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"Health Insurance Card Scheme" for cross-border migrants in Thailand:

Responses in policy implementation & outcome evaluation

Rapeepong Suphanchaimat

Thesis submitted in accordance with the requirements
for the degree of Doctor of Philosophy

University of London

26 October 2016

Department of Global Health and Development

Faculty of Public Health and Policy

London School of Hygiene and Tropical Medicine

The research was funded by the Health Insurance System Research Office and the
International Health Policy Program, Ministry of Public Health of Thailand.

Declaration of candidate's roles in the thesis

I, Rapeepong Suphanchaimat, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis. The entire thesis was designed, conceptualised, analysed, and written by myself while I was pursuing the doctoral degree at the Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine (LSHTM). The study was mainly conducted in Ranong province, Thailand. Both qualitative and quantitative methods were exercised. Quantitative data were acquired from individual patient service records stored at Ranong hospital, Kraburi hospital, and Ranong Provincial Public Health Office. The whole study course was supervised by my PhD supervisor, Professor Anne Mills, and by the advisory committee: Dr Natasha Howard and Dr Jenny Neuburger, and Dr Supon Limwattananon from Khon Kaen University, Thailand.

Rapeepong Suphanchaimat

I confirm the accuracy of the above statement.

26 October 2016



Professor Anne Mills

Supervisor

Abstract

The health of migrants has attracted increasing attention in the international policy dialogue in recent years. Thailand is one of many countries where migrant health is a major political issue. This is because the country is situated at the centre of the Indochinese Peninsula and its economy is fast-growing relative to its neighbouring countries, particularly Cambodia, Lao PDR, and Myanmar. As a result, Thailand has, for decades, attracted a large number of low-skilled cross-border migrants. The majority of these immigrants have passed the border without any valid travel document. However, most of the time, past governments did not impose strict deportation measures on these undocumented/illegal immigrants since they were considered a key contributor to the Thai economy. Measures often used by recent governments included granting them leniency for temporary residence, issuing work permits for certain jobs, and insuring them through public-oriented health insurance, namely, the 'Health Insurance Card Scheme' (HICS).

The primary aim of this thesis is to evaluate (i) the enrolment of cross-border migrants in a public health insurance scheme, namely, the HICS, in Thailand through the viewpoints of various stakeholders, and (ii) the effects of insurance on use of services. Ranong province was selected as the study site since it had the largest proportion of migrants compared to other provinces. The main objectives are: (1) to explore how the HICS evolved over time in light of changes in surrounding policies, (2) to investigate the responses of local officers and relevant stakeholders towards the HICS and to examine how the policy affects migrants' health-seeking behaviour in practice, (3) to evaluate the outcomes of HICS in terms of utilisation numbers and financial implications for its insurees, and (4) to provide policy recommendations. A multi-methods approach was employed. In-depth interviews, document review and facility-based data analysis were undertaken. Policy makers, local healthcare providers, and migrants were interviewed. Thematic and analyses were applied.

The findings revealed conflicting ministerial objectives and gaps in both inter- and intra-ministerial policies. In addition, policy objectives were not clear from the outset. While the health sector aimed to insure ‘all’ migrants, this was constrained by the security and economic authorities where the focus was mainly only on migrant workers who registered with the government. Besides, in reality, the boundary between ‘legal’ and ‘illegal’ migrants was very fluid.

Though the current government attempted to address policy gaps by overhauling the HICS and instigating a new measure, namely, 'One Stop Service', it is difficult to claim that the deep-rooted implementation problems were resolved. This situation was even more complicated at the local level as some frontline health officers adapted the policy in various ways, and occasionally made the policy diverge from its initial objectives.

For users, the cost of registration was a significant barrier in obtaining the insurance card, and a reliance on private intermediaries (both legal and illegal) to help them obtain the insurance card was not uncommon. Besides, there were migrants who were neither insured, nor able to return to their home country.

However, the HICS still had some merits in reducing out-of-pocket payment, and helping increase utilisation of services amongst insurees. It was noteworthy that the most important factor determining the number of visits was history of experiencing catastrophic illness, not insurance status, and this influence was even more apparent in Thai patients than in migrants. Evidence suggested that there might be insured migrants with catastrophic illness who still experienced difficulties in accessing services, let alone uninsured migrants.

Unless policies to protect the health of this population are put in place, poor access to health services for the uninsured will continue being a serious public health problem, not only to migrant communities but also to Thai society as a whole. Both macro- and micro policy recommendations are provided, for example, integrating the different authorities’ information systems on migrants, amending some outdated laws and regulations, and strengthening the capacity of the insurance governing body.

List of abbreviations and currency equivalents

Currency equivalents (currency unit-Thai Baht)

UK £1.00 = 53 Baht

US \$1.00 = 33 Baht

(As of 13 June 2015)

Abbreviations

AC = ASEAN Community

ACSC = Ambulatory Case Sensitive Condition

Adjusted Relative Weight = adjRW

AME = Aide Médicale d'Etat

ART = Antiretroviral Therapy

ASEAN = Association of Southeast Asian Nations

A&E = Accident and Emergency

BHA = Bureau of Health Administration

BOI = Board of Investment

BORA = Bureau of Registration Administration

BPS = Bureau of Policy and Strategy

CEDAW= Convention on the Elimination of All Forms of Discrimination against Women

CERD = International Convention on the Elimination of All Forms of Racial Discrimination

CL = Compulsory Licensing

COPD = Chronic Obstructive Pulmonary Diseases

CRC = Convention on the Rights of the Child

CSMBS= Civil Servant Medical Benefit Scheme

CSR = Corporate Social Responsibility

CUP = Contracted Unit for Primary Care

DID = Difference-in-Difference

DM = Diabetes Mellitus

DOE = Department of Employment	HN = Hospital Number
DOPA = Department of Provincial Administration	HPSR = Health Policy and System Research
DRG = Diagnostic Related Groups	HSRI = Health System Research Institute
EEA = European Economic Area	HT = Hypertension
EPI = Extended Programme on Immunisation	ICCPR = International Covenant on Civil and Political Rights
ESRD = End-stage Renal Disease	ICD10 = International Classification of Diseases version 10
EU = European Union	ID = Identification Number
FE = Fixed Effect	ICESCR = International Covenant on Economic, Social, and Cultural Rights
FY = Fiscal year	ILO = International Labour Organization
GDP = Gross Domestic Product	IOM = International Organization for Migration
GGHE = General Government Health Expenditure	IP = Inpatient
GLM = Generalised Linear Model	IQR = Interquartile Range
GNI = Gross National Income	IRR = Incidence Rate Ratio
HI-PCP = Health Insurance for People with Citizenship Problems	IUU = Illegal, Unreported, and Unregulated
HIC = High Income Country	IV = Instrumental Variable
HICS = Health Insurance Card Scheme	LICS = Low Income Card Scheme
HIG = Health Insurance Group	LMIC = Low and Middle Income Country
HISO = Health Information System Development Office	LR = Likelihood ratio
HISRO = Health Insurance System Research Office	

LSHTM= London School of Hygiene and Tropical Medicine	NSO = National Statistical Office
MeSH = Medical Subject Headings	NV = Nationality Verification
MICT = Ministry of Information and Communication Technology	OECD = Organization for Economic Co-operation and Development
MHV = Migrant Health Volunteer	OFWA= Office of Foreign Workers Administration
MHW = Migrant Health Worker	OLS = Ordinary Least Square
MOE = Ministry of Education	OOP = Out-of-pocket Payment
MOF = Ministry of Finance	OP = Outpatient
MOFA= Ministry of Foreign Affairs	OPS = Office of the Permanent Secretary
MOI = Ministry of Interior	OSS = One Stop Service
MOL = Ministry of Labour	PBC = Performance-based Contracting
MOPH= Ministry of Public Health	PCMO = Provincial Chief Medical Officer
MOU = Memorandum of Understanding	PDRC = People's Democratic Reform Committee
NCD = Non-Communicable Diseases	PICUM= Platform for International Cooperation on Undocumented Migrants
NCPO = National Council for Peace and Order	PPHO = Provincial Public Health Office
NGO = Non-government organisation	Probit-2-Staged-Least-Square = Probit-2SLS
NHSO = National Health Security Office	RCT = Randomised Controlled Trial
NHS = National Health Service	RE = Random Effects
NPM = New Public Management	
NSC = National Security Council	

SD	= Standard Deviation	UDHR	= Universal Declaration of Human Rights
SDG Goals	= Sustainable Development Goals	UHC	= Universal Health Coverage
SE	= Standard Error	UKBA	= United Kingdom Border Agency
SIDS	= Sudden Infant Death Syndrome	UMIC	= Upper Middle Income Country
SLB	= Street-Level Bureaucracy	UNAIDS	= Joint United Nations Programme on HIV and AIDS
SSO	= Social Security Office	UNGA	= United Nations General Assembly
SSS	= Social Security Scheme	UNHCR	= United Nations High Commissioner for Refugees
STD	= Sexually Transmitted Disease	VHCS	= Voluntary Health Card Scheme
TAVI	= Traffic Accident Victim Insurance	VHV	= Village Health Volunteer
TB	= Tuberculosis	WHO	= World Health Organization
TIP	= Trafficking in Persons	WHR	= World Health Assembly Resolution
TMC	= Thai Medical Council	95% CI	= 95% Confidence Interval
TPM	= Two Part Model		
UCS	= Universal Coverage Scheme		

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I dedicate this research to all patients, both Thai and migrant populations, in Thailand. As a medical doctor, I used to practise in a mountainous area near Thai-Myanmar border. I actually realised that we all (doctors and patients) are both givers and receivers. When I started my career as a medical professional, I perceived myself as the one who helped improve quality of life of the people in underserved areas, but in essence, I was the person who received enormous help from them. The patients gave back to me huge moral support and taught me substantially about respect for human beings and all forms of life. I therefore hope that this research will contribute to improving quality of life of the patients and to better management of the healthcare system for migrant populations in Thailand. This is something that helps me repay them.

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Section 1: Background

This section serves as the thesis' starting point and is composed of four chapters. The first chapter provides the outline of the whole thesis. It also describes the migrant health situation in a broader context: how it has evolved, current trends in international migration, and the importance of global and regional health policy discourses. Chapter 2 presents findings from the literature review on issues related to migrant health. All of these points are linked in Chapter 3, where the story is narrowed down to the Thai context and gaps in knowledge are identified. The last chapter is Chapter 4, where the research objectives and the methodological outline are discussed.

Chapter 1: Background

Chapter 1 considers why migrant health is a critical concern at the present time. The chapter commences with an overview of current migration trends (subsection 1), and summarises how migrant health is related to political, economic and human rights issues (subsection 2). Following this point, the attempt to include migrant health protection as part of the global momentum towards Sustainable Development Goals (SDGs) and the growing effort to achieve Universal Health Coverage (UHC), particularly in the Southeast Asia region, are described (subsection 3). At the end of the chapter, the document outline (subsection 4) and the expected academic contribution of this thesis (subsection 5) are displayed.

1.1 Current trend and scope of international migration

It is believed that more than 214 million people (constituting over 3.1% of the global population) are residing outside their country of origin. The International Organization for Migration (IOM) (2010) estimated that if international migration continued at the same pace as in the last two decades, the number of international migrants worldwide would reach 405 million by 2050. The growth of people's mobility was due to a variety of reasons, such as economic pressures, low transportation costs, changes in demographic trends, environmental degradation, political conflict, domestic violence, and even human trafficking.

Traditionally, most migration reports and policy discourses emphasised the movement from low and middle income countries (LMICs) to high income countries (HICs), so-called, 'South-North' migration. However, it is now believed that the 'North-South' distinction does not accurately reflect the actual migration trend. Recent evidence showed that 'South-South' migration was rising sharply, from less than 20 million in 1990 to almost 60 million in 2010, while 'South-North' migration remained stable at 45 million during the same period (International Organization for Migration, 2013). This phenomenon is likely explained by many factors, for instance, an increasing demand for

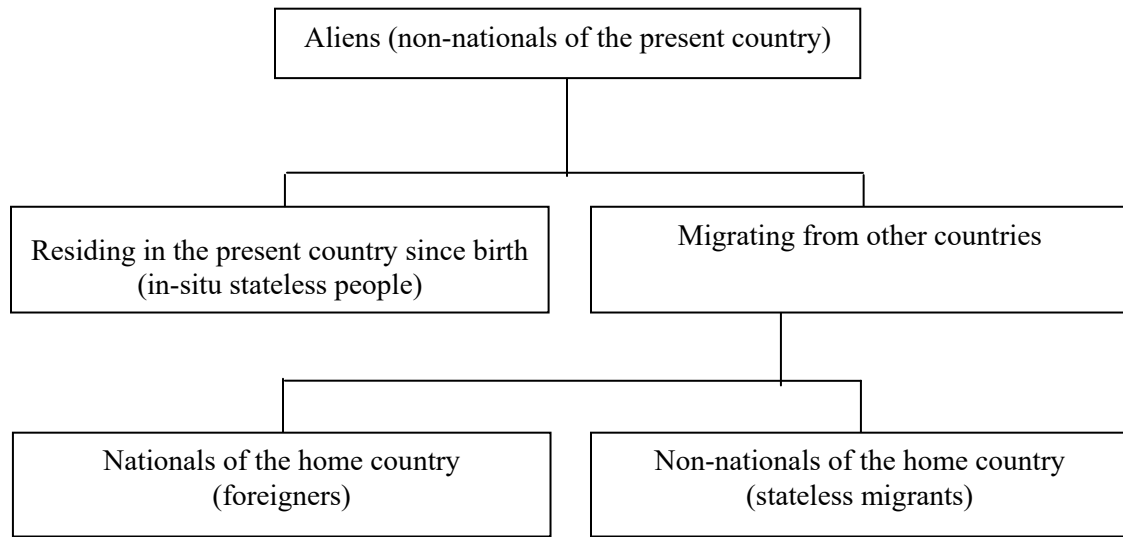
labour in response to fast economic growth in the developing nations, plus political and domestic violence in some regions.

So far there has been no universally accepted definition for the term 'migrant' in international policy discourses. In practice, this term was mainly applied to persons and family members moving to another country with the aim of obtaining better material and social conditions and of improving their and their family's job prospects (International Organization for Migration, 2004). As used in this thesis, the term migrant followed the above definition but was limited to cross-border low-skilled migrants from the countries neighbouring Thailand. Other types of migrants, for instance, refugees, foreign professionals, and tourists, were beyond the scope of this study.

Note that the term migrant often overlapped with the term 'alien'. The term 'alien' has been used in the nationality laws of many countries, including Thailand (United Nations, 1948, Thai Immigration Bureau, 2004), and originated from the maxim of using 'nationality' to define a 'nation-state' (UNESCO, 2015). The nationality principle often used 'nationality' as a 'tool' in deciding who the members of the nation-state are. This point was affirmed by the Hague Convention (1930).

In theory, nationality laws should function in line with immigration laws. Using nationality as a measure, populations in a country are categorised into two main groups: (1) persons with nationality of the nation-state (nationals), and (2) persons without nationality of the nation-state (aliens). In addition, 'aliens' could be broken down into two subgroups: (1) people migrating from another country, and (2) people residing in the present country since birth. Concerning human mobility, in the receiving country, the nationals of another country were often treated as 'foreigners', while the 'non-nationals' were often labelled 'stateless migrants'. A group of aliens residing in the nation-state since birth but not entitled to the present country's nationality was called 'in-situ stateless people' (Napaumporn, 2012), see Figure 1. An elaboration on the complexity (and even confusion) of these terms is presented again in Chapter 5.

Figure 1 Simplified diagram of various subgroups of 'aliens'



Source: adapted from Napaumporn (2012)

1.2 Health of migrants through the international lens— Why is it important?

It is undeniable that citizens' health is a precondition for the sustainable development of all countries. A country with healthy citizens can expect economic prosperity since healthy citizens lead to an increase in a country's productivity, which in turn contributes to the expansion of government fiscal space and the increase in health and education investment (Webster and Sanderson, 2013). However, in the real world, this issue is not straightforward as almost all countries are constituted of both 'national' and 'non-national' populations. This point leads to a critical question, that is, to what extent the health of cross-border migrants should be protected by the state of residence.

Historically, the main concern was related to a contagion brought by migrants. An example was found in the US. The yellow fever epidemic in Philadelphia in the 1790s was attributed to the arrival of the Caribbean people in the US (the disease was later called 'Barbados distemper') (Powell, 1949). Also, the cholera epidemic in the early 1830s was linked to the influx of immigrants from Ireland (Rosenberg, 1987).

Loue (2012) opined that the prohibiting laws on migrants were promulgated according to three main presumptions: (1) fear that citizens of the host country would come into contact with germs/diseases carried by immigrants, (2) concern that the 'stock' of native population would be diminished in quality if it was combined with an 'inferior' migrant race, and (3) alarm that the host country's economy would face the expense of caring for immigrants.

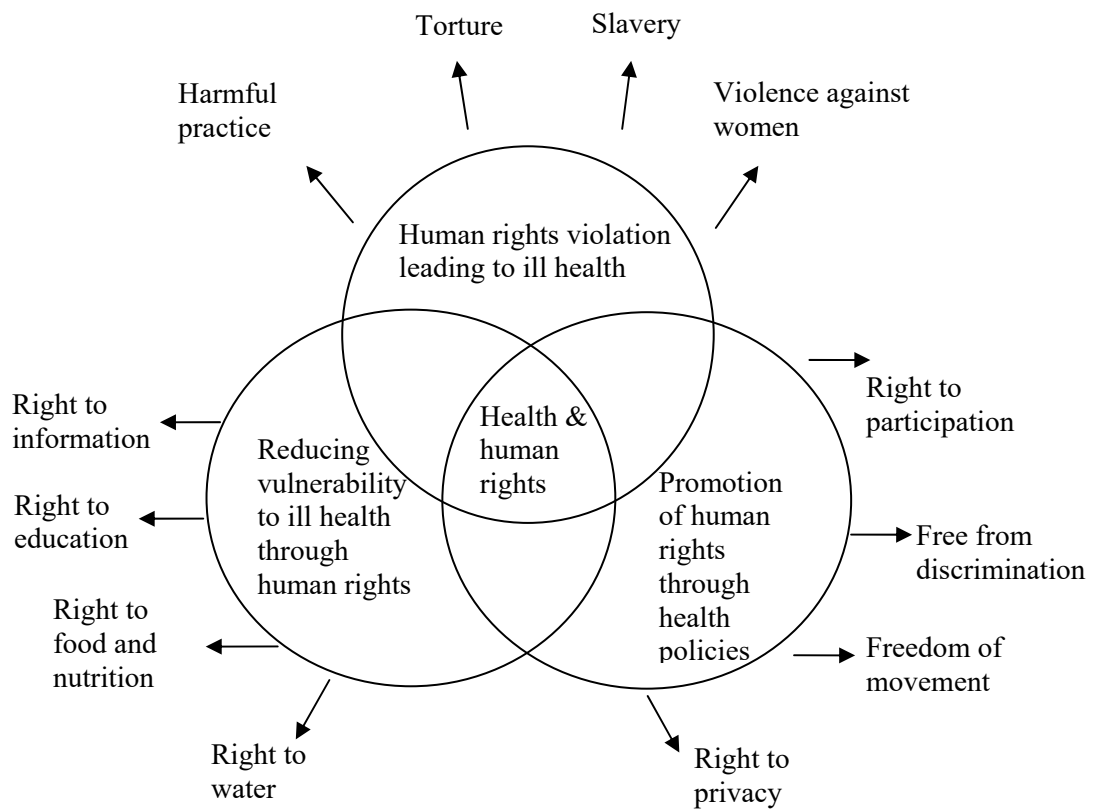
In the 20th century, the emergence of globalisation caused a paradigm shift to a modern economy that attempted to reap benefits from the circulation of human capital. A sharp increase in labour/economic migration has led to calls for better protection of the health and welfare of migrants as 'healthy migrants' represent a better economic contribution to the host country. Evidence showed that the purchasing power of migrants living in Australia was as large as €20 billion, and in the UK, in 2006 alone, migrants contributed up to £6 billion to the British economy (International Organization for Migration, 2013).

Of note is that the idea of protecting health of migrants included not only legal migrant workers, but also illegal immigrants (the term, 'illegal', was often used interchangeably with 'undocumented', 'irregular', and 'clandestine', referring to anybody entering a country in violation of the immigration laws of that territory) (Loue, 2012). This was evidenced by the United Nations Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1991), which expanded the definition of 'migrant worker' to 'anybody' who is engaged in a remunerated activity in a state of which he/she is not a national.

The promotion of migrant health therefore expanded from economic protection to include a human rights aspect. The 1948 Universal Declaration of Human Rights (UDHR) has been considered the supreme maxim of the human rights issue (United Nations, 1948). The scope of human rights encompassed not only an individual's physical health but also his/her quality of life and social determinants as reaffirmed by several international covenants and conventions on human rights, such as Article 24 (3) of the International Covenant on Civil and Political Rights (ICCPR), Article 7 (1) of the Convention on the Rights of the Child (CRC), Article 12 of the International Covenant

on Economic, Social, and Cultural Rights (ICESCR), Article 5 (d) (iii) of the International Convention on the Elimination of All Forms of Racial Discrimination (CERD) and Article 9 of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (Napaumporn, 2012). The World Health Organization (WHO) (2002) also suggested that health and human rights were inextricably linked in three facets: (1) violations of human rights can lead to serious health outcomes; (2) health policies and programmes can promote human rights in their design or implementation; and (3) vulnerability to ill health can be addressed by taking steps to fulfill human rights, see Figure 2.

Figure 2 Linkage between health and human rights



Note: adapted from WHO (2002)

The global momentum to protect the health of migrants was observed in a number of high-level dialogues, such as the United Nations General Assembly (UNGA) meeting in 2006 (Macpherson et al., 2007), and the Joint United Nations Programme on HIV and

AIDS (UNAIDS) Board meeting in 2009. The WHO also called for migrant-sensitive health policies and practices through the World Health Assembly Resolutions (WHRs), including the WHR60.26 (2007) and the WHR61.17 (2008). Recently, the concept of UHC has been more emphasised. This was evidenced by the post-2015 SDGs, where UHC is one of the indicators (Tangcharoensathien et al., 2015b).

Despite a marked progress towards better health and social protection for migrants, there are still a number of challenges when translating this concept into action. To achieve this goal, multisectoral and multidimensional policy interventions are required with adequate support from both domestic and international politics.

1.3 Migration issues in ASEAN

Southeast Asia is one of the world's most dynamic regions, with a substantial volume of migrant workers moving within the region, as well as between the region and the rest of the world (Guinto et al., 2015). In recent years, migrant health in Southeast Asia has gained much attention in regional policy dialogue as the region has attracted large scale overseas investment due to its high economic potential and a sheer number of low-wage workers (Kantayaporn and Mallik, 2013). This situation was more pronounced especially after the ten member statesⁱ of the Association of Southeast Asia Nations (ASEAN) agreed to work towards full economic integration, so-called, the ASEAN Community (AC), by 2015 (ASEAN Secretariat, 2007). With this situation, a further rise in migration can be expected. Destination countries were those with declining birth rates and with high demand for industrial sector labour, such as Brunei, Malaysia, Singapore, and Thailand. Note that some countries also exported a large number of workers to countries outside the region, for instance, Thai workers to Japan and Taiwan; or overseas Filipinos to the US (Kantayaporn and Mallik, 2013), see Table 1.

ⁱ Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, Thailand, The Philippines, and Vietnam

Table 1 Volume of cross-border migration amongst the ASEAN countries

Origin	Destination										
	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam	Total
Brunei	NA	-	-	-	7,905	-	1,003	-	-	-	8,908
Cambodia	-	NA	-	909	-	-	232	-	124,761	-	125,902
Indonesia	6,727	505	NA	-	1,397,684	-	5,865	102,323	586	-	1,513,690
Lao PDR	-	1,235	-	NA	-	-	-	-	110,854	-	112,089
Malaysia	81,576	816	-	-	NA	-	394	1,060,628	2,251	-	1,145,665
Myanmar	-	247	-	143	17,034	NA	415	-	1,078,767	-	1,096,606
Philippines	15,861	728	-	-	277,444	-	NA	-	6,778	-	300,811
Singapore	3,033	581	-	-	103,318	-	288	NA	1,617	-	108,837
Thailand	3,855	50	506	734	3,880	226	145	13,919	NA	536	23,851
Vietnam	-	173,694	-	8,167	-	-	748	-	301	NA	182,910
Total	111,052	177,856	506	9,953	1,807,264	226	9,091	1,176,879	1,325,915	536	4,619,277

Source: Kantayaporn and Mallik (2013)

Note: Limited to only documented workers where data available

While much attention has been devoted to the economic benefits of within-region labour migration, the health and well-being of migrants and their dependants still remain under-explored. Though the ASEAN member states have agreed in principle to protect the rights of migrants (as evidenced by the Declaration on the Protection and Promotion of the Rights of Migrant workers and by one of the strategic objectives under the ASEAN Socio-Cultural Community Blueprint), the policy discourse on health and migration still focused on general issues regarding the spread of infectious diseases and border control measures, rather than considering broader health system changes to promote the holistic quality of life of migrants (Guinto et al., 2015).

At the country level, Thailand is one of the important migrant-receiving countries in the region. Therefore it is beneficial to draw lessons from how the country addresses migrant health issues through the operation of its existing public health insurance scheme for cross-border migrants and how this attempt is linked to the UHC concept.

As stated earlier, the scope of this study focused on low-skilled cross-border migrants who were the primary target of the migrant insurance scheme managed by the Thai Ministry of Public Health (MOPH). However, deeper exploration revealed that the boundary between 'legal' and 'illegal' migrants was unclear, and this inevitably affected the population scope of the insurance policy. This point is discussed later in Chapter 5, Chapter 6, and Chapter 8.

1.4 Thesis outline

From now on, this thesis is structured into three sections. In Section 1, the introduction chapter (Chapter 1) sets the scene for this study, detailing why migrant health is of importance. Chapter 2 shows results from the literature review from several angles, such as theoretical concepts/theories concerning migrants' health and how health insurance policies for cross-border migrants are arranged in selected countries. Chapter 3 narrows this issue to the Thai context and presents gaps in knowledge, which in turn serve as a

basis for constructing research questions, research aim and objectives, and relevant methodology in Chapter 4.

Section 2 (Chapter 5-7) displays the key findings of each objective. Chapter 5 elaborates on the evolution of migrant health insurance policy in Thailand as well as its interaction with other ministerial policies. Chapter 6 delves into the perceptions and challenges relevant to implementing migrant health insurance policy through the lens of local implementers and service users. Chapter 7 presents the quantitative outcomes of the policy.

In Section 3 the key results from previous chapters are discussed in more detail to construct emerging knowledge/themes for this thesis (Chapter 8). Key policy recommendations and recommendations for future research priorities are presented in Chapter 9. Additional information, which is not the core of the thesis, is shown in Appendixes.

1.5 Expected academic contribution

It is expected that this thesis will contribute to knowledge on the issue of migrant health in various ways. This study can be regarded as multi-methods research. It also serves as an example of how health policy and systems research (HPSR) questions can be scientifically addressed in real-world settings.

At the local level, this study helps identify the advantages and drawbacks of existing Thai health insurance policy arrangement for migrants. More than a decade since its implementation, there have been very few studies that assessed outcomes of the policy in a systematic fashion. Furthermore, there is little evidence of the views of frontline implementers in non-health sectors (such as employers of migrants or officials in non-MOPH ministries) on migrant health issues.

At the international level, since migrant health is now immensely related to the global momentum towards UHC, lessons from the Thai case study might be useful to both

developing and developed countries. This is because, though Thailand is a developing nation, it has a relatively strong healthcare system and has already achieved UHC like many developed countries.

In addition, while most existing literature has discussed the constraints to managing insurance for migrants from the angle of individual attributes (such as language difficulty and cultural difference), this study attempts to explore this issue throughout the whole policy process. Also, the academic contribution of this study goes beyond the health sector, as it sheds light on the challenges of diverging interests and policies between authorities.

Chapter 2: Literature review

This chapter presents the key findings from the literature review, which then served as a basis for constructing the research design and for identifying knowledge gaps. The chapter is divided into five subsections: (1) general theories and concepts about health and migrant health seeking-behaviour, (2) international experience of health insurance management for undocumented/illegal migrants, (3) providers' perspectives on challenges in the provision of care for migrants, (4) methodological concerns about policy evaluation research, and (5) conclusion. Subsections 1, 2, and 3 focus on issues related to migrant health, while subsection 4 is more focused on policy evaluation concept.

A narrative review was undertaken in subsection 1, 2 and 4, as it is a useful approach for examining theories or concepts, while a systematic review was applied in subsection 3. Reason for conducting a systematic review in subsection 3 rather than a narrative review was because, while exploring relevant literature, the author discovered that though there existed some reviews of literature on challenges to care from the viewpoint of migrants, literature that explored this issue from providers' perspectives was quite limited.

2.1 General theories and concepts about health and health seeking-behaviour of migrants

Most of the literature in this subsection was garnered from textbooks and research reports in the field of migrant health and migrant healthcare policy, for instance, 'Immigrant Medicine' by Walker and Barnett (2007), 'Encyclopaedia of Immigrant Health' by Loue and Sajatovic (2012), and 'World Migration Report' by the IOM (2013). Additional information was sourced from electronic journals in Medline. This subsection consists of two parts: (1) Migrant health, and (2) Health seeking-behaviour of migrants—What are the challenges?.

I. Migrant health

Migrant health is highly dynamic and affected by several factors. Zimmerman et al (2011) suggested that the migration process comprised five stages, namely, pre-departure, travel, destination, interception, and return. Studies from different regions reported that migrants usually had lower public health utilisation than native people, as supported by Norrendum (2010) in European countries, Gonzalez-Block and de la Sierra-de la Vega (2011) in Mexico, and Hesketh et al (2008) in China.

The low utilisation rate of migrants was more evident for some specific conditions, such as life-limiting illnesses (de Graaff and Francke, 2009, Shanmugasundaram and O'Connor, 2009) and mental diseases (Tarricone et al., 2012, Jackson et al., 2007); but less apparent in emergency care and inpatient admissions (Srithamrongsawat et al., 2009, Norredam et al., 2010). Such findings suggested that migrants tended to seek formal care when they were critically ill.

Some articles ascribed the low utilisation of migrants to the 'healthy migrant effect' (Thomson et al., 2013, Fennelly, 2007, Hesketh et al., 2008). This concept proposed that individuals who migrated to recipient countries tended to have favourable health status. David and Collins (1997) highlighted that in the US, Mexican, Caribbean and African mothers usually enjoyed a significant birth-weight advantage compared with US-born citizens. Wu et al also (2005) pointed out that migrants in Canada had 12% lower prevalence of unmet needs than Canadian-born residents.

However, other articles explained this phenomenon differently. Razum and Rohrmann (2002) suggested that migrants' low utilisation of health services was derived from intrinsic international differences in mortality patterns. Domnich (2012) reported that the healthy migrant effect was apparent in the US and Canada but less evident in Europe and in certain types of migrants, for instance, refugees.

Furthermore, Ingleby et al (2005) explained that long-term residence in a host country tended to lead to immigrants' health deterioration as a consequence of poor living

conditions and an inability to culturally integrate him/herself into the receiving society. Bollini and Siem (1995) called this phenomenon the 'exhausted migrant effect', while similar findings from the US and Canada referred to this as the 'immigrant paradox', suggesting that migrant individuals with a shorter stay in destination countries tended to have more favourable health outcomes than those with a longer stay. Bacio et al (2013) and Delavari et al (2013) ascribed this phenomenon to an erosion of protective cultural factors and an accumulative exposure to risky behaviours commonly found in a host country, such as smoking and substance abuse. Berry (2006) proposed that migrants displayed several approaches for acculturating to a host country, that is, 'assimilation', 'separation', 'integration' and 'marginalisation'; so-called, 'bidirectional model of acculturation'. The model summarises acculturation as a degree to which migrants become submerged in a new cultural environment and how migrants maintain their cultural identity. According to the bidirectional model, 'marginalisation' was considered the most deleterious approach amongst the four strategies (Marks and Conn, 2012). Yoon et al (2013) and Schluter et al (2011) asserted that 'integration' was the most preferable acculturation strategy. Given this evidence, it can be concluded that cultural acculturation is an important factor that determines health of migrants, see Table 2.

Table 2 Bidirectional model of acculturation

Acculturation approach	Maintain original culture, attitudes and behaviours	Discard/avoid original cultures, attitudes and behaviours
Adopt/apply new cultures, attitudes and behaviours	Integration	Assimilation
Discard/avoid new cultures, attitudes and behaviours	Separation	Marginalisation

Source: adapted from Berry (2006) and Schluter et al (2011)

II. Health-seeking behaviour of migrants—What are the challenges?

As stated earlier, migrants often had lower health-service utilisation than the host country's citizens. It is therefore of interest to explore the contributing factors to this phenomenon, and to this end a literature review for additional references was conducted.

The following search term, ((*"Transients and Migrants"*[Mesh]) AND ((*"Information Seeking Behavior"*[Mesh]) OR (*"Illness Behavior"*[Mesh]) OR (*"Health Behavior"*[Mesh]) OR (*"Health Services Accessibility"*[Mesh]) OR (*"Culture"*[Mesh]) OR (*health seeking behavio**)) AND (*hasabstract*[text] AND (*"2000/01/01"*[PDat] : *"2014/12/31"*[PDat]) AND *Humans*[Mesh] AND *English*[lang]))) was applied in Medline. The selected abstracts were limited to literature published in English after 1 January 2000. A total of 504 articles were recruited. Of these 504 articles, 75 employed a qualitative approach as the main method, whereas the remaining 429 articles were excluded since they employed quantitative methods with a primary focus on disease epidemiology or biomedical research. After excluding articles where full texts were not available and those focusing only on domestic migrants, 28 were left for the final review. See Appendix 1 for more detail.

Almost all articles were published in developed countries (26/28), while there were two articles from developing countries (Huffman et al (2012) from Kazakhstan and Munyewende et al (2011) from South Africa). Most selected literature explored health-seeking behaviour of migrants for general illnesses, except for some articles that focused on severe illnesses, such as Aranda-Naranjo (2000), Navaza et al (2012) and Weine et al (2013). The key challenges of migrants' access to care can be grouped into five categories as follows.

1) Communication barrier: This barrier presented in a variety of diseases, from non-severe illnesses, such as skin problems in Latino farmworker migrants in the US (Arcury et al., 2006) and dental problems in Iraqi and Lebanese migrants in Australia (Riggs et al., 2014), to life-threatening conditions like HIV/AIDS amongst African migrants in Spain (Navaza et al., 2012). Blignaut et al (2008) suggested that Chinese-born patients in Australia were reluctant to utilise public mental health services due to communication difficulties.

2) Cultural difference and dissimilarity of views on Western medicine: Cultural differences shaped the attitudes and views of migrants towards Western medicine, and this led to ineffectiveness when conveying health messages to migrants. While

healthcare workers in Australia recommended putting a baby in his/her own cot to prevent sudden infant death syndrome (SIDS), such health messages were often resisted by the Indian families as Indian migrant women regarded co-sleeping between a mother and her baby as a way to promote child security (Aslam et al., 2009). However, cultural dissimilarity did not always lead to negative consequences. For example, Islamic beliefs in Turkish communities in the Netherlands encouraged migrants with hepatitis B to receive treatment as soon as possible, to purify themselves before returning to god after death (van der Veen et al., 2009, Van Cleemput et al., 2007).

3) Precarious legal status: Biswas et al (2011) showed that undocumented/illegal Asian migrants in Denmark feared being reported to the police if they visited health facilities. To cope with the citizenship status problem, some undocumented/illegal migrants applied alternative strategies to help them access health services, such as borrowing health insurance cards from their peers, and seeking help from charitable agencies (Biswas et al., 2011, Heyman et al., 2009).

4) Poor housing and working conditions, and economic constraints: Cross-border migrants often worked in risky settings. Financial hardship also had a detrimental impact on the health of migrants. Walter et al (2002) found that the prevalence of occupational injuries was quite high in Mexican and Central American workers in the US, due to dangerous work environments, lack of training, and inadequate safety equipment. Since some migrants were engaged in low social-status occupations and/or illegal situations, they were likely to be treated differently to native citizens, and this might lead to more severe consequences, such as discrimination and harassment by the authorities (Munyewende et al., 2011, Huffman et al., 2012, Bollini et al., 2007)

5) Mobile behaviour: Seasonal farm workers from Mexico in the US were more likely to be exposed to HIV/AIDS infection due to unsafe sexual practices (Aranda-Naranjo et al., 2000). Frequent mobility of Burmese migrants in London made registration with, and access to, general practitioners (GPs) more difficult. Huffman et al (2012) raised concerns over drug resistance in Uzbek patients with tuberculosis in Kazakhstan since their frequent mobility caused treatment delay and interruption.

2.2 International experience on the management of health insurance for undocumented/illegal migrants

As shown in the earlier subsection, precarious legal status is one of the most important factors hampering access to care of migrants. It is imperative to investigate how receiving countries manage health insurance for undocumented/illegal migrants.

It should be noted that a legal migrant may become an illegal one if he/she over-stays in a host country, while an illegal immigrant may become a legitimate resident if he/she undertakes the legalisation process.

As mentioned in Chapter 1, there are several terms defining illegal migrants, which are often mixed with the terms, 'refugees' and 'asylum seekers'. The operational definition of several subtypes of 'illegal migrants' for this review is displayed in Table 3 below.

Table 3 Operational definition of undocumented/illegal migrants

Type	Definition
Irregular migrants	Irregular migrants are those whose migration paths did not conform to legal provisions of entry and residence.
Undocumented migrants	Undocumented migrants are third-country nationals without a valid residence permit or visa permitting them to live in the country of destination.
Involuntary migrants	Any foreign-born people who have migrated to a country because they have been displaced from their home country, have an established or well-founded fear of persecution, or have been moved by deception or coercion.
Asylum seekers	Asylees are persons applying for asylum under the 1951 Refugee Convention on the Status of Refugees on the grounds that they had a well-founded fear of persecution on account of race, religion, political belief and nationality if they returned to the country of origin.
Refugees	Refugees are asylum seekers whose application has been successful.

Source: adapted from Biswas et al (2011)

Literature was sourced from the database of the 'Platform for International Cooperation on Undocumented Migrants (PICUM)', which explored health insurance policies for undocumented/illegal migrants in the European Union (EU) member states. Additional

literature outside the EU was explored, such as the Asia Pacific Journal and official websites of the authorities accounting for healthcare management for undocumented/illegal migrants in certain countries (Parikh, 2010, Department of Health, 2015a).

Gray and van Ginneken (2012) categorised EU countries into three levels according to the degree of care the state provided to undocumented/illegal migrants: (1) emergency services (limited rights), (2) primary care and emergency services (minimum rights), and (3) (almost) full range of care (full rights).

The author further divided the reviewed countries into six groups according to the financing system of the main insurance scheme and the degree of care in the host country (see Table 4). This distinction was based on the assumption that different financing mechanisms might affect how migrants would be eligible for the insurance. For example, countries with payroll tax financing might require migrants to pay contributions, and this requirement might contradict the fact that most undocumented/illegal migrants were not allowed to have legitimate work in the host country. Thus it is imperative for the review to take into account the difference in financing systems.

Table 4 Level of rights to healthcare for undocumented/illegal migrants in 27 EU countries

Level of rights	General tax financing	Premium or payroll tax financing
Limited rights	Finland, Ireland, Malta, Sweden	Bulgaria, Czech Republic, Latvia, Luxembourg, Romania
Minimum rights	Cyprus, Denmark, The UK	Austria, Belgium, Estonia, Germany, Greece, Hungary, Lithuania, Poland, Slovak Republic, Slovenia
(almost) Full rights	Italy, Spain, Portugal	France, The Netherlands

Source: adapted from Gray and van Ginneken (2012)

Health insurance for undocumented/illegal migrants in Thailand provides (almost) the full range of benefits (including HIV/AIDS treatment), thus it might be justifiable to claim that, at least in theory, Thailand can be categorised at least in the 'minimum-rights' or even the 'full-rights' tier. Therefore, the review from this point onwards focuses on countries where at least basic primary care is provided.

To attain maximal variability in terms of level of rights and financing management, this review focuses on four European countries, namely, the UK (basic rights, general tax), Germany (basic rights, premium), Italy (full rights, general tax) and France (full rights, premium). Moreover, country examples outside Europe were included. In this case, Japan and the US were selected because they are amongst the most popular destinations for migrants in Asia and America.

Note that the review experienced challenges in acquiring up-to-date and accurate data of the number of undocumented/illegal migrants. The figures of undocumented/illegal migrants shown below were always approximate numbers. In addition, since the policy towards migrants in each country is dynamic, the data on undocumented/illegal migrants below might not reflect the situation at the present time.

Moreover, it was difficult to set a clear line between 'legal' and 'illegal', or between 'documented' and 'undocumented' migrants. This is because for countries where health care policies were open to all types of migrants, it did not mean that anybody could enjoy services without showing his/her identity. In practice, the laws in each country almost always required an undocumented/illegal migrant to undertake certain kinds of registration, however it did not mean that those registered migrants were fully legalised. The nuanced differences in citizenship status also reflected the complexity in population management policies, not just in the reviewed countries but also in Thailand (see Chapter 5).

I. United Kingdom

As of 2010, the number of undocumented/illegal migrants was approximately 618,000 to 1.1 million (Migration Watch UK, 2010). The main authority responsible for insuring the health of the UK residents is the National Health Service (NHS). The eligible beneficiaries of the NHS are 'ordinary residents' as specified in the 1989 Statutory Instrument No 336. Generally, a person residing more than 3 years in the UK is defined as ordinary resident, and this term normally includes legal immigrants. Ordinary residents are allowed to enjoy free NHS services in all range of care.

For undocumented/illegal migrants, only certain services are provided free of charge, which include (but are not limited to), outpatient emergency care, compulsory treatment under court order, psychosis treatment, treatment for potential public threats (such as cholera, tuberculosis (TB), encephalitis, HIV/AIDS [in England and Scotland, but not in Wales], and influenza), family planning, and treatment for victims of violence.ⁱⁱ Note that maternity care is regarded as secondary care where undocumented/illegal migrants are liable to pay the treatment expense. Doctors are not allowed to delay treatment for patients with urgent needs who are unable to pay the treatment cost, but the incurred debts will be pursued later (Citizens Advice, 2015). In practice, there was still confusion in the NHS guidelines and regulations for dealing with undocumented/illegal migrants. Some NHS staff were unaware of the rights of these migrants (Piacenti, 2016). Nevertheless, the NHS attempted to resolve confusions by establishing a hotline service where healthcare staff can check the rights of each patient. Some Primary Care Trusts collaborated with non-profit clinics or charitable agencies in order to help undocumented/illegal migrants have better healthcare access (Cuadra, 2010b).

II. Germany

There were about 8.2 non-German nationals in Germany (~10% of its population). It is estimated that the number of undocumented/illegal migrants might be as large as 1.5

ⁱⁱ There are slight differences in migrant insurance policies amongst countries within the UK; most information in this review is from the English experience.

million. The refugee crisis of European region in recent years might have expanded the volume of migrants who applied for asylum by 330,000 (Berens et al., 2008, BBC, 2015).

The main public insurance system in Germany follows the Bismarck concept where social health insurance plays a dominant role. Standard insurance is funded by a combination of employee contributions, employer contributions and government subsidies on a scale determined by income level. Germany has a universal multi-payer system where private insurance companies under state regulation are the main insurer (pluralistic system). Contributions are waived in certain beneficiary groups, such as children and pregnant women. The benefit package is comprehensive. Legal migrants are required to make insurance contributions, similarly to German nationals. In summary, the German health insurance system is tightly linked to work and residence status (Gray and van Ginneken, 2012).

Undocumented/illegal migrants' rights to care are limited to certain services, such as post-natal care and infectious disease treatment (including HIV/AIDS, TB, and sexually transmitted diseases [STDs]). For such services, no charge is incurred by a patient if he/she applies for the Health Card (Krankenschein) with the Welfare Office. The state will issue a Toleration Certificate (Duldung), which guarantees the patient's right to care while he/she is under a temporary suspension of expulsion. In some local regulations, the coverage of the Duldung also covers delivery and postpartum care. Germany also endorsed the Law of Infectious Diseases, which allows an undocumented/illegal migrant to participate in anonymous disease screening and counselling free of charge without showing his/her legal identity. Undocumented/illegal migrants without the Duldung are still allowed to enjoy emergency care without any charge. Healthcare providers can apply to have the cost of emergency treatment reimbursed by the Social Welfare Office upon the condition that the providers report the residence status of these migrants according to the law (Section 87 AufenthG). This practice indirectly creates barriers to care for some undocumented/illegal migrants who are afraid of being reported to immigration officials (Gray and van Ginneken, 2012).

III. Italy

Of the 60 million residents in Italy, 3.5 million (~5.8%) are foreign-born (Cuadra, 2010a). The estimated volume of undocumented/illegal migrants was one million. The main insurance system is the Italian Health Service, financed by general taxation. Insurees are required to register with the local authorities to obtain a Health Card (Tessera Sanitaria). The Health Card holder is eligible to enjoy comprehensive health services, including specialised care/treatment, but there is co-payment at point of care, varying by the beneficiary's income. Certain populations are exempted from co-payment, such as those aged above 65, low-income, prisoners, persons suffering from chronic diseases, and pregnant women. Legal migrants are under the same regulations as Italian nationals (Gray and van Ginneken, 2012).

Undocumented/illegal migrants are eligible to acquire a 'Temporary Residing Foreigner Code', with a 6-month validity. This serves as a guarantee to enjoy a variety of essential services. In general, the benefit includes treatment for infectious diseases, HIV/AIDS, TB, occupational injuries and maternal and child care (Cuadra, 2010a). However, there are subtle differences in the interpretation of scope of 'essential service' between regions. Healthcare providers are not obliged to inform immigration control or the police about the presentation of undocumented/illegal migrants, except where they suspect that the patients are involved with criminal activity (Brindicci et al., 2015).

IV. France

France is composed of 64.7 million residents. About 3.6 million of them are foreign-born (~5.8%). The volume of undocumented/illegal migrants is approximately 300,000-500,000 (~0.7%) (Gray and van Ginneken, 2012). French public health insurance is operated under the Universal Coverage Act. Employees and employers must pay contributions to the Social Health Insurance, controlled by the Ministry of Social Security. The contributions are exempted in some populations, such as pregnant women and children, and persons with a yearly wage less than €6,600. The benefit package is comprehensive. For outpatient care, a patient must pay for the treatment first but up to

70% of the total expense can be later reimbursed from the scheme (Gray and van Ginneken, 2012).

The benefit package comprises primary care, secondary care, maternity and child care, emergency care, vaccination, family planning, public health threat treatment (including HIV/AIDS and TB), but migrants need to apply for the State Medical Assistance Certificate first (Aide Médicale d'Etat: AME). Evidence required for the AME application consists of birth certificate, expired passport and proof of residence and monthly income. The French healthcare system classifies the benefit for undocumented/illegal migrants into three tiers according to length of stay in the country.

For the first three months of residence, the patients can access only emergency care free of charge. After three months, the benefit package is expanded to cover secondary care and high-cost items, with some exceptions, such as prostheses and corrective lenses. If the patient has been residing in France for at least three years, they can be eligible for 'home medical assistance' (Assistance Médicale à Domicile), and other services, which are almost similar to French nationals.

In 2004, the French government established a special fund for indemnifying unpaid debts of health facilities incurred from providing emergency care to uninsured patients (including undocumented/illegal migrants). The Caisse Nationale d'Assurance Maladie (CNAM) is the governing body of the fund. Requests for reimbursement are considered on a case-by-case basis. Facilities must provide evidence to the CNAM to show that the patient is uninsured and the treatment is really related to an emergency condition (Gray and van Ginneken, 2012, Hasuwannakit, 2012a).

V. Japan

Japan is one of the top destination countries for migrants in East Asia, with about 2.2 million immigrants according to the IOM report (2010). However, the volume of undocumented/illegal migrants in Japan is much smaller than in other developed countries in the western world. Fujimoto (2013) suggested that the size of

undocumented/illegal migrants in Japan was around 67,000, and most of them were Chinese and Korean.

The Japanese health insurance system is based on the Bismarck model, where employers and employees are required to pay contributions. There are four main sub-schemes, that is, (1) Social Health Insurance for large companies/enterprises, contributed by employers and employees, (2) Social Health Insurance for small-scale companies/enterprises, financed by tripartite contribution (employers, employees, and the government), (3) Citizens' Health Insurance for the self-employed population, financed by an individual contribution plus the government's subsidy, and (4) Long-term Care Insurance for those aged over 75, subsidised by the central government with part of the budget cross-funded from the above three main schemes. The benefit package of all schemes is comprehensive but there is a co-payment at point of care of around 30% of the total expense (except for the elderly where exemption is applied) (Ikegami et al., 2011). Legal migrant workers are required to pay contributions to the Social Health Insurance like Japanese citizens.

The insurance system for undocumented/illegal migrants is not well established. However, there were some attempts to endorse laws that provide a safety net for these migrants, for instance, the Infectious Diseases Law ratifying the rights to TB treatment for everybody in Japan (this does not include HIV/AIDS), or the Tertiary-Level Emergency Care Unpaid Bill Reimbursement scheme, which aims to subsidise unpaid debts to the health facilities that provide complicated treatment for uninsured patients. Nonetheless, requests for reimbursement are considered on a case-by-case basis, and the system is effective only in some regions (such as Kanto region) (Calain-Watanabe and Lee, 2012, Parikh, 2010). The Mother and Child Health Law also provides pregnant women and their newborns rights to maternity care regardless of their immigration status, with the benefits including antenatal care, postnatal care and vaccination. However, some officials in welfare centres opposed the idea of providing care to undocumented/illegal migrants, and this situation created inconsistency in the provision of care across provinces (Calain-Watanabe and Lee, 2012, Parikh, 2010).

VI. United States

The US is the nation with the most ethnically diverse population, with an approximate number of undocumented/illegal migrants of about 11.3 million in 2014 (Krogstad and Passel, 2015). The health insurance system varies across states. Normally, each state applies a pluralistic system, which is a combination of private and public insurance. The main insurance arrangements are (1) public insurance for the vulnerable groups, that is, Medicaid for low-income populations and Medicare for the elderly, and (2) voluntary private insurance. Some states provide state-sponsored insurance for individuals who are medically uninsurable through private insurance.

Those who are not entitled to any scheme above are liable to out-of-pocket payment at point of care. In 2010, the Affordable Care Act (Obamacare) was enacted. The Act made it illegal for insurers to refuse to insure an individual due to pre-existing conditions. It also increased coverage by expanding Medicaid to cover individuals and households near the poverty line, and by subsidising private insurance for middle-income people (Hall and Lord, 2014). Legal immigrants and foreign-born residents have the same rights as US citizens.

This review found an example from California, where the policy for undocumented/illegal migrants is quite relaxed. The local government established the state's insurance project for undocumented/illegal migrants, namely, restricted Medi-Cal. To be entitled to the scheme, the applicants must provide a proof of residence to the officials, such as an expired visa or the residence card (California Department of Health Care Services, 2015, Hispanas Organized for Political Equality (HOPE), 2015). The basic benefit package includes: (1) emergency treatment, (2) acute, ongoing, and maintenance renal dialysis services, and (3) maternity and childcare (family planning, antenatal care, delivery care, and postpartum care up to 60 days).

Beneficiaries can utilise such services free of charge. Aside from these services, patients are liable to have co-payment. However, disadvantaged or poor beneficiaries can apply under the Ability-to-Pay Plan, which is the programme that helps reduce treatment

expenses for a patient. The Plan subsidises cost of care in accordance with the patient's income. There is no charge for individuals in applying for the Plan if, after deductions (current taxes, medical insurance, child care and support payments), their monthly income is still less than 138% of the poverty line (around US\$ 1,343 for a single applicant). If, after deductions, the applicants' monthly income is still above that threshold, they have to pay the monthly premium, varying between US\$ 60-500 to be eligible for outpatient care. Yet the individual is still obliged to pay for inpatient care. The Plan also helps patients negotiate with a health facility in order to pay the treatment cost in instalments rather than a lump sum (Maternal and Child Health Access, 2014).

In conclusion, the review found that each country has managed its health insurance for undocumented/illegal migrants differently, according to its health system context. Even where there are laws and regulations that ratify migrants' rights to care, these do not guarantee that migrants can enjoy their rights without constraints. Some common barriers include ignorance of healthcare providers about migrants' eligibility for health benefits, and variation in legal interpretation across regions. On the other hand, in a country where migrants' rights to care are restricted, there may exist some extra-mechanisms/channels, such as charitable organizations, that help migrants access essential care.

2.3 Challenges in the provision of healthcare services for migrants: a systematic review from the providers' perspective

In addition to the earlier review, which presented a macro-picture of international insurance designs for cross-border migrants, it is beneficial to explore this element in more depth. This subsection explores the evidence or real-life challenges encountered by healthcare providers when seeking to provide care for migrants.

At the time of writing, there was little systematic review of this issue from providers' perspectives. Therefore, the author conducted a new systematic review on this matter.

The review question was: 'What are the perceptions and practices of healthcare providers in managing care for migrants, as well as the challenges and barriers that they often faced in the actual setting?'

I. Review methods

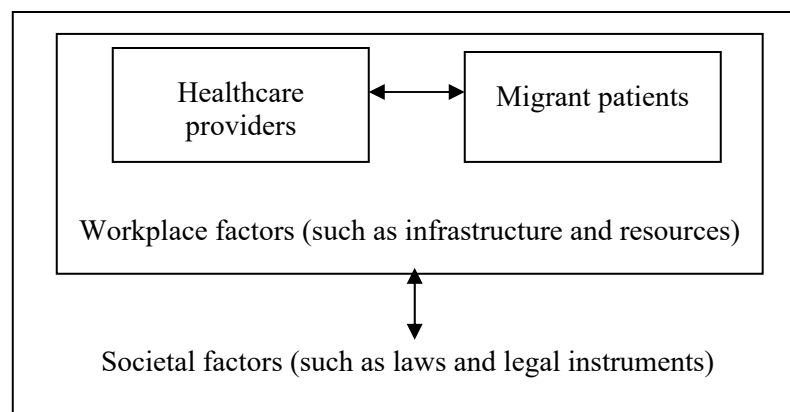
Review framework

The review defined 'healthcare providers/workers' as people engaging in service delivery (in the public or private sector) in structured facilities such as hospitals and primary care units. Note that family carers at home and health volunteers were excluded.

The review framework was adapted from Ferlie and Shortell (2001), suggesting that challenges faced by a provider were shaped not only by individual attitudes towards a patient, but also by surrounding environment in which the provider was operating.

The environment was divided into three levels, namely: (1) patient factors, (2) workplace factors, and (3) societal factors (specifically laws and regulations that stipulated the rights to care for migrants), see Figure 3.

Figure 3 Review framework



Source: adapted from Ferlie and Shortell (2001)

Search strategy

Since this review sought a broad description of the attitudes and perceptions of healthcare staff rather than aiming to assess this topic quantitatively, articles which utilised qualitative methods were considered more suitable for the review than quantitative articles. Accordingly, the search was limited to qualitative research articles.

Potential articles were recruited from two main strands: (1) systematic search, and (2) purposive search. In the systematic search, the key search engines, namely, Medline, Embase and Scopus, were explored.

In Medline, both 'Medical Subject Headings (MESH)' search, and text search were performed. In Embase and Scopus, where MESH terms are not available, an exploding search strategy was applied to encompass relevant texts as though the MESH terms were used.

Publication date was limited to the time of writing, between 1 January 2000 and 30 June 2015. Due to limited capacity for language translation, studies published in any language other than English were excluded. Table 5 indicates the search terms employed in the three aforementioned databases. Truncation and wildcards were carefully checked in all search engines.

Table 5 Search terms used in Medline, Embase, and Scopus for the systematic review

Search engine	Search terms
Medline	(((((("mixed method*")) OR (("qualitative study")) OR ("qualitative research")) OR ("Qualitative Research"[Mesh])))) AND (((("Transients and Migrants"[Mesh]) OR ("Emigrants and Immigrants"[Mesh]) OR ("migrants")) OR ("refugees*") OR ("asylum seekers*"))) AND (((("Health Services"[Mesh]) OR ("Professional Practice"[Mesh]) OR ("Attitude of Health Personnel"[Mesh])) AND ("Health Personnel"[Mesh]))))
Embase	((exp migrant/) OR (exp refugee/) OR (exp asylum seeker)) AND (exp health care personnel/) AND ((exp health personnel attitude/) OR (exp professional practice/) OR (exp health service/)) AND ((exp qualitative research/) AND ("mixed method".mp.))
Scopus	(TITLE-ABS-KEY ("qualitative research" OR "qualitative study" OR "mixed method") AND PUBYEAR > 1999 AND PUBYEAR < 2016) AND (((((TITLE-ABS-KEY ("asylum seekers") AND

Search engine	Search terms
	PUBYEAR > 1999 AND PUBYEAR < 2016) OR (TITLE-ABS-KEY (refugee) AND PUBYEAR > 1999 AND PUBYEAR < 2016) OR (TITLE-ABS-KEY (immigrant) AND PUBYEAR > 1999 AND PUBYEAR < 2016) OR (TITLE-ABS-KEY (migrant) AND PUBYEAR > 1999 AND PUBYEAR < 2016)) AND ((TITLE-ABS-KEY ("health personnel") AND PUBYEAR > 1999 AND PUBYEAR < 2016)) AND (((TITLE-ABS-KEY ("health service") AND PUBYEAR > 1999 AND PUBYEAR < 2016) OR (TITLE-ABS-KEY ("attitude") AND PUBYEAR > 1999 AND PUBYEAR < 2016) OR (TITLE-ABS-KEY ("practice") AND PUBYEAR > 1999 AND PUBYEAR < 2016))))) AND (LIMIT-TO (LANGUAGE , "English"))

For the purposive search, articles and publications were retrieved from the WHO websiteⁱⁱⁱ and from the online grey literature database organised by the New York Academy of Medicine Library^{iv}.

Inclusion and exclusion criteria and data extraction

Abstracts of initially selected articles were screened by the researcher and a research assistant. Any disagreement in the decision on abstracts was resolved by discussion. Apart from the abstract screening, all other steps of the systematic review were performed solely by the researcher. Articles which passed the screening process were retrieved for the full text. Eligible studies were included if they met all the following criteria: (1) providing information about perceptions, attitudes or practices of providers, (2) presenting evidence relevant to cross-country migrants, (3) involving health services that were commonly performed in routine clinical settings, and (4) being primary research with sufficient scientific details of the methods used.

Articles were excluded if they met any one of the following criteria: (1) failing to provide sufficient information about providers' perceptions, attitudes and practices; (2) engaging with domestic migrants rather than cross-country migrants, (3) not employing a rigorously scientific approach (that is, a selected article must pass the first two

ⁱⁱⁱ http://www.who.int/hac/techguidance/health_of_migrants/en/

^{iv} <http://www.greylit.org/>

questions of the quality assessment checklist; see 'Quality assessment and data analysis' below) or purely representing an author's opinion (letters to the editor or commentary articles were left out), (4) not relevant to widely practiced modern medicine (health services which were specific to some cultures, such as Aruyaveda or Chinese herbal medicine, were excluded), and (5) being restricted to experimental or biomedical pilot programmes.

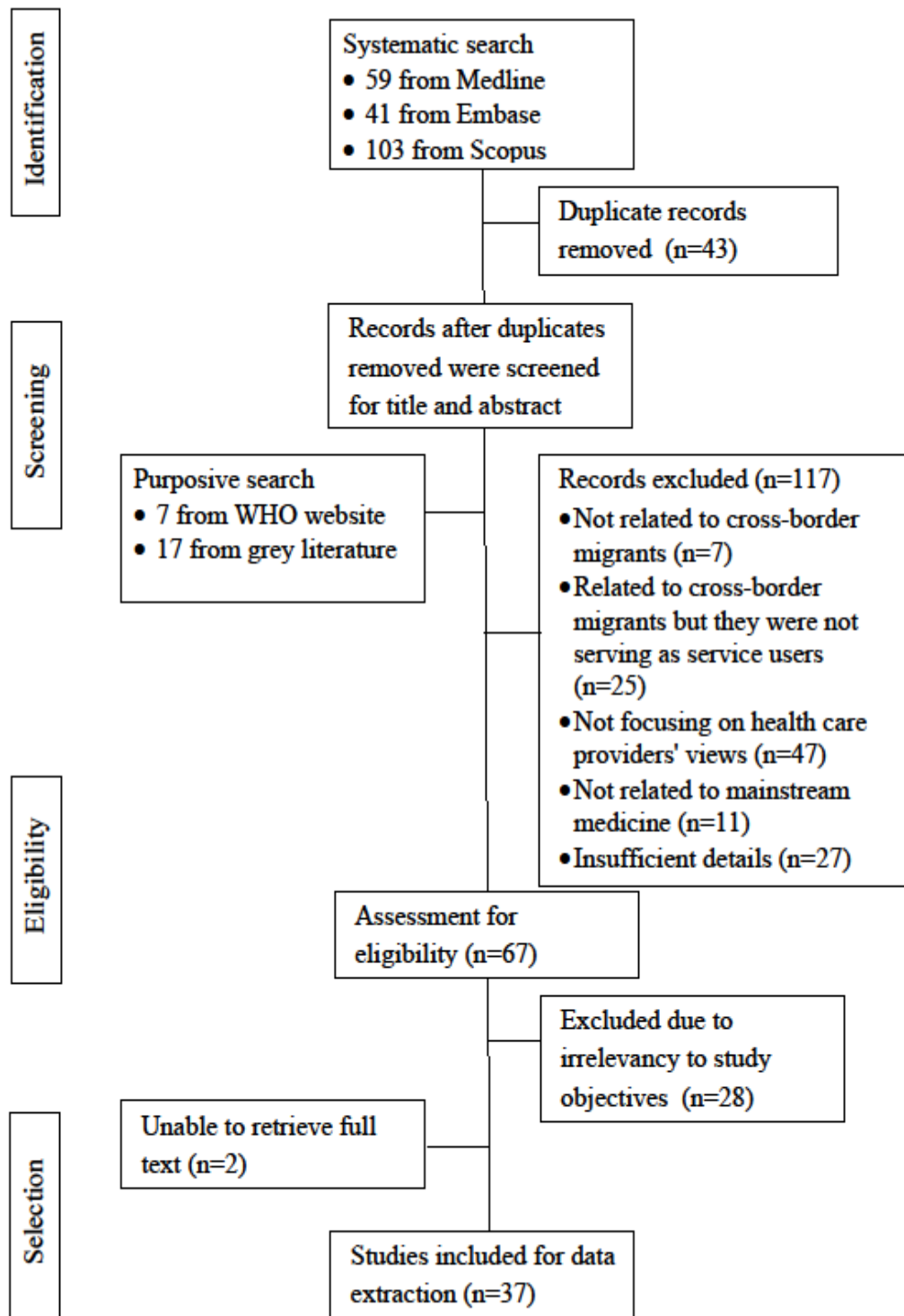
Potential articles were then checked for duplication and the full text was screened. Studies were stored and tracked in a manageable computerised format by EndNote software Version X4.

Quality assessment and data analysis

The main results of each selected article were extracted and collected in the data extraction table. A quality assessment tool was applied from Spencer et al (2003) and the Critical Appraisal Skills Programme (CASP) checklist (2013). The checklist is composed of 10 questions, each of which would be given an answer, 'Yes', or 'No', or 'Cannot tell'. Passing the first two screening questions meant that an article's research question matched the review objective, and the methods used were appropriate for addressing the research question. In this case, the article's full text would then be perused in greater detail.

Articles which failed to meet the above screening criteria were not included in the data extraction table. Note that the assessment of quality in this regard did not apply a specific cut-off point to discard articles of seemingly poor quality. Instead it was used to remind audiences of any potential bias of the study. Framework analysis as suggested by Barnett-Page and Thomas (2009) was applied, that is, the key message of each article was summarised and charted against the above framework. A summary of the article selection process is presented in Figure 4 on the following page.

Figure 4 Article selection process



II. Results

A total of 203 articles were obtained from the systematic search (41 from Medline, 59 from Embase and 103 from Scopus). After discarding 43 duplicate articles, there were 160 remaining articles. After combining with 17 articles from the WHO website and 7 articles from the grey literature database, there were 184 articles left for abstract screening. Of the 184 articles, 37 passed the screening process and then the full text was explored for key messages. The quality assessment result of each article is shown in Appendix 2, and the key messages of each article are exhibited in Appendix 3.

Of the 37 articles, three showed data from multi-country surveys (Dauvrin et al., 2012, Straßmayr et al., 2012, Sandhu et al., 2013), the remaining thirty-four are standalone study projects. About 68% of the reviewed studies (25/37) were carried out in Europe, followed by 24% (9/37) in America, and the rest in Australia and Africa. Only two studies were conducted in developing nations, that is, Costa Rica and Morocco (Goldade and Okuyemi, 2012, van den Ameele et al., 2013).

The quality appraisal table in Appendix 2 reveals that the quality of the selected articles varied considerably. The most common concern regarding article quality was a failure to critically examine the extent of potential bias resulting from the role and experience of the researchers (reflexivity). Examples of articles which had a clear reflexivity issue were Abbot and Riga (2007), Akhavan (2012) and Byrskog et al (2015).

Interaction with patient factors

Almost all the selected articles (35/37) highlighted that language and cultural differences, and lack of knowledge of a host country's health system, are perceived by providers to be common challenges (Abbott and Riga, 2007, Otero-Garcia et al., 2013, Hakonsen et al., 2014, Pergert et al., 2008, Terraza-Núñez et al., 2011, Suurmond et al., 2013, Samarasinghe et al., 2010, van den Ameele et al., 2013). These difficulties significantly impeded effective communication between migrants and providers. The barriers interweaved with unfamiliarity with specific cultural beliefs of migrants, such as

patriarchal norms in Muslim culture, making it difficult for providers to address migrants' illnesses in a holistic fashion. In light of this barrier, primary care physicians, were reluctant to delve into details beyond physical illness, and consequently shaped their practice to be more 'superficial' and 'straight forward'. This problem was highlighted by Rosenberg et al (2006) and Hultsjo and Hjelm (2005), reporting that language barriers made nurses in psychiatric emergency wards adapt the way they took patients' medical histories, making the accounts less complex to avoid delving into the traumatic experiences of migrants. Dauvrin et al (2012) reported that providers in accident and emergency (A&E) departments, where treatment was more direct, were far less affected by language and cultural divergence than those in mental health and primary healthcare clinics.

Furthermore, cultural beliefs, specifically gender preference, also played an important role. As expounded by Lyberg et al (2012), most male interpreters did not understand the demands of immigrant women receiving maternity care. Since it was difficult to deliver health services effectively, there arose a feeling of mistrust, meaning providers feared accusations of racism if they unintentionally made cultural mistakes (Manirankunda et al., 2012, Worth et al., 2009). The mistrust problem was further complicated when it was combined with the fact that most migrant patients were unfamiliar with the health system of the country of residence (Sandhu et al., 2013, Englund and Rydström, 2012, O'Mahony and Donnelly, 2007).

Interaction with workplace factors

Respondents commonly cited in-house constraints resulting from huge work burdens and inadequate human resources and institutional capacity as common barriers (found in 21 of 37 articles). As discussed by Straßmayr et al (2012), such challenges were more apparent when providers with highly specific expertise were in demand, for example, a shortage of skilled psychotherapists in mental care.

To resolve communication barriers, interpreting services were set up as part of 'migrant-friendly services'. Yet the availability of interpreting assistance neither guaranteed the quality of care nor ensured the interpreting service would be utilised in practice.

Akhavan (2012) and Farley et al (2014) highlighted that using interpreters was somewhat time consuming. Eklof et al (2015) and Lindsay et al (2012) emphasised that using phone interpreters increased the workload of nursing staff, especially in situations requiring urgent care. In addition, Lyberg et al (2012) found that an interpreting service was of little use in some circumstances, such as during delivery and maternity care. Nicholas et al (2014) suggested interpretation problems might be eased by using healthcare staff of the same ethnic background to the patients to serve as a bridge between migrants and healthcare providers.

The respondents in some studies (7/37) mentioned contradictions between service provision guidelines of the workplace and beliefs of migrant patients (Foley, 2005, Fowler et al., 2005, Munro et al., 2013, Worth et al., 2009, Høye and Severinsson, 2008, Vangen et al., 2004, Wachtler et al., 2006). Foley (2005) raised an example where nurses in an HIV clinic in the US changed their routine practice by delivering medicine for HIV-positive migrants at places outside the patients' homes in order to avoid disclosing the HIV status of female migrants to their male partners. Høye and Severinsson (2008) and Wachtler et al (2006) underscored that the mismatch between routine clinical service guidelines and migrant patients' beliefs increased feelings of stress amongst healthcare providers. An instance of intensive care wards in Norway was raised to support this notion, since the wards were often crowded by a large number of family members of immigrant patients, and this hampered care procedures of the nursing staff (Høye and Severinsson, 2008).

Interaction with societal factors

Societal challenges were reported in 25 of 37 articles. Different belief systems of providers and service users was an important challenge. For example, patriarchal values in Muslim migrants made female providers feel that they were not fully trusted by patients (Høye and Severinsson, 2008, Englund and Rydström, 2012). Nicholas et al (2014) mentioned that neonatal intensive care staff in Canada reported negative feelings towards the birthing rites of some immigrant families. The difference in belief systems

had some overlapping features with language and cultural barriers as explained above (interaction with patient factors).

Aside from cultural differences, a discrepancy between immigrant laws and professional norms was observed. Professional norms more strongly shaped the behaviours and attitudes of healthcare providers than laws that prohibited migrant rights to care. In cities where policy regarding universal healthcare access was open for 'everybody', clinical practice was more relaxed. Nonetheless, the relaxation of laws that allowed undocumented/illegal migrants to enjoy services (for free or with little expense) did not guarantee that migrants would be able to access health facilities without constraints. In contrast, in countries where the rights of migrants were restricted, most health practitioners did not feel obligated by this mandate. Informing the police or government authorities about the presence of undocumented/illegal migrants was an uncommon practice, even though they were requested to do so (Dauvrin et al., 2012, van den Aamele et al., 2013, Kurth et al., 2010). Common excuses used by the providers were grounded on philanthropic concepts, recognising migrants as a vulnerable group and taking into account the potential threat to the public of leaving sick migrants untreated (Goldade and Okuyemi, 2012).

Besides, administrative and financial burdens usually played an important role in limiting the migrants' rights to care (Foley, 2005, Munro et al., 2013, Eklof et al., 2015, Donnelly and McKellin, 2007). Donnelly and McKellin (2007) exemplified a case in Canada where a breast cancer screening service for immigrants faced a huge funding cutback. Because of administrative delay, refugees and refugee claimants in Quebec found themselves uninsured despite having the right to participate in the Interim Federal Health Programme (Munro et al., 2013).

Similar challenges also appeared in the US. To be insured at the city health centres in Philadelphia, an immigrant must first provide proof of residence to the accountable authority. Yet some African women had no documentation in their own name since they lived with male partners or relatives (Foley, 2005). Goldade and Okuyemi (2012) reported healthcare providers' opinions that allowing migrants to access emergency

services was reasonable, since it had advantage in preventing the country from experiencing public health threats (however, respondents reported that the benefit should not include treatment for occupational injuries because the profit of the treatment went to individual companies rather than the wider national population).

Though this review aimed to identify 'challenges' encountered by healthcare providers in managing care for migrants, some 'enabling factors' could be identified. The introduction of an interpreting service as expounded in the earlier subheading (Interaction with workplace factors) could be regarded as a mechanism that facilitated healthcare access for migrants. Another obvious example was a collaboration between public healthcare providers and informal networks, such as charitable groups or non-government organisations (NGOs). A reliance on informal networks/channels could help providers in the public sector overcome administrative and legal constraints since most NGOs or philanthropic agencies were less bound by rules and procedures than government authorities (Straßmayr et al., 2012, Health Protection Agency, 2010). A concrete example was in England where some health staff described confusion in the NHS regulations that limited some benefits (such as housing aid) for certain types of migrants. Therefore, some health professionals resorted to non-statutory organisations or civil networks to help fill this service gap (Health Protection Agency, 2010).

III. Limitations of the review

Despite a rigorous search design, this systematic review experienced some limitations. Firstly, the search did not encompass non-English-language articles, due to limited interpreting capacity of the researcher. Secondly, the majority of articles were retrieved from online databases and the selection was mainly based on the MESH terms. Literature from university-based reports, unpublished articles and domestic textbooks, were not thoroughly explored. Lastly, the review was limited to qualitative research articles only. The reason for confining the search in this fashion was that this review aimed to capture a broad understanding of the perceptions and practices of healthcare staff in providing care for migrants, rather than assessing this topic in a quantitative sense.

2.4 Methodological issues in policy evaluation research

While subsections 1, 2, and 3 are about the 'content' of migrant health and migrants' access to care, subsection 4 is more about 'methods' and 'viewpoints' towards policy evaluation research. There are two subheadings under this topic: (1) Challenges/conflicts between policy objectives and policy implementation, and (2) Trends in modern-day evaluation research.

I. Challenges/conflicts between policy objectives and policy implementation

Though this research focuses primarily on policy implementation, it is worth mentioning the whole policy process, from agenda setting and policy formulation to policy implementation and outcome evaluation (Walt, 1994).

Ideally, in formulating a policy, policy makers should be 'rational'. The goals and consequences of all policy options should be carefully considered (Walt, 1994). Lindblom (1979) argued that, in the real world, policy makers often use the 'incrementalist model'. The model suggested that policy makers usually explore only a small number of alternatives in dealing with problems and tend to select options that differ trivially from existing policies. That is, in practice a good decision is defined as agreement between policy makers.

A critic of incrementalism is Dror (1989), who criticised incrementalists for being too conservative. With such a conservative approach, policies were likely to reinforce inertia and the status quo. Dror (1989) also argued that incrementalism was a sound approach in countries with high social stability but not in a situation where significant social changes were required.

In policy implementation, experiences from many countries attest that, oftentimes, actual practice might deviate from a policy's initial goals. The situation in the UK can exemplify this notion. Recently, the UK government endorsed the 'migrant health levy'

policy, which put an additional financial burden on the non-British service NHS users. However, some GPs in the UK expressed discomfort with this policy as it made them act like a 'border patrol' officer rather than a clinician. As a result, some GPs found a compromise solution by removing (illegal) migrant patients from their patient list when contacted by the UK Border Agency (UKBA), then reinstating them later (Migrants' rights network, 2011).

In general, there are two analytical approaches/frameworks to investigate how a policy is implemented, that is, 'top-down' and 'bottom-up' approaches (Nilsen et al., 2013). Though this study focuses mainly on a bottom-up perspective, it is worth mentioning briefly the top-down approach. Besides, the more the study was conducted, the more the researcher found that parts of the phenomenon in the field could not be explained solely by the bottom-up perspective as parts of the implementation problems originated from the policy formulation process at the central level, which could be better explained by the top-down approach (see Chapter 5).

Top-down investigators often ascribe implementation failure to problems deriving from central government policy makers, such as insufficient provision of resources and unclear or flawed policy messages (Schofield, 2001). Hogwood and Gunn (1984) defended the top-down approach by proposing some recommendations for policy makers to improve policy implementation, such as minimising the dependency relationship in a command line, making a job description as clear as possible, and getting rid of external circumstances that might impose crippling constraints on the implementing agencies.

By contrast, bottom-uppers often criticise the top-down perspective for considering implementation as a purely administrative process (Nilsen et al., 2013). The bottom-up approach therefore pays more attention to variables in the field and views policy implementation as a complex process of translating policy intentions to action. One of the renowned theories which is recognised as a classic example for bottom-up policy analysis is the 'Street-Level Bureaucracy' (SLB), proposed by Lipsky (1980). The theory

suggests that what policy makers expect to happen may not always align with perceptions or preferences of local implementers, or 'street-level bureaucrats'.

Lipsky (1980) defined street-level bureaucrats as those *'who interact with citizens in the course of their jobs, and who have substantial discretion in the execution of their work'*. In this sense, health workers can be viewed as street-level bureaucrats. The theory also emphasised that the decisions of street-level bureaucrats and any mechanisms they invented to deal with work pressures and uncertainty might shape the reality of public policies.

Some common adaptive behaviours of frontline officers are (1) rationing services (that is, prioritising their clients, in terms of who should receive benefits first), (2) controlling clients and reducing the consequences of uncertainty (routinisation of any request/appeal made by clients in a passive manner), (3) husbanding worker resources (developing work patterns to conserve the resources available), and (4) managing the consequences of routine practices (avoiding tackling complicated cases directly by referring them to other agencies, in order to protect their routine work).

Moreover, Leichter (1979) proposed that the implementation of policy was influenced by several exogenous elements: (1) situation factors—referring to the transient and idiosyncratic atmosphere surrounding a policy, for example, violent events or a radical change in politics; (2) structural factors—the relatively unchanging elements of society; (3) cultural factors—value commitments within a community; and (4) international factors—events or values outside the boundaries of a political sphere, such as bilateral trade agreements and pressures from external donors.

II. Trends in modern-day evaluation research

In recent years, evaluation research has been moving away from a 'black-box' towards an 'open-box' approach. 'Black-box' evaluation focuses on the magnitude of programme effects, whereas the 'open-box' approach aims at expounding 'how' and 'why' such effects come about (Astbury and Leeuw, 2010, Pawson and Tilley, 2004). Having reviewed the literature concerning migrant health insurance in Thailand (presented in

Chapter 3), most literature rarely pointed out 'why' the insurance can (or cannot) boost service utilisation amongst the beneficiaries, 'what' the barriers in the policy implementation are, and 'how' health personnel overcome such barriers. These questions could not be answered by using only the 'black-box' approach.

A qualitative approach is considered beneficial in providing a better understanding on 'how' and 'why' a policy/programme turns out as it does in practice. A remarkable example on 'open-box' study was drawn up by Ssengoba et al (2012), explaining why performance-based contracting (PBC) policy failed in Uganda. The study highlighted that inadequate design and hasty selection of service targets meant healthcare providers were 'locked-in' to the poor choices. Such explanations complemented the findings of an earlier study by Basinga et al (2011), which pointed to a lack of improvement in child immunisation completeness after the introduction of PBC.

From a quantitative angle, apart from 'how' and 'why' questions, the question of whether or not the success/failure of a policy is due to the policy *per se* is of equal importance. This point is related to the 'counterfactual' problem. Khandker et al (2010) defined the idea of tackling the counterfactual argument as an 'impact evaluation'.

The impact evaluation is a quantitative assessment of what might happen in the absence of the policy/programme. Thus, the quantitative analysis, which adjusts for potential confounders, is important in addressing possible statistical bias in evaluating programme impacts.

Therefore, applying the quantitative 'impact evaluation' concept alongside the qualitative 'open-box' concept (through a multi-methods approach) might be helpful in obtaining a comprehensive view of a programme's achievement, and this was the rationale for constructing the methodology for this thesis.

2.5 Conclusion

This chapter has presented the following issues: (1) general conceptions of migrant health and health-seeking behaviour, (2) international examples of health insurance arrangements for undocumented/illegal migrants, (3) providers' perspectives on challenges and barriers to care for migrants, and (4) methodological concerns over the current trend of policy evaluation research.

The review suggested that migrants normally had lower utilisation rates than the native populations. However, there was evidence arguing that the low utilisation rate of migrants was not necessarily due to favourable health status of migrants. The situation might be attributable to the fact that some migrants faced a number of barriers to care, including language difficulty, unfamiliarity with the host country's health system, economic constraints, and precarious legal status.

The second topic considered experiences of insurance management for undocumented/illegal migrants in the six countries. The review reported that health insurance design for undocumented/illegal migrants varied across countries. Yet there are some common features in the insurance design: (1) emergency care and treatment for maternal and child health and communicable diseases were relatively open to all types of migrants, (2) though there were laws and regulations affirming the rights to care of migrants, these did not guarantee that migrants were able to enjoy services in reality since there were varying legal interpretations, and (3) in a country that tended to limit the rights to care of migrants, health practitioners occasionally requested support from non-government authorities to fill the service gaps.

In the third topic, the systematic review found that perceptions, attitudes and practices of individual practitioners were markedly influenced by several factors. Diverse cultural beliefs and language differences created difficulties for providers to manage care for migrants, and these difficulties could not be addressed simply by establishing interpreting assistance. Limited institutional capacity, such as human resources resource and financial shortfall, could undermine the achievement of migrant-friendly services.

The fourth topic reviewed potential gaps between policy objectives and policy implementation. Though, ideally, policy makers were supposed to be 'rational' in formulating a policy, this might not occur in practice. At the implementation level, frontline officers might adapt their practice of the policy to manage day-to-day problems and this situation might create gaps between policy objectives and policy implementation.

In terms of methods for evaluating the policy, there is now an increasing tendency to use an 'open-box' approach to better explain the real-world phenomenon rather than a sole reliance on 'black-box' approach. Besides, the concept of 'impact evaluation' is of important in policy evaluation research.

Chapter 3: Overview of migrant related policies in Thailand and identification of knowledge gaps

Chapter 3 supplements the literature review in Chapter 2 by focusing on the Thai situation. The chapter is divided into four subsections: (1) an overview of the Thai healthcare system and a brief description of the main public health insurance system in Thailand, (2) an introduction to how Thailand defines its 'non-Thai' populations, (3) a literature review for identifying gaps in knowledge for this thesis, and (4) chapter conclusion.

3.1 Overview of the Thai healthcare system

I. Thailand at a glance

Thailand is one of the founding members of the ASEAN in 1967. The geographical location that connects the India Ocean (through the Andaman Sea) with the Pacific Ocean (through the Gulf of Thailand) makes the country the centre of logistics and transportation in the Indochinese Peninsula. The country shares over 5,000 kilometres of land border with Cambodia (758 km), Lao PDR (1,750 km), Malaysia (576 km), and Myanmar (2,202 km). As of 2013, there were 89 official border crossing points, set up to accommodate the orderly transportation of goods and people, see Table 6.

Table 6 Border crossing sites between Thailand and its neighbouring countries

Thailand	Length of the shared border (km)	International border crossings			
		Permanent	Temporary	Special permitted areas	Total
Myanmar	2,202	4	14	4	22
Lao PDR	1,750	13	26	1	40
Cambodia	758	6	8	4	18
Malaysia	576	9	-	-	9
Total					89

Source: Than Online (2015)

The majority of the population (96%) is of Thai ethnicity. The country's official language is Thai and Buddhism is the main religion (93%). The population rose from 34.4 million in 1970 to 63.8 million in 2010. However, the population growth rate declined rapidly in the last three decades due to effective family planning. The total fertility rate fell from over 3 births per woman in 1980 to 1.6 in 2010.

Demographically, there were slightly more females than males (51% v 49%). The ratio of children aged 0-14 to the total population shrank from 45.1% in 1970 to 19.6% in 2010, and the percentage of people aged 65 or over almost tripled, from 3.1% to 8.9% during the same period. The adult literacy rate in 2010 was about 93.5%, see Table 7.

Table 7 Demographic transition of Thailand between 1970 and 2010

Demographics	1970	1980	1990	2000	2010
Total population (million)	34.4	44.8	54.5	60.9	63.8
Population, female (% of total)	50.1	50.2	50.4	50.7	51.2
Fertility rate (total births per woman)	5.6	3.4	2.1	1.7	1.6
Population aged 0-14 (% of total)	45.1	38.3	29.2	24.4	19.6
Population aged 65 or over (% of total)	3.1	3.6	4.7	6.3	8.9
Adult literacy rate (% of total)	78.6	87.2	92.7	90.8	93.5

Source: adapted from Jongudomsuk et al (2015)

Thailand is one of the countries in the region with a fast growing economy, especially during 1985-1996, when the country planned to establish itself as a newly industrialised nation. However, the country experienced major negative economic growth after the 1997 Asian financial crisis, and Thailand took almost 10 years to recover from the crisis. By 2006, the gross national income (GNI) per capita recovered to the same level as before the 1997 financial crisis.

The fiscal space, measured by tax burden, was about 16–17% of the gross domestic product (GDP). Though it was relatively small, compared to the average for Organization for Economic Co-operation and Development (OECD) countries, it was slightly higher than most middle-income countries (Jongudomsuk et al., 2015). According to the World Bank criteria, Thailand is now recognised as one of the upper middle income nations as its GNI per capita has gone beyond US\$ 4,125 since 2010

(World Bank, 2015). Though the labour force in the agriculture sector is quite large, it has been decreasing continuously. The contribution to GDP made by the agricultural sector was around 12% in 2010, almost half of the contribution in 1980. Despite marked economic growth, income distribution has not improved notably. The country's Gini index has never gone below 0.4, see Table 8.

Table 8 Macroeconomic indicators of Thailand between 1980 and 2010

Indicators	1980	1990	2000	2010
GNI per capita (US\$)	710	1,480	1,930	4,150
GNI per capita, Power purchasing parity (US\$)	1,050	2,800	4,800	8,120
Tax burden (% of GDP)	-	-	-	16.0
Value added in industry (% of GDP)	28.7	37.2	42.0	44.7
Value added in agriculture (% of GDP)	23.2	12.5	10.3	12.4
Value added in service (% of GDP)	48.1	50.3	49.0	43.0
Gini coefficient	0.44	0.45	0.43	0.40

Source: adapted from World Bank (2015) and Jongudomsuk et al (2015)

II. Thailand's healthcare system and its path towards UHC

Thailand has extensive experiences in the development of its healthcare system. In 1942 the Thai MOPH was founded. The MOPH has helped fuel the development of modern medicine for the entire nation, leading to a shift in health-seeking behaviour of the Thai population, from self-medication to facility-based treatment (Prakongsai, 2008).

Before 1960, not all districts in the country had a district hospital. At that time, only certain large districts had well-established health facilities. Between 1960 and 1975, according to the National Health Development Plan, the government agenda was geared towards speedy development of health and education (Prakongsai, 2008). Accordingly, the district health system development project was launched in 1977 to provide all districts with full geographical coverage of district hospitals and health centres. By the late 1990s, the targeted coverage was achieved, resulting in the foundation of over 95 provincial hospitals (tertiary care), 725 district hospitals (secondary care) and almost 9,800 health centres (primary care) throughout the country (Tangcharoensathien et al., 2013). The infrastructure improvements were followed by the engagement of a larger

health workforce. The number of physicians grew tremendously, from 8,000 in 1985 to over 40,000 in 2013—a fivefold increase in almost three decades, and more than a threefold increase in nurses was observed during the same period. The establishment of medical and nursing schools, particularly those outside Bangkok, contributed to a considerable rise in the country's capacity to produce physicians and nurses. With the long term investment in healthcare infrastructure and human resources, Thailand achieved UHC in 2002 through the introduction of the Universal Coverage Scheme (UCS) (Evans et al., 2012).

In terms of financing, since the early 1970s, previous governments had devised a piecemeal approach to expand health insurance coverage to all populations in Thailand (Towse et al., 2004). The 'Workmen's Compensation Fund' and the 'Free Medical Care for the Poor' were the first two public health insurance schemes introduced during the mid-1970s. These were followed by a variety of insurance schemes for Thai citizens, for instance, the 'Civil Servant Medical Benefit Scheme' (CSMBS), 'Traffic Accident Victim Insurance' (TAVI), the 'Low Income Card Scheme' (LICS), the 'Voluntary Health Card Scheme' (VHCS), the 'Social Security Scheme' (SSS), and finally the UCS.

The policy for protecting the poor was first initiated in 1975, through the 'Free Medical Care for the Poor' policy, which gradually evolved into the LICS 1981. The LICS enabled the poor (with a yearly income below the national poverty line) to obtain government health services free of charge. The process of identifying eligible persons was means testing, and community leaders were involved in selecting the eligible beneficiaries. Evidence suggested the LICS experienced many operational problems, such as local prejudice and nepotism from community leaders, inadequate financial resources from the government, and relatively poorer quality of service compared to other schemes (Kongsawat et al., 2000, Pannarunothai, 2002). It should be noted that the LICS did not impose a nationality condition on its beneficiaries. Migrants or foreign populations, who were identified as 'being poor', were still eligible to buy the card.

The SSS is a tripartite contributory scheme, in which employers, employees, and the government, all pay equal contributions to the Social Security Fund. The contribution is

5% of an employee's monthly salary. SSS beneficiaries are covered for both health and non-health benefits, such as sickness, death, invalidity, child assistance, and unemployment benefits. The Social Security Office (SSO) is in charge of purchasing health services from public and private providers by using a capitation contracting model.

After three decades of a piecemeal approach of targeted health insurance schemes, the health insurance system in Thailand seemed to be composed of fragmented insurance schemes, each of which had diverse characteristics in terms of targeted population, benefit package, and provider payment method, see Table 9.

Table 9 Chronological events of the development of various health insurance schemes for Thai citizens

Year	Events	Insurance Characteristics			
		Social welfare	Fringe benefit	Compulsory insurance	Voluntary insurance
1954	First Social Security Act			✓	
1974	Workmen's Compensation Fund			✓	
1975	Free Medical Care for the Poor	✓			
1978	First private health insurance company				✓
1980	Royal Decree for Civil Servant Medical Benefit Scheme (CSMBS)		✓		
1981	Low Income Card Scheme (LICS)	✓			
1983	Maternal and Child Health Fund				✓
1984	Voluntary Health Card Scheme (VHCS)				✓
1990	Social Security Act covering enterprises with 20 or more employees			✓	
1992	Free medical care for the elderly	✓			
1993	Traffic Accident Victim Insurance			✓	
1994	Social Security Act extending to cover enterprises with 10 or more employees			✓	

Year	Events	Insurance Characteristics			
		Social welfare	Fringe benefit	Compulsory insurance	Voluntary insurance
1994	VHCS extending to cover community leaders and health volunteers		✓		
1994	LICS expanding to the elderly, the disabled, and children aged < 12 years	✓			
2000	Social Security Scheme (SSS) under the Social Security Act expanding to cover old age pension and child benefits			✓	
2001	Implementing the Universal Coverage Scheme (UCS)	✓			
2002	Social Security Act extending to cover enterprises with at least one employee			✓	

Source: adapted from Prakongsai (2008) and Tangcharoensathien (2009)

The fragmentation and the ineffectiveness of health insurance arrangements were one of many factors contributing to the establishment of the UCS. With strong political support from the newly elected government, and technical support from health reformists, policy analysts, and movements from many civic groups, the UCS was successfully implemented in late 2001.

Since then, the country has seen three major public insurance schemes covering almost 99% of the 67-million population. The first scheme is the CSMBS for government employees (~9% of the population), funded by general taxation and managed by the Ministry of Finance (MOF). The second scheme is the SSS for private employees in the formal sector (~15% of the population), financed by payroll taxes equally paid by employers, employees, and the government. The SSS is regulated by the Ministry of Labour (MOL). The last scheme is the UCS, covering the rest of the population (~75% of the total population), including 18 million people who were previously uninsured and former beneficiaries of the LICS and the VHCS.

The most remarkable change after the UCS was the establishment of the National Health Security Office (NHSO) to act as the sole purchaser on behalf of all UCS beneficiaries.

Though the NHSO is an independent public agency, the NHSO Board is chaired by the Public Health Minister. The 2002 National Health Security Act serves as the legal basis for the foundation of the NHSO. Moreover, the Act clearly indicates that every 'Thai' citizen has entitlement to medical care under the state's protection (National Health Security Office, 2002). Table 10 summarises key characteristics of the main three public health insurance schemes in Thailand.

Table 10 Key characteristics of the main three insurance schemes in Thailand at present

Insurance scheme	Population coverage	Source of revenue	Mode of provider payment	Access to service
Civil Servant Medical Benefit Scheme (CSMBS)	~9%, government employees plus dependants (parents, spouse, and up to 2 children)	General tax, noncontributory scheme	Fee for service, direct disbursement to mostly public providers and Diagnostic Related Groups (DRG) for inpatient treatment	Free choice of public providers
Social Security Scheme (SSS)	~16%, private sector employees, excluding dependants	Tripartite contribution, equally shared by employer, employee and the government	Inclusive capitation for both outpatient and inpatient plus additional adjusted payments for accident and emergency and high-cost care	Registered public and private contractors
Universal Coverage Scheme (UCS)	~75%, the rest of the 'Thai' population not covered by the SSS and the CSMBS	General tax	Capitation for outpatients and global budget plus DRG for inpatients	Registered contractors, notably the network of public hospitals (Contracting Unit for Primary Care)

Source: Tangcharoensathien (2009) and National Health Security Office (2002)

3.2 Introduction to non-Thai populations and insurance management for non-Thai populations

I. Who are non-Thais?

The Thai Immigration Act (1979) uses the term, 'alien' (*'tang dao'* in Thai) to refer to any ordinary person who does not have Thai nationality. This definition is extremely broad, encompassing foreign workers, tourists, ethnic minorities, displaced persons, refugees, and stateless populations. However, Thai society often uses the term *'tang dao'* to refer to migrants and their dependants travelling from countries with low economic status, whereas better-off groups, such as tourists and foreign professionals, are usually called 'foreigners' (*'tang chad'* in Thai language) (Thai Immigration Bureau, 2004, Taotawin, 2010).

Confirming the actual number of non-Thais residing in the country is always irksome for policy makers. Different government agencies use different recording systems for tracking non-Thai populations. To date, there are three main official authorities responsible for collecting information on non-Thai populations, namely, the MOL, the Ministry of Interior (MOI), and the Ministry of Information and Communication Technology (MICT) with details as follows.

1. The Department of Employment (DOE) of the MOL: The recording system of the MOL focuses on cross-border 'migrant workers'. A migrant worker is required to apply for a work permit. The DOE normally posts records of work permit holders on its website, which is updated on a monthly basis. By the end of 2015, there were more than 1.5 million cross-border migrant workers in Thailand (Office of Foreign Workers Administration, 2015). Note that this figure excluded self-employed migrants and dependants of migrants; therefore it is very likely that the reported number was underestimated. The DOE classifies migrant workers into two main categories: (1) legal/regular migrant workers, and (2) illegal/irregular migrant workers.

I. Legal/regular migrant workers: There are five subcategories under this group: 'Lifetime', 'General', 'Board of Investment (BOI)', 'Memorandum of understanding (MOU)', and 'Nationality Verification (NV)'.

a) Lifetime: Lifetime migrant workers are those authorised for permanent residence and holding the Foreigner Identification Card for an indefinite period. These migrants are approved to work in Thailand indefinitely according to the Revolutionary Party Announcement No.332 in 1972, stating that *'a work permit granted to an alien who had resided in the Kingdom under Immigration Law and had worked before 13 December 1972, is valid for the lifetime of that person except where he/she changes his/her occupation'*. In 1980, there were about 27,000 foreigners who were granted permanent residence status and acquired the Lifetime work permit. Currently, the MOL no longer issues this type of work permit. Accordingly, the number of Lifetime migrant workers rapidly declined to 983 in 2014, and has remained constant since that time (Sciortino and Punpuing, 2009).

b) General: This category includes foreigners who have obtained temporary permission to work in Thailand in a high-level position at a company/firm. Some were sent from the company headquarters outside Thailand. The minimum business income threshold to be approved for hiring migrant workers in this category is two million Baht (US\$ 60,606). 'General' migrants are allowed to work in Thailand for up to two years. Most of them are Japanese, British, and Chinese. Each year, the number of these migrants varied between 70,000 and 100,000 (Office of Foreign Workers Administration, 2015).

c) Board of Investment (BOI): Migrant workers in this category are quite similar to the 'General' group. The difference is the 'BOI' migrant workers are permitted to work in Thailand under special laws that aim to boost the Thai economy, such as the Investment Promotion Act (1977) and the Act on Industrial Estate Authority of Thailand (1979). The majority of these migrants are posted in high-level positions, such as managers and advisors to large manufacturers. The stock of these migrants steadily

increased from about 24,000 in 2007 to over 37,000 in 2014 (Office of Foreign Workers Administration, 2015).

d) Memorandum of Understanding (MOU): 'MOU' migrants are workers engaged in low-skilled occupations. The majority of them are wage labour and domestic servants who are given permission to work in the country for two years, with a possibility of a two-year extension (not exceeding four years in total). Employers of these migrants can be either physical or juristic persons. These migrants are recruited through bilateral agreement between Thailand and neighbouring countries. The volume of MOU migrants in Thailand expanded from 14,150 in 2007 to more than 200,000 in 2014 (Swaschukaew, 2014).

e) Nationality verification (NV): NV migrants refer to formerly illegal migrant workers from Cambodia, Lao PDR, and Myanmar who have already been in the country for a while and are in the process of converting their immigration status from 'illegal' to 'legal' through the nationality verification process. The NV measure has been operated in parallel with the MOU policy, with the aim that the stock of NV migrants will gradually decline and will be substituted by the arrival of MOU migrants. NV migrants are low-skilled workers and this group constitutes the largest category of all types of all migrant workers in Thailand. By 2015, the volume of NV migrants was over 1,000,000, and became larger after the instigation of a special policy, called the One Stop Service, during the junta era (more detail in Chapter 5) (Office of Foreign Workers Administration, 2015).

II. Illegal or irregular migrant workers: Since in theory, the DOE cannot issue work permits to illegal migrants, there is no record of this migrant group in the DOE system. Nonetheless, the existence of a huge number of illegal migrants in Thailand is undeniable. Therefore, the MOL has in the past attempted to create systems to track this population by means of issuing work permit for 'illegal migrants who participated in the registration process'. The DOE classified this population into two subgroups.

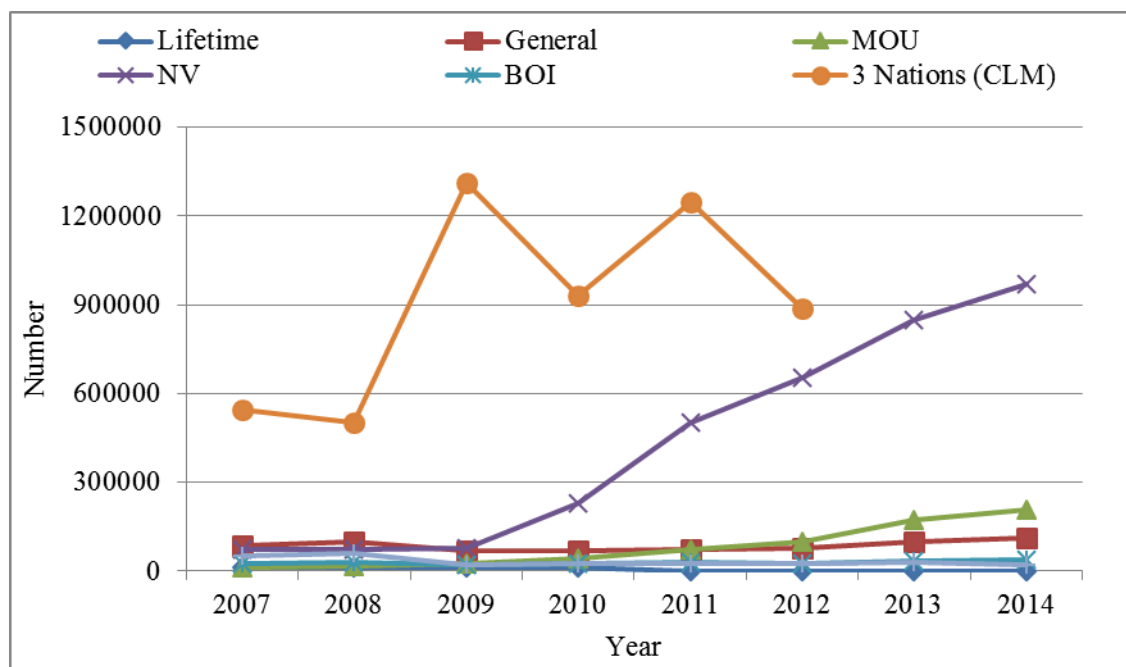
a) Ethnic minorities awaiting Thai nationality verification: This group consists of migrants who have been living in Thailand for an extended period. The majority of them are tribal populations residing along the northern border. However, they were labelled as 'aliens' according to the Regulation of Resolution No.337 in 1972, the era of military government, which revoked Thai nationality for ethnic minorities during the Cold War. Some of them are native people who failed to register with the MOI as Thai nationals. Part of this population overlaps with 'stateless people' (this point is detailed later). The number of migrants in this category fell from over 50,000 in 2007 to about 20,000 in 2014, as a result of the nationality verification measure (Paitoonpong and Chalamwong, 2011).

b) Three-nations migrants: This category is a group of illegal migrant workers from Cambodia, Lao PDR, and Myanmar, or CLM nations, who were registered with the government under the amnesty law (Section 13 the Working of Alien Act (2008). This stipulates that an illegal migrant can be issued a work permit, conditional upon Cabinet Resolution, while awaiting deportation. In other words, the government allowed illegal migrants to work for a certain period but these migrants must be registered with the MOL and the MOI to undertake the NV. The term 'three-nations' is somewhat confusing, since in fact, these migrants are a stock of 'registered' migrants from CLM nations who were awaiting the NV or have recently undertaken the NV but the NV process has not been completed. Once the NV is finished, they will become NV migrants as mentioned above (in principle, this category should be called 'pre-NV' migrants rather than 'three-nations' migrants; however, the MOL always used the term, 'three-nations', to refer to this population in its official documents) (Kantayaporn and Mallik, 2013). The first registration effort for illegal migrant workers started in 1992, then re-opened on a year-by-year basis until 2013. This migrant group expanded rapidly from approximately 100,000 in 2000, reached its peak at 1,300,000 in 2009, and subsequently fluctuated around 900,000-1,000,000 after 2010 (Paitoonpong and Chalamwong, 2011). In 2013 the Thai government discontinued the leniency policy that allowed illegal migrants to temporarily stay and work in Thailand since this policy was replaced by 'the National Strategy on Comprehensive Management of the Illegal

Cross-border Migrants Problems (2012b)'. The Strategy emphasised that all illegal migrants who did not participate in the NV process must be deported. As a result, the MOL stopped recording numbers of migrant workers in this category in 2013. However, the fact is, after 2013 there were still a large number of migrants who neither joined the NV nor returned to their home country. This is one of the key reasons that, in 2014, the government launched a special measure, the One Stop Service, to clear up all existing illegal migrants (more details in Chapter 5).

According to the above classification, the target population of the health insurance card policy for cross-border migrants (which is the focus of this thesis) comprises (1) 'MOU migrants' in the informal sector, (2) 'NV migrants', and (3) 'Three-nation migrants' (who then became the target group of the One Stop Service). A summary of the volume of various types of cross-border migrant workers in Thailand is shown in Figure 5.

Figure 5 Numbers of several types of foreign migrant workers in Thailand



Source: Office of Foreign Workers Administration, the MOL (2015)

2. The Department of Provincial Administration (DOPA) of the MOI: While the MOL assembles data on non-Thai workers in order to issue a work permit, the MOI (through the DOPA) is responsible for registering anybody with permanent or temporary residence in Thailand through the household registry. There are two types of household registration (Ministry of Interior, 2001).

I. Tor Ror 14: Tor Ror 14 is a household registry for either, (1) a Thai national, or (2) non-Thai national who is granted a permanent legitimate residence. The latter group is mostly composed of ethnic minorities who were surveyed by the MOI during the mass registration policy for all residents in Thailand about fifty years ago.

II. Tor Ror 13: Tor Ror 13 is a household registry for a non-Thai national who is granted temporary legitimate residence. The non-Thai nationals in this category can be divided into two subgroups: (1) those passing the border legally and showing a definite period of residence in Thailand, such as foreign business workers, foreign wives/husbands, and expatriates, and (2) formerly illegal migrants who had passed the NV or, in other words, NV migrants.

In addition, there are other two special forms of the household registry. Strictly speaking, these are a 'profile record' rather than a household registry, which can be classified into two subtypes:

I. Tor Ror 38/1: Tor Ror 38/1 is issued for illegal migrant workers and dependants who are registered with the authority. The difference between Tor Ror 38/1 and Tor Ror 13 is that Tor Ror 38/1 is for migrant workers whose NV process has not been completed. Tor Ror 38/1 comes together with the national identification number (ID), or 13-digit number, beginning with '00', and this ID serves as the official identifier for illegal migrants while the NV is on the way. Of note is that a Thai national acquires a national ID at birth but the number appearing on the ID card starts with non-zero integers (such as 1XXXXXXXXXXXX). The relationship between Tor Ror 38/1 and the health insurance policy for migrants is described in Chapter 5 and Chapter 6.

II. Tor Ror 38kor: Tor Ror 38kor is for people with citizenship problems, who are often called 'stateless people'. Similar to Tor Ror 38/1, by being issued of Tor Ror 38kor, a stateless person will acquire a 13-digit ID, but the difference is the ID for stateless people commences with '0'. Stateless people are persons who failed to register for a birth certificate for various reasons (such as geographical barriers or ignorance of the Thai civil registry system). Though most of them are ethnic minorities, the stateless population also includes children of (both Thai and foreign) parents, who have not joined the civil registration in any country, and foreign migrant workers who cannot return to their country of origin (or in other words, the country of origin refused to ratify their nationality). The size of the stateless population in Thailand is about 500,000-700,000. Note that some civil groups and academics regard the term 'stateless' as misleading because these people are in essence 'nationalityless' rather than 'stateless'. Yet the term 'stateless' is still used in many official documents, even on the official website of the MOPH (Paisanpanichkul, 2008, Srithamrongsawat et al., 2009).

It should be noted that the household registration of the MOI is a passive system. It is the responsibility of migrants (or employers of migrant workers) to contact the local branch of the DOPA to have their name enlisted in the registry. An example is that an ex-illegal migrant with Tor Ror 38/1 who has completed the NV is not obliged to contact the DOPA local office to change Tor Ror 38/1 to Tor Ror 13. Besides, the registry is subject to double counting. Migrants leaving for their home country are not withdrawn from the registry unless the MOI is informed of their departure, and the registration of illegal migrants with the MOI depends on the 'openness' of migrant policy at a particular period (Kantayaporn et al., 2013, Archavanitkul, 2012).

3. The National Statistical Office (NSO) of the MICT: The NSO has conducted a nationwide census every 10 years since 1960. The recent 2010 census estimated that the number of non-Thai nationals in Thailand was about 3.2 million (~4.9% of the country total population). Though the census is theoretically the best way to collect detailed information on 'all' people, the data accuracy is questionable as surveyors often face problems when communicating with non-Thai respondents or people with precarious

citizenship status, who might not be willing to be exposed by the surveyors (Kantayaporn et al., 2013).

Aside from the three organisations above, there are other authorities that gather records of specific groups of non-Thai populations. These organisations include, but are not limited to, (1) the Immigration Bureau of the Royal Thai Police, which collects records of circular migrants and tourists, and (2) the United Nations High Commissioner for Refugees (UNHCR), responsible for collecting data on refugees or displaced persons in UNHCR camps/sheltered areas.

The Immigration Bureau gathers data on non-Thais who enter and leave the country legally. This group comprises (1) tourists, (2) transit visitors en route to a third country, and (3) those granted temporary permission to stay in Thailand for a variety of reasons such as study, business, diplomatic service, and living with family members. Part of this group are work permit holders. Therefore, some of them overlap with foreign workers stated above. Table 11 below displays the size of entries and exits to Thailand and balance remaining in each year.

Table 11 Number of entries and exits to Thailand and balance remaining (excluding Thai nationals)

Year	Entry	Exit	Balance remaining
2011	20,468,020	20,023,951	444,069
2012	24,072,940	23,343,873	729,067
2013	28,661,493	28,137,665	523,828
2014	27,296,540	27,005,405	291,135

Source: Immigration Bureau, Royal Thai Police (2015)

The UNHCR is the principal international agency that deals with international refugees and asylum seekers. Most refugees are ethnic minorities from Myanmar, fleeing political conflict to the western border of Thailand nearly 30 years ago. The Thai government has run the refugee camps along the Thai-Myanmar border in cooperation with the UNHCR. The camp inhabitants receive essential food, medicine, shelters and schooling, provided by NGOs. The reorientation of Myanmar politics in recent years has caused a decrease in the size of the camps, and as of mid-2014, the total population of

the camps was about 120,000 (The Border Consortium, 2015). Note that Thailand does not have a formal process of accepting refugees and asylum seekers like European countries as Thailand is not a party to the 1951 UN Refugee Convention.

II. Health Insurance for non-Thais

Though private insurance is available for non-Thai populations, the discussion on this topic is confined to public insurance schemes. Registered foreign migrant workers, who enter the country legally (such as the BOI and Lifetime migrants) are, by law, insured by the SSS, similarly to Thai workers. Migrants whose spouse and parents are Thai civil servants are covered by the CSMBS. However, those insured by the SSS and the CSMBS are very small in number.

Households and individuals falling below the poverty line, regardless of their nationality, were eligible to be insured by the LICS until the year 2002, when the LICS was replaced by the UCS. The UCS covers all Thai nationals, but not non-Thais, due to the verdict of the Office of the Council of State, stipulating that the term 'Thai' in Section 5 of the 2002 National Health Act refers to 'Thai nationals'. Such interpretation limited the function of the NHSO towards migrants. Many migrant workers and their dependants, as well as stateless populations, who were previously covered by the LICS, were thus excluded from the UCS (Hasuwannakit, 2012b). The MOPH therefore took over the responsibility for protecting the health of the non-Thais. To date, there are two main MOPH public insurance schemes for non-Thai populations, namely, (1) 'Health Insurance for People with Citizenship Problems' (HI-PCP), and (2) the 'Health Insurance Card Scheme' (HICS) for cross-border migrants.

The HI-PCP: The HI-PCP or 'Stateless Insurance' covers the stateless population, numbering about 500,000 beneficiaries. The scheme was initiated in 2010. The Health Insurance Group (HIG) of the MOPH is the governing body of the scheme. Hospitals are paid by capitation. The benefit package is comprehensive and quite similar to that of the UCS, including outpatient and inpatient services, health promotion and disease prevention, and high-cost care. There is no co-payment at point of care, similar to the

UCS. The purchasing mechanisms are copied from the UCS (Hasuwannakit, 2012b, Suphanchaimat et al., 2015). Though the HI-PCP is not the focus of this study, there are some discussions on the instigation of the HI-PCP in Chapter 5 as part of it is related to the evolution of migrant policies.

The HICS: The HICS is the prime focus of this thesis. It was endorsed by the Cabinet Resolution in 2004. Strictly speaking, the HICS existed before 2004 but at that time it operated only in certain provinces. In 2004 the HICS expanded to cover all provinces. At present, the HICS covers cross-border migrant workers in the informal sector and their dependants, conditional upon registration with the One Stop Service. Beneficiaries need to buy the insurance card, and this must be renewed every year. The benefit package includes outpatient care, inpatient care, and some high-cost treatments such as chemotherapy and antiretroviral therapy (ART) for HIV/AIDS. Yet it still exempts some conditions, such as psychotic or substance-abuse conditions and renal replacement therapy for chronic renal failure (Health Insurance Group, 2013).

It should be noted that, in 2013, the Public Health Minister at that time (Dr Pradit Sintavanarong) announced to the public that the MOPH was in the process of improving its health service system to ensure effectiveness and promoting Thailand to be a medical tourism and wellness hub in ASEAN as a preparation for the advent of the ASEAN Community by 2015. Though the message did not clearly detail how the MOPH would provide insurance coverage to all non-Thai populations, there was an idea that the MOPH would target three groups of foreign nationals: (1) people from countries sharing border with Thailand who sought treatment in Thailand, (2) foreign workers, migrants, and expatriates and their families who were not covered by the SSS, and (3) foreign tourists or visitors (Bangkok Post, 2013).

For the first group, the MOPH would plan to set charges for those entering Thailand to seek medical treatment, and in the meantime, help the neighbouring countries to develop insurance systems in an attempt to encourage patients to receive care in their own countries. Some measures were piloted, such as signing a memorandum of understanding between some Thai hospitals and border hospitals in Myanmar and

Cambodia to boost health care collaboration, especially in terms of sharing disease alerts and referring emergency or severe cases (Wangkiat, 2013). For the second group, the ministry would open the health card scheme (which was in fact the existing insurance scheme for CLM migrants) for all foreign workers and expatriates (Bangkok Post, 2013). For the third group, the government would find measures to promote medical tourism in Thailand. Some measures were proposed, such as exempting the visa requirement for people from six Gulf states who come to Thailand for treatment purposes under the condition that the patients (or tourists) must show an appointment letter issued by a Thai hospital (Ngamsangchaikit, 2013).

It seems that this policy was just in an early development phase and necessitated much more work to translate this intention into action. Besides, this idea sparked public debates. Some doctor groups called for a removal of the minister from the position, accusing him of weakening the public system through the medical hub policy and through supporting the growth of the private sector (Sarnsamak, 2013). Note that the medical hub policy was not the only reason for the protest, but it was combined with other contentious issues, such as removal of a hardship allowance for rural doctors, and intervening in the functioning of independent health agencies, including the NHSO (Sarnsamak, 2013). Dr Sintuvarong was in the position for only around one and a half years, and was removed from the position after the coup in May 2014. So far, to the researcher's knowledge, there have not been any concrete measures/interventions from the current government to materialise or seriously advance this hub policy.

3.3 Literature review for identifying gaps in knowledge

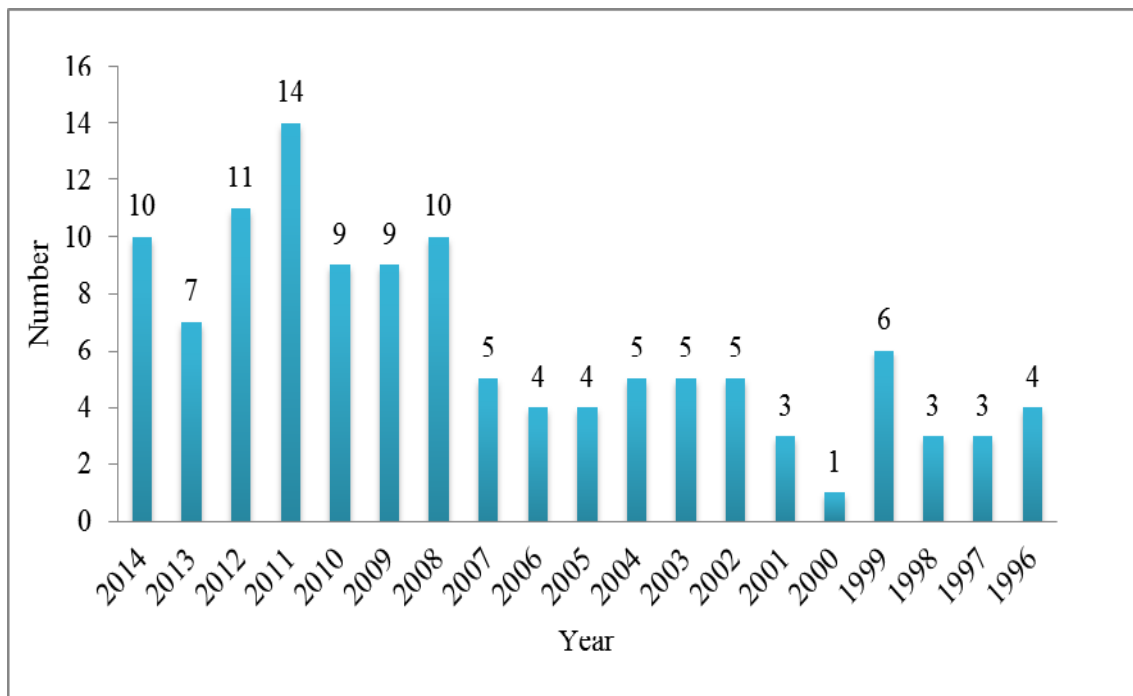
This section explores whether the HICS has ever been evaluated in a systematic manner and to what extent such evaluation met the state of the art in healthcare evaluation research (as presented in the literature review in Chapter 2). To this end, a scoping review was conducted. Tricco et al (2015) suggested that a scoping review is a useful method to identify knowledge gaps and to set research agendas. It differs from a systematic review in several ways, for instance, a scoping review is more of hypothesis-generating exercise, while a systematic review can be seen as hypothesis-testing. The

literature search was conducted in Medline through the following search term, ((*"Transients and Migrants"*[Mesh]) OR (*"Emigrants and Immigrants"*[Mesh])) AND (*Thailand*)).

A total of 163 articles were retrieved. The search was limited to between 1 January 1980 and 31 March 2015. Only articles published in Thai or English were recruited. Additional references from other journal-based databases, such as Embase and Scopus, were also explored.

The findings revealed that, since 2005, the issue of migrant health in Thailand has received increasing attention, as reflected in the rising number of published articles in Medline, see Figure 6.

Figure 6 Number of articles published in Medline concerning health of migrants in Thailand



Source: Author's synthesis from Medline

Of the 163 articles, about one third (63) explore migrant health from either an epidemiological or clinical point of view (such as drug trial and quantitative survey on migrants' health risk behaviour), without adequately examining this issue through a health system angle. Around two thirds (93) were about overseas Thais and/or health professional migration (this might be because the MeSH term, "*Emigrants and Immigrants*"[*Mesh*], encompasses a diversity of migrants). Only seven articles were found to have some components related to migrant health service, with details as follows (Sirilak et al., 2013, Sullivan et al., 2004, Hu, 2010, Webber et al., 2012, Canavati et al., 2011, Crozier et al., 2013, Saether et al., 2007).

Sullivan et al (2004) investigated how Mae Tao Clinic, an NGO clinic in Tak province, implemented a 'migrant-friendly service' programme, and how the programme suffered from shortage of healthcare staff and poor evaluation systems. Sirilak et al (2013) highlighted the pivotal role of migrant health volunteers, which helped bridge cultural and linguistic gaps between migrant patients and health personnel.

Three articles investigated some migrant disease specific services, namely HIV/AIDS care (Saether et al., 2007, Crozier et al., 2013), and child immunisation (Canavati et al., 2011). A common finding of these three articles was that, although HIV screening service and child immunisation were available to all patients, some irregular migrants with mobile behaviour seemed to benefit from those services less than Thai citizens.

The most relevant articles were studies by Hu (2010) and Webber et al (2012). Hu (2010) surveyed migrant and Thai populations living in the outskirts of Kanchanaburi province in 2000 and in 2004. The surveys found that about half of migrants did not have health insurance, while about 90% of the Thai residents were insured. Approximately 54% of the surveyed migrants ever utilised services. This figure was much lower than the 87% figure of the Thai participants. However, the study did not perform multivariate analysis.

Webber et al (2012) assessed influencing factors and barriers to care amongst migrant beer promoters in Bangkok. Almost all informants (97%) were insured. The study also

reported that the regulation of the insurance that required migrants to access services only at registered hospitals was perceived as hindrance to care since it contradicted the mobile behaviour of migrants. Yet the study did not detail or analyse the effects of migrant health insurance from the perspectives of other stakeholders, such as health staff and employers of migrants.

In addition to the journal search, grey literature and research reports from the MOPH and other network institutes (for example, the Health Insurance System Research Office (HISRO) and the Health Systems Research Institute [HSRI]) were investigated. There were three studies, conducted by Prasitsiripol et al (2013), Srithamrongsawat et al (2009), and Suphanchaimat et al (2013), which have study objectives close to the focus of this thesis. A summary of those studies is as follows.

Srithamrongsawat et al (2009) evaluated the impact of the HICS in Thai provincial hospitals. The study revealed that migrants insured with the HICS had much a lower crude utilisation rate than the UCS and the SSS beneficiaries. The financial impact of the HICS on health facilities varied considerably. The HICS was an 'income generator' for hospitals in Bangkok and its vicinity, whereas smaller hospitals at the border did not financially benefit from the policy. Yet, the study assessed only crude use rates of the patients.

Prasitsiripol et al (2013) employed actuarial methods in calculating the HICS premium if the card was to cover HIV/AIDS (before 2013, the card's benefit package did not include HIV/AIDS—see Chapter 5). The study estimated that if 'all' migrants were forced to be insured, the stock of insured migrants would be increased in size by almost one million, and the appropriate card premium should be raised by 300 Baht (US\$ 9) per annum. In the scenario that only 300,000 migrants bought the insurance, the annual premium should be increased by approximately 900 Baht (US\$ 27). Though the study had a qualitative component by interviewing healthcare providers, the result was not counterbalanced with opinions of migrant service users.

Suphanchaimat et al (2013) applied a 'Difference-in-Difference' (DID) technique in analysing the impact of the HI-PCP (the insurance policy for stateless people) in terms of utilisation volumes and out-of-pocket payments of its insurees. The study reported that the HI-PCP policy did not bring about significant changes in service utilisation patterns of stateless patients, compared to before the policy was implemented. Moreover, the study found that the legal status of stateless people and migrants was quite fluid. This problem more or less affected the accuracy of the quantitative analysis. Though policy makers and providers were interviewed, opinions from service users were not explored.

According to the above review, the following critical knowledge gaps were identified. Firstly, though there is a body of literature describing how migrants perceived difficulties in accessing care, or how health staff faced barriers in managing care for migrants, views from both sides were explored in separate studies.

Secondly, little is known about the perception of migrant health insurance from other stakeholders apart from those in the health sector. Having comprehensive views from all key stakeholders might be more beneficial in illuminating how the policy is actually functioning in the field.

Thirdly, most identified studies used a single methodological approach. Those relying solely on quantitative methods, could neither tackle the question of 'why' and 'how' the policy came out as appeared, nor take into account the counterfactual argument.

Fourthly, in terms of Thailand, since the introduction of the HICS in 2004, there have been very few studies that systematically evaluated the achievement of the policy and its constraints at the operational level. The most recent evaluation was conducted by Srithamrongsawat et al (2009), which was about six years ago. Since migrant policy is very dynamic and is always influenced by various factors, it is imperative to re-evaluate the performance of the policy through a more rigorous scientific approach.

As mentioned earlier, the benefit of a scoping review is that the review findings can serve as key ingredients for formulating research hypotheses. In this regard, the following hypotheses were generated, and used as grounds for constructing the research objectives in the next chapter. Firstly, challenges and barriers in the implementation of migrant insurance policy in Thailand might be explained by, amongst other things, a difference (or even conflict) of views and/or directions between various stakeholders involved in the policy (such as healthcare staff, non-MOPH officials, migrants, and employers of migrants). Secondly, local staff were likely to adapt the policy to match their routines, and this adaptive behaviour might not necessarily be in line with the original policy intentions. Thirdly, insurance status alone was not sufficient in determining the number of services used. Other factors, such as baseline characteristics of the insurees or disease conditions might have significant impact on service utilisation, and the impact from these covariates might modify the insurance effect to some extent.

3.4 Conclusion

Thailand is an upper middle income country with a well-established healthcare system. The country achieved UHC in 2002. The main public insurance schemes are the SSS for workers in the formal sector, the CSMBS for civil servants and their dependants, and the UCS for the rest of Thai citizens. However, non-Thai populations are not covered by these insurance schemes, except for high-skilled migrant workers insured by the SSS. The majority of non-Thai populations are low-skilled migrant workers and their dependants. Most of them are undocumented/illegal immigrants from CLM nations, who were later registered with the government to join the nationality verification process. To provide health protection for these migrants, the government launched a specific insurance scheme, namely the HICS, in 2004. After more than a decade of its implementation, little is known about the outcomes of the scheme, either in terms of the responses of all stakeholders involved in the policy, or the impact of the policy on its insurees at point of care.

Chapter 4: Aim, objectives, and research methodology

Chapter 4 comprises five subsections, namely, (1) research aim and objectives, (2) research framework and relevance to theory, (3) methodology, (4) ethical considerations, and (5) conclusion.

4.1 Aim and objectives

The overarching aim of this thesis is to evaluate (i) the enrolment of cross-border migrants in Thailand in a public health insurance scheme, namely, the Health Insurance Card Scheme (HICS), through perspectives of various stakeholders, and (ii) the effects of the insurance on use of health services. It is hoped that the evidence generated in this thesis will ultimately help inform policy makers and academics for further improvement of the migrant health insurance policy in Thailand. The main research questions are as follows.

1. How was the HICS policy established and how has it interacted with other migrant policies in Thailand?
2. How do health providers and relevant officers at the implementation level, as well as migrant service users, respond to the policy, and why do they respond accordingly?
3. What is(are) the outcome(s) of the policy on service utilisation and out-of-pocket (OOP) payment of migrants receiving care at health facilities, relative to Thai UCS beneficiaries and uninsured migrants?

With the research questions above, the following objectives were constructed:

1. To investigate how the HICS was established in the context of surrounding migrant policies in Thailand from the policy makers' perspectives

2. To explore and analyse the response of local healthcare providers to the HICS policy, and how the policy affects migrant health-seeking behaviour.
3. To assess the outcome of the policy on service utilisation and out-of-pocket expenditure of insured migrants in comparison to the Thai UCS beneficiaries and the uninsured migrants.
4. To provide recommendations for further improvement of the HICS.

4.2 Research framework and relevance to theory

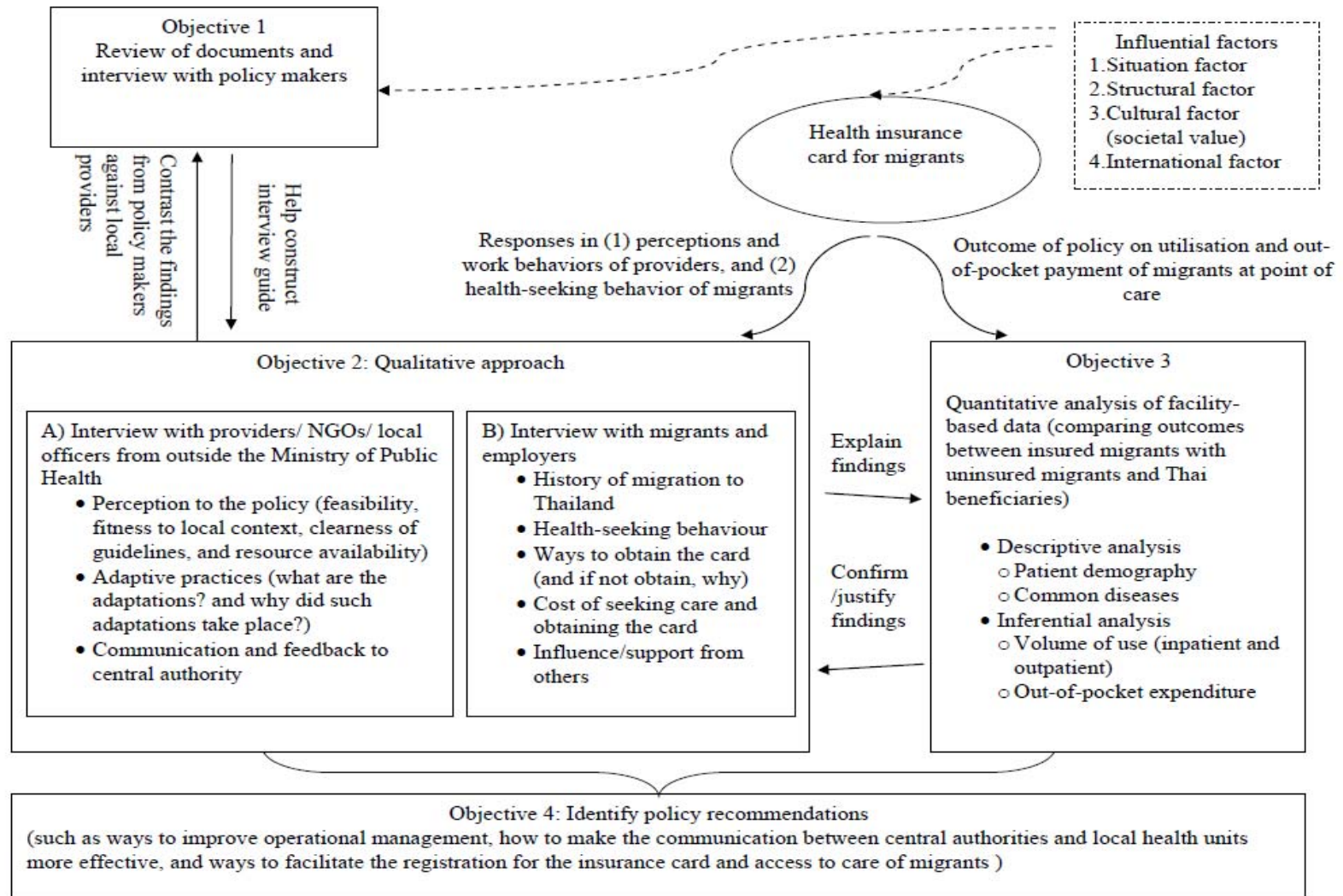
The above objectives were developed based on the following hypotheses/theories. Firstly, success in policy implementation does not depend only on the readiness of health facilities. As proposed by Leichter (1979), the implementation success is influenced by several external factors, namely, situation factor, international factor, cultural factor, and structural factor. These points are captured in objective 1. The preliminary results of objective 1 helped shape the interview guides used in objective 2, and shed light on the 'gaps' of understanding between policy makers and local implementers.

Secondly, with reference to 'Street-Level Bureaucracy' (SLB) theory, the adaptation of policy may derive from the fact that local healthcare providers consider that guidelines or rules relayed from central authorities do not suit their day-to-day problems and that what they adjust/adapt are more practical for the real-world practice. Thus it is imperative to explore whether, and to what extent, any of these behaviours appeared in the implementation of the HICS in the Thai context, and why such adaptive practices happened. Findings from interviews with providers are of more value if complemented by insights from migrants. It is possible that, despite the policy encouraging undocumented/illegal migrants to buy the insurance card, some migrants may consider that the policy does not effectively meet their needs. The interviews with migrants in objective 2 help address this point.

The quantitative analysis of volume of use and out-of-pocket expenditure of migrants in objective 3 helps justify/confirm the findings in objective 2, while findings in objective

2 can help explain results in objective 3. Both objectives were exercised in parallel and were explored through an iterative process. All findings from objective 1-3 are analysed and synthesised in objective 4 through an inductive approach, in order to identify policy recommendations. All above accounts were drawn together to develop the following research framework, see Figure 7.

Figure 7 Research framework of the study and linkage between objectives



4.3 Methodology

This thesis applied a multi-methods approach. Qualitative methods demanding primary data collection, and quantitative methods with secondary data analysis were undertaken. The following section explains methods used in each objective.

I. To investigate how the HICS policy was established in light of surrounding migrant policies in Thailand from the perspectives of policy makers (objective 1)

Methods: Qualitative approach

Data collection: The key data collection techniques for this objective were in-depth interviews with policy makers, and document review. The key informants were purposively selected, taking into account their role and responsibility within the policy. Additional informants were recruited through snowball sampling. The interviews were conducted at informants' workplaces. The researcher served as the principal interviewer, accompanied by a research assistant^v as a note taker. Each interview lasted about 45 minutes, and was audiotaped upon consent from interviewees. In practice, informants were firstly asked to explain their role and responsibilities, and their general perceptions of the HICS. Then, the researcher gradually probed into details by adapting the interview questions while the dialogue went along. The interviewees' characteristics are exhibited in Chapter 5. The following question guides served as a starting point for the interview, though not reflecting exact words used. Hard brackets contain suggested prompts or memos, which were used to remind the interviewer during the interviews.

^v As this fieldwork involved only one research assistant, the researcher did not set up a formal training/workshop to train her. However, before embarking on fieldwork, the researcher arranged a debriefing session between himself and the research assistant. This process allowed the research team to rehearse and practise a mock interview, and prepare the team not only in academic content, but also in other issues, such as how to dress properly, how to communicate with local officers and migrant patients, and how to protect confidentiality of the interviewees. The researcher and the research assistant also attended the qualitative research training workshop held by Prof Luechai Sringsoenyung, Mahidol University, Thailand. Though the workshop was not directly related to migrant issue, it markedly helped the research team gain better insight on qualitative research prior to starting fieldwork.

- Please tell me about your position [How long have you been in this position?, What about your past experience in this work?, What are the role and responsibility of your job re migrant healthcare policies?, etc];
- Please briefly explain how you have been involved in the development of HICS policy [How was it developed?, Who was involved?, What was the original intention/goal of the HICS?, etc];
- Now that the HICS was introduced, what are your opinions on the policy [Was it implemented in the way you expected? (If so, or if not, how and why?), Have you received any feedbacks from the local implementers?, What is the feedback?, etc];
- Please tell me about the positive sides and the negative sides of the HICS policy in your opinion [What are the key challenges?, How can those challenges be overcome?, etc];
- Please suggest ways to improve the HICS policy and also other migrant-related policies in Thailand.

The researcher also reviewed relevant policy documents, such as (1) minutes of the MOPH and NHSO meetings about migrant policies, (2) existing laws and measures stipulated by current and recent governments, and (3) official letters and announcements from the central authorities to local health facilities. Besides, the researcher observed and participated in the meetings, in which migrant healthcare policies were discussed, for instance, the Prince Mahidol Award Conference Side Meeting (January 2015, Bangkok) and the Regional Workshop on Migrants' Health, jointly arranged by the IOM and Ministry of Foreign Affairs (MOFA) of Thailand (August 2015, Bangkok).

Data analysis: The interview data were imported into the NVIVO v10 software and were coded manually. Thematic analysis was applied. The researcher thoroughly checked the cleanliness of the transcript by listening to the tape. Transcribers were asked to record everything appearing on the tape, including interrupting noise and laugh. The researcher then identified condensed meaning units of a paragraph with the same content. The preliminary codes across similar meaning units were identified. Similar codes were grouped in order to formulate emerging categories. Finally, a higher

construct/theme that presents across categories was identified. This analytical process was also exercised in objective 2. The interview data were triangulated against findings from the document review, field notes and memos.

II. To explore and analyse the response of local healthcare providers to the HICS policy, and how the policy affects migrant health-seeking behaviour (objective 2)

Methods: Qualitative approach

Study area: The selection criteria for the study site stem from a presumption that an area with a large number of migrants is likely to face significant workload in addition to routine practice, and this situation causes local health units to adapt themselves or increase their capacity to deal with the emerging consequences of the policy. Ranong province was selected as it has the largest proportion of registered migrants to Thai citizens, compared to other provinces in Thailand, see Figure 8 and 9.

Figure 8 Proportion (%) of insured migrants to Thai citizens in all provinces in Thailand

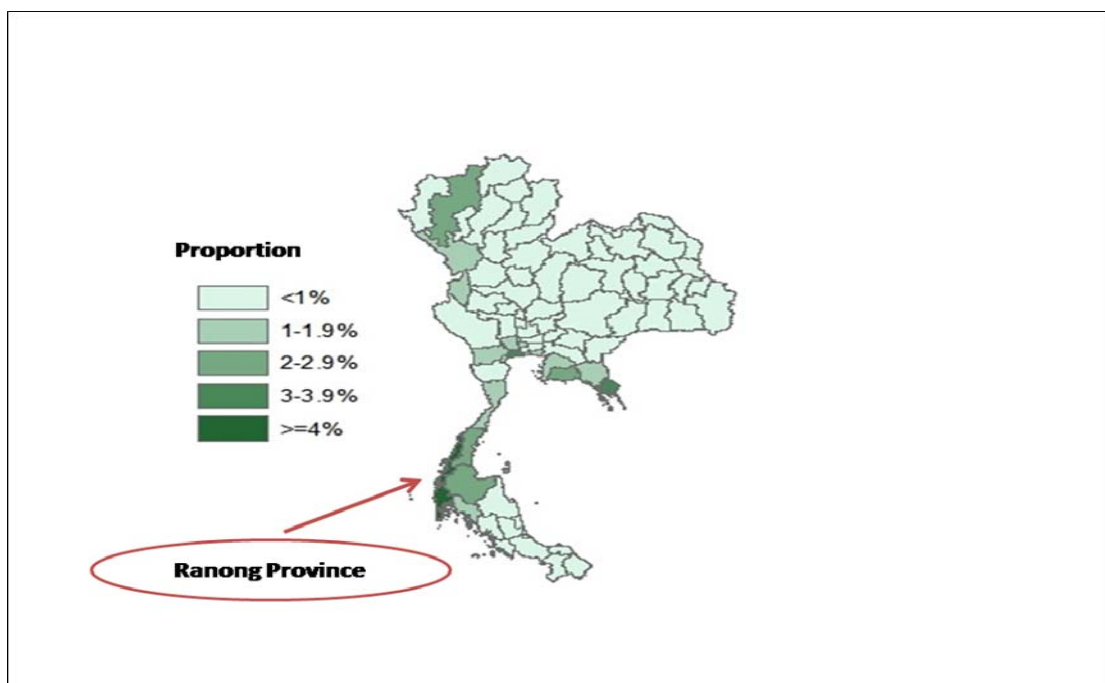
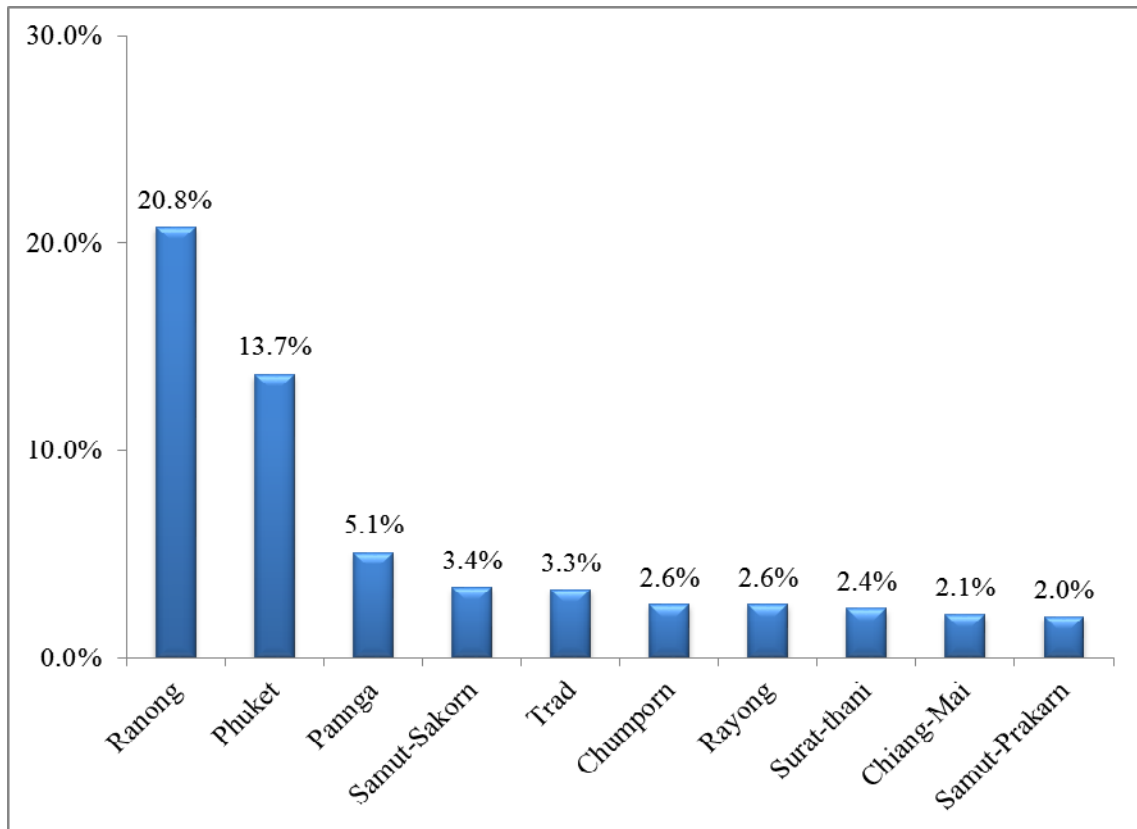


Figure 9 Top-10 provinces with the largest proportion (%) of insured migrants to Thai citizens



Source:

1. Health Insurance Group, Office of the Permanent Secretary, the MOPH (2013)
2. National Statistical Office of Thailand (2008)

Within Ranong province, the two districts with the largest number of migrants were selected, namely, Muang (headquarter) district and Kraburi district. A summary of Ranong province's characteristics is displayed in the introduction part of Chapter 6.

Data collection: Individual in-depth interviews were conducted in two strands: (1) interviews with local healthcare providers, local staff working in non-health agencies, and NGO representatives, and (2) interviews with migrant service users and employers of migrants.

Strand 1—Interviews with healthcare providers, officers from non-health agencies, and NGO representatives

- **Sampling strategy:** The researcher purposively selected local health officers, who are responsible for managing the HICS in Ranong province. The researcher approached the provincial chief medical officer (PCMO) at the Ranong Provincial Public Health Office (PPHO) and hospital directors of Ranong provincial hospital and Kraburi district hospital, then used a snowball technique. The key informants also included NGOs and officers of the local branches of non-health authorities (the MOI and the MOL). The total number of participants was 14, with some participants participated in the interviews more than once. A list of the interviewees is displayed in Chapter 6.

- **Interview procedure:** The interview procedure and the interview team were arranged in the same fashion as objective 1. Most interviews were conducted at the participants' workplace. Debriefing sessions between the research team members were arranged before and after each interview. The interviews were audiotaped upon approval from the interviewees. Each interview lasted approximately 45-60 minutes. Additional interviews via telephone or further contacts by email were performed after the researcher listened to the interview record and had further inquiries. Data from the informal conversations were not audiotaped, but the researcher still jotted down that information in field notes.

- **Question guides:** The interviews were performed in a relaxed manner, starting with open questions and an introductory discussion of the research. The question guides were mostly constructed with reference to the SLB concept (Lipsky, 1980). Respondents were asked to explain how they coped with operational constraints in carrying out the policy. This approach enabled the researcher to identify '*de jure*' policy design and '*de facto*' practices of providers. The respondents were also asked to provide suggestions for the improvement of the policy. An example of question guides used in the real interview is displayed in Appendix 4.

Strand 2—Interviews with migrants and employers

- **Sampling strategy:** Two subdistrict health centres were selected. They are located in subdistricts where migrant dwellers are mostly concentrated. Therefore 'health centre A' in Muang district and 'health centre B' in Kraburi district were chosen (the real names of these health centres were anonymised to protect confidentiality). The researcher approached employers of migrants through purposive sampling. For migrant interviewees, the selection process was more complicated. Households with member(s) having severe or chronic diseases were selected as index cases. By investigating these index cases, it was possible to assess whether and to what extent the policy really addressed their need for services. Ten households were selected (four in Kraburi district and six in Muang district), taking into account a variety of household characteristics and the insurance status of family members (for some households, only some or none of the members were insured). Thick description of the selected households is presented in Chapter 6 and Appendix 11. Since some migrants have precarious legal status, a sampling strategy through a formal approach might lead to selection bias. The researcher therefore used the following approaches to access potential interviewees.

(1) Approaching NGOs or civil society groups—Volunteers from NGOs and charitable groups are key implementers of many healthcare programmes for migrants and other vulnerable populations in Thailand. Some local health facilities in Ranong province received support from NGOs to hire 'migrant health volunteer (MHVs)' and 'migrant health workers (MHWs)', with the aim of assisting local health staff to reach the hard-to-reach patients and interpret for local health staff. Most MHVs or MHWs are migrants who have been living in Thailand for years and become familiar with the Thai healthcare system. More details about the role/responsibility of MHVs and MHWs are presented in Chapter 5. The research team contacted MHVs and/or MHWs and accompanied them when visiting hard-to-reach migrants as part of their work. Some MHVs and/or MHWs also served as the key informants

(2) Exploring family folders—Family folders stored at subdistrict health centres are useful resources as they contain information on household characteristics and brief comments on the health status of household members (regardless of their

nationality), see Figure 10. The researcher used this information as a starting point for gaining better insights into migrant communities before presenting himself to the field.

Figure 10 Example of family folders stored at subdistrict health center



Note: Green folders are for migrant households whereas black folders (with pink strip) are for Thai households.

(3) Discussion with ground-level health staff—Frontline health staff at subdistrict health centres, such as nurse practitioners and public health officers, are likely to be more acquainted with migrant community than hospital-level staff. Moreover, subdistrict health centre staff usually have long working experience in the field, and this allowed the researcher to obtain information about how the policy has evolved over time.

- **Interview procedure:** The interviews were performed at migrants' households. The researcher conducted 2-3 rounds of interviews per household. The first visit was to introduce the research team and build rapport. The following visits were for in-depth interviews and for following up any emerging themes/topics. The interview language was chosen according to the respondents' preference (some migrants are fluent in Thai). The principal investigator served as the main interviewer, accompanied by a research assistant as a note taker, and a local coordinator (selected from MHVs or MHWs) as an

interpreter. The number of the interview team was kept as small as possible to minimise any pressure on participants. Each interview took around 30-45 minutes. The information was audiotaped and transcribed verbatim upon verbal consent from interviewees. The transcriber was instructed to include notes about tone of voice and laughter. Note that some interviews are considered group interviews rather than individual interviews. This is because most interviews took place at migrants' households, and this made it difficult to exclude migrants' family members from taking part. One may argue that such situation might lead to respondent bias as the interviewers might avoid divulging sensitive information in front of other people. This argument might not be true in case of migrants with precarious legal status (like in this setting) as they might feel more secure in a situation where they were surrounded by their family members and peers. The methodological discussion about advantages and disadvantages of such an interview setting are presented in Chapter 8. Nonetheless, in practice, before starting an interview, the researcher always asked the key informants whether they were comfortable to join the interview in such a setting.

- **Translation issue:** Translation was made through the following steps. Firstly, the interviewer asked the question in Thai. Secondly, the translator asked the participant in Burmese. Thirdly, the participant answered the question in Burmese, and fourthly, the translator repeated the answer in Thai. The translator was given instructions to translate contextual meaning (including phrases, emphases, idioms, etc) rather than simply verbatim. Note that, though MHVs or MHWs can serve as interpreters and local coordinators, they are not professional interpreters, and this situation may affect data accuracy (see Chapter 6 for more discussion on this point). To ensure rigour and trustworthiness of the translation, the following measures were executed; (1) using the same interpreter throughout the fieldwork, (2) cross-validating the interview findings with information from informal discussion and observation, and (3) having an independent professional interpreter check parts of the audio records and the transcripts.

- **Question guides:** The question guides were developed based on the background knowledge that health-seeking behaviour of migrants is influenced considerably by factors such as cost of services, and support from peers and family members. Migrants were asked to tell their life story about how they journeyed to Thailand, and the reasons

behind their migration. Then, the researcher asked the interviewees about their experience in receiving care and their involvement with the HICS, and other related migrant policies. Appendix 5 demonstrates an example of question guides used in the actual interview.

Data analysis: Data were coded manually. Thematic analysis was applied in similar fashion with objective 1. Additional information from informal discussions/conversations recorded in field notes and memos was added to the interview data.

III. To assess the outcome of the policy on service utilisation and out-of-pocket expenditure of insured migrants in comparison to the Thai UCS beneficiaries and the uninsured migrants (objective 3)

Method: Facility-based quantitative analysis

Data sources: This objective aimed to investigate the extent to which the policy affected the utilisation volume and OOP of migrants at point of care. Inpatient (IP) and outpatient (OP) visits in the latest five fiscal years were analysed^{vi}. The IP data are routine admission records of Ranong provincial hospital and Kraburi district hospital. The OP data are routine OP utilisation records, including disease prevention activities performed at health facilities. The OP data used in this research were retrieved from the PPHO since it is the only authority that assembles OP records of all health facilities in the province (from subdistrict health centres^{vii} to district and provincial hospitals). It should be noted that data on newborns admitted right after delivery were excluded to avoid double counting with delivery admissions.

^{vi} Fiscal year X started from the first of October of the year before, for example, fiscal year 2014 starts from 1 October 2013 to 30 September 2014.

^{vii} Subdistrict health centre is also known as 'Tambon health promoting hospital'.

Rationale of the analysis: As the HICS policy has been gradually developed over time, it is difficult to set a specific cut-off point for 'before-after' comparison. A more feasible approach is 'treatment-control' comparison, which addresses the counterfactual argument by taking into account within individual variation over time.

Using data stored at local health facilities is superior to using the data stored at the NHSO or at the MOPH. This is because local health facilities are not obliged to submit immigrant patient records to the MOPH for healthcare cost reimbursement (except for high-cost treatment) as the HICS budget is independently managed by individual facilities (the HICS budget management is detailed in Chapter 5).

Lack of incentive to submit data to the MOPH might affect the completeness of information stored at the MOPH. Another data source is the NHSO, where Thai UCS beneficiary data are complete but non-UCS data are filtered out.

Therefore, the facility-based data have advantage in enabling the researcher to access information on all beneficiary groups, namely, (1) insured migrants, (2) uninsured migrants, and (3) Thai UCS patients.

Nevertheless, using routine facility-based data has some disadvantages, one of which is data uncleanliness. Accordingly, much effort is required for data cleaning. While this point is deemed as a handicap, it also reflects how local administrative staff deal with migrant data (for more discussion on this point, see Chapter 8).

Health facilities in Thailand are structured in the form of a coordinating network, namely, 'contracted unit for primary care' (CUP), comprising one provincial hospital and/or one district hospital and contracted health centres. Hence, this study tracked OP data from health centre level to provincial/district hospital level in CUPs where migrants are concentrated. In this case, health centre A (under Muang CUP) and health centre B (under Kraburi CUP) were selected to match the selection in objective 2.

After exploring the cleanliness of data, the researcher found that the IP data of Ranong hospital were not feasible for OOP expenditure analysis due to data incompleteness. Table 12 summarises the availability of data from each health facility.

Table 12 Overview of the data in each health facility used for the analysis in objective 3

District	Muang		Kraburi	
	Ranong hospital	Heath centre A	Kraburi hospital	Health centre B
IP data: utilisation	✓	Not applicable	✓	Not applicable
OP data: utilisation	✓	✓	✓	✓
IP data: out-of-pocket payment	Not available	✓	✓	✓
OP data: out-of-pocket payment	✓	✓	✓	✓

Statistical analysis and variable setting: The analysis in this objective mainly uses econometric techniques to identify causal relationships between the variables of interest. According to Samuelson et al (1954), econometrics is defined as the quantitative analysis of actual economic phenomena, including the development of theories and concepts in terms of which observable phenomena can be described, classified, and related. Most econometric studies in the past were concerned with economic implications, for example the study by Angrist (1990), which estimated the effect of voluntary military service on earnings in later life of the US veterans during the cold war.

Recently, econometrics applications have gained more attention from researchers in the area of health policy and systems research (HPSR) because, in most HPSR, it is almost impossible to assess the impact of a health policy/intervention in a controlled environment in the same way as for clinical research. Some examples of use of econometrics in HPSR are the multi-country study by Basu et al (2013), which explored the relationship between sugar intake and prevalence of diabetes, and the study by Limwattananon et al (2011), which investigated the incidence of household

impoverishment from healthcare payment pre- and post-UCS (1996, 1998, 2000, and 2002) in Thailand.

Regression analysis appears to be the most common statistical technique used to identify causal inference in most econometric studies. However, this is not just a matter of regressing the outcome variable on independent variable(s). An HPSR researcher needs to be wary of the fact that, in the real world, it is very difficult to avoid selection bias (also called omitted variable bias). Including covariates into the regression equation is one of the most common but effective approaches to address selection bias (in econometric language, fulfilling the 'conditional independence assumption'). Khandker et al (2010) summarises several methods, which can help address such a problem in econometric studies, such as Difference-in-Difference (DID) and Instrumental variable (IV) techniques.

Note that 'regression analysis' is a broad term, comprising various mathematical techniques (such as Poisson regression, Logit regression, and Ordinary Least Square [OLS]). To select the most appropriate method(s), several issues should be carefully assessed, including how well a proposed technique fits to the dataset, characteristics of the variable(s), efficiency (how large is the standard error) and consistency (how large is the bias given the sample size grows close to the true population) of the estimates. All of these points are considered again in Chapter 7

The analysis of this objective was founded on an assumption that HICS insurees are considered 'treatment', while the UCS insured population and uninsured migrants are 'control 1' and 'control 2' respectively. This assumption implied that the analysis treated the HICS as having some features of 'natural experiment'.

The calculation is composed of 2 main parts: (1) utilisation analysis, and (2) OOP analysis. In each part, the analysis is divided into two tiers, namely, (1) general assessment using descriptive statistics, and (2) determining relationship between the policy and outcomes of interest by econometric techniques.

- **Part 1—Utilisation analysis:** The analysis in part 1 was executed on migrants (regardless of insurance status) and UCS patients. Since most variables were analysed for an individual patient but the routine dataset is stored as 'per visit', linking different visits for a unique individual must be done prior to the analysis. This means that selecting an appropriate 'unique identifier'^{viii} is very important.

For Thai citizens, the national 13-digit identification number (ID) is the unique identifier. However, this approach is not suitable for migrant data as not all migrants obtained the 13-digit ID (to obtain the 13-digit ID, a migrant must first register him/herself with the MOI). Moreover, accessing the national ID of an individual is very sensitive even if the analysis is done anonymously.

A more feasible alternative is using hospital numbers (HN) as unique identifiers since each patient has his/her own HN which is unique and remains constant over time for each hospital. The key independent variable is insurance status, while the outcome variables are the number of visits per year. Detailed information about the variables (dependent variable, independent variable, and confounders) used in the analysis is presented in Appendix 6.

Since this study attempts to identify the policy impact over time and across insurance entitlements, an appropriate technique should be able to account for timing effects and influences from unobserved characteristics (such as culture, beliefs, and health need). Given this, the OLS or the Poisson regression with robust variance adjusted for individual variability over time is suggested.

The author also explored other possible techniques, such as Random-effects (RE) model and Fixed-effect (FE) model, but found that the Poisson regression with robust standard error sufficed (see Chapter 7). STATA XII software was used. Goodness of fit and model specification were tested by Likelihood Ratio test and Hausman test.

^{viii} The identifier that is unique per each individual and constant over time.

Subgroup analysis was then carried out on migrant patients only. This step can be considered a sensitivity analysis as well since the researcher assumed that there was 'endogeneity effect' in the HICS utilisation. The effect is succinctly explained as a problem of reverse causality, and if it exists in the data, the conventional OLS may produce misleading estimates.

For a more concrete explanation, one might ponder that a possibility of obtaining the card may be influenced by some characteristics of migrants. For example, migrants in specific occupations (such as those working in the formal sector) may have better opportunities to acquire the card. In this account, the 'card' is recognised as 'endogenous' variable since migrants with the card are likely to utilise more services and, on the other hand, those who tend to utilise services more often are more likely to take out the card to accommodate their needs.

Since the Thai citizens are not potential beneficiaries of the card, Thai patients' records were excluded for this step. The Probit-2-Stage-Least-Square (Probit-2SLS), which is one of the techniques under the IV family, was used in lieu of the conventional OLS or Poisson regression (Khandker et al., 2010, Cerulli, 2011).

The researcher also conducted another round of subgroup analysis but this time limited the calculation to all patients with non-delivery conditions. This is because the descriptive statistics saw a large volume of delivery-related visits by the HICS and the uninsured patients (more details in Chapter 7). Hence it is beneficial to assess whether the impact of HICS on utilisation volume might change if delivery-related conditions were excluded. Nevertheless, the researcher found that there was just a trivial difference between the full and the subsample analyses. Thus, to make the thesis more concise, the results of this subgroup analysis are not displayed in the main results chapter, but appear in Appendix 14 instead.

- **Part 2—OOP analysis:** The analysis in part 2 is limited to insured and uninsured migrants because theoretically the UCS patients need not pay for their treatment. In OOP analysis, it is well recognised that health expenditure data often have

unique characteristics, which may affect the accuracy of the estimates. These include a substantial positive skewness, excess zeros and heavy right tails.

A traditional approach in handling non-normally distributed data in medical statistics is using a non-parametric test, however, this approach is less accepted by policy makers than the estimate of mean cost (Arrow and Lind, 1970). Methods based on a normal distribution assumption, such as Student's t test, are subject to biases if facing extreme values given the underlying normal distribution is not met, especially with a small-to-moderate sample size (Mihaylova et al., 2011).

In this regard, alternative method, based on a mixture of parametric distributions, is proposed (Mihaylova et al., 2011), that is, the Two part model (TPM). The model generates a separate probability function (first part) and positive outcome (second part).

The first part is to estimate the probability of having any expense by Logit or Probit regression, whereas the second part focuses on positive values of count data or continuous data using Generalised linear model (GLM). Estimations of the expected cost are the multiplication of the probability of incurring cost and conditional cost being incurred. An instance of the application of the TPM in healthcare expenditure is a study by Clarke et al (2003), which estimated the healthcare cost for complicated diabetes patients in the UK Prospective Diabetes Study in 1996-1997.

Details of the FE model, the RE model, the IV method, and the TPM are exhibited in Appendix 7.

IV. To provide recommendations for further improvement of the Thai migrant healthcare policy (objective 4)

Findings from the above objectives were brought together and analysed by the thematic analysis. Various policy recommendations are proposed, such as ways to improve operational management, how to make communication between central authorities and local health units more coherent, and ways to facilitate registration for the card and

increase healthcare access for migrants. A summary of the research questions, research objectives and corresponding methods is displayed in Table 13 below.

Table 13 Linkage between research questions, research objectives and corresponding methods

Research question (RQ)	Objective	Main methods	Analytical tool
RQ 1: How was the HICS policy established and how has it interacted with surrounding migrant policies in Thailand?	Objective 1: to investigate how the HICS policy was established through the lens of policy makers	In-depth interviews and document review	Thematic analysis
RQ 2: How do health providers and relevant officers at the implementation level, as well as migrant service users respond to the policy, and why do they respond accordingly?	Objective 2 (strand 1): to explore the response of local implementers towards the card policy	In-depth interviews, group interviews, and document review	Thematic analysis
	Objective 2 (strand 2): to explore how the policy affects migrants and employers		
RQ 3: What is(are) the outcome(s) of the policy on service utilisation and OOP of migrants from receiving care at health facilities relative to the UCS and the uninsured patients?	Objective 3: to assess the influence of the policy on service utilisation and out-of-pocket expenditure of insured migrants	Quantitative analysis of facility-based data	Econometric techniques
Objective 4: To provide policy recommendations for future policy improvement			

4.4 Ethical considerations

I. Ethics approval

This study was carried out according to the London School of Hygiene & Tropical Medicine (LSHTM)'s Guidelines on Good Research Practice. It was approved by the School's Ethics Committee (ID: 8776) and the Institute for Development of Human Research Protection in Thailand^{ix}.

^{ix} IHRP letter head: 166/2558

All data are kept anonymous. Dissemination of data can be done only for academic interest and individual information cannot be identified. Facility-based data were obtained upon the consent from respective hospital directors. For the interview process, the participants were informed about the study's objectives and were assured that confidentiality would be strictly kept. The research team always informed participants that it was perfectly acceptable for them to withdraw from the study at any time or to refuse to answer any question if they felt uncomfortable.

Though written consent is considered the gold standard, it may make migrants uncomfortable to participate in the interview as some migrants have precarious legal status. Thus, migrant respondents were asked for verbal consent instead and the interviewer would record this. Non-migrant interviewees (healthcare providers, employers or migrants, local officers, and NGOs) received a stipend of about 500-1,000 Baht (US\$ 15-30) each for their time spent after the interview was finished, while the migrant respondents received a souvenir (cost about 250-500 Baht or US\$ 8-15 each) as a thank you gift for their participation.

II. Confidentiality & anonymity of participants

The confidentiality and anonymity of the interviewees were preserved in transcripts, data entry and publications. Participants were asked for their consent to be quoted anonymously in published materials, for which their personal information would be adequately altered to ensure that the readers could not identify them. Audio-recordings were made upon consent from the interviewees. Audio files and transcripts were password protected in the researcher's personal computer. Electronic facility-based records were retrieved upon written approval from the facility directors. The researcher also asked health staff of the facilities to redact some digits of the patients' ID to protect the patients' confidentiality. The participant information sheet and consent form (in English, Thai and Burmese) are displayed in Appendix 8.

4.5 Conclusion

This research sought to evaluate providers' and migrants' responses to the current migrant health insurance policy in Thailand. Qualitative and quantitative methods were employed in parallel. A wide range of data collection and analysis techniques were used, including primary data collection through in-depth interview and document review, and secondary data analysis using facility-based data. Perspectives of all relevant stakeholders involved in the policy, such as policy makers, healthcare providers, and migrant service users, were investigated. Impact evaluation via econometric analysis was performed to assess the outcome of the insurance policy on its insurees in terms of utilisation volume and out-of-pocket payment. Results from all objectives were synthesised to provide policy recommendations.

Section 3: Results

This section is composed of 3 chapters (Chapters 5-7). Chapter 5 presents the findings from objective 1, which centres on how migrant policy in Thailand has evolved over time. Chapter 6 (objective 2) describes how local health staff, and other relevant stakeholders, responded to the health insurance policy for migrants in the real world. Chapter 7 (objective 3) elaborates the quantitative results. Each chapter starts with a brief introduction (subsection 1) and a summary of the methods used (subsection 2). Key results from the fieldwork (subsection 3) are displayed after the methods subsection. Each chapter is recapitulated with a short discussion (subsection 4), and a conclusion (subsection 5).

Chapter 5: Evolution of the HICS policy and relevant migrant policies in the Thai context

5.1 Introduction

The main focus of this thesis is to explore the outcomes of the health insurance for cross-border migrants in Thailand (the HICS). Though the main focus is the downstream policy process, some understanding of the upstream process, that is, how the policy was formulated, is also important.

As briefly explained in earlier chapters, the HICS is not a standalone policy. In fact, it is an interministerial agenda. This chapter therefore explored not only the health aspect of the HICS, but also its surrounding elements, such as concerns over state security or economic necessity.

In addition, the design of the HICS did not necessarily come out according to a rational policy decision making process, since oftentimes it was affected by various factors including internal and external politics, and the legacy of previous laws/regulations. Hence it is imperative to investigate the historical and contextual environment of the HICS not merely its current formulation.

5.2 Methods

The main data collection techniques were in-depth interview and document review. For in-depth interview, seven key informants who were, or have been involved in the formulation of the HICS, were identified. Initially, the researcher could identify only five interviewees working closely with the MOPH (namely, PM01, PM02, PM03, PM04, and ADM_CO1), then the two additional interviewees outside the MOPH (PM05 and PM06) were recruited through snowball sample selection. More details about the

interview process were given in Chapter 4. The interviewees' characteristics are presented in Table 14 below.

Table 14 Key characteristics of the interviewees

Code	Age	Sex	Current workplace	Role and responsibility regarding the HICS
PM01	58	Male	Office of the Permanent Secretary, the MOPH	Involved in the HICS formulation
PM02	76	Male	Independent academic institute	Involved in the policy discourse whether the NHSO responsibility covered non-Thai populations
PM03	55	Male	Office of the Permanent Secretary, the MOPH	Involved in the HICS formulation
PM04	59	Male	Office of the Permanent Secretary, the MOPH	Involved in the HICS formulation
PM05	58	Male	Office of the Permanent Secretary, the MOL	Involved in the MOU migrant recruitment policy
PM06	57	Female	Faculty of law in one of the public universities	Member of the National Reform Council during the junta
ADM_CO1	55	Female	Office of the Permanent Secretary, the MOPH	Supervising the reimbursement for contracted hospitals under the HICS

For document review, the researcher explored the Thai laws/regulations concerning migrant issues, tracing back to the early 1950s. These included the Thai Constitution, the Nationality Acts, the Immigration Acts, and the Working of Alien Acts. Subordinate laws, such as ministerial announcements, were perused.

Relevant minutes and proceedings from official meetings and conferences, where migrant health issues were discussed, were investigated. For instance, the Regional Workshop on Migrants' Health, convened by the MOFA and the MOPH in August 2015; the Consultative Meeting in Developing Strategy for Addressing the Rights to Health Services of Stateless/nationalityless People held by the MOPH in March 2015; and the Roadmap in Managing Services for Migrant Workers in Thailand, arranged by

the WHO Thailand Country Office in July 2015. The researcher presented at the above conferences as an observer and used that opportunity to identify potential respondents for further interview. Additional references were sought from Medline and the MOPH's archive.

Data analysis was done through both deductive and inductive thematic approaches. In the deductive approach, from the review in Chapter 2, it is clear the migrant health is not just a matter of health, as it often interplays with political and economic elements. The researcher thus grouped the interview findings into three domains, namely, (1) National security, (2) Employment, and (3) Health insurance. In addition, during the time of fieldwork, Thailand introduced a special measure, the One Stop Service (OSS), with the aim of overhauling existing migrant policies. The researcher thus added the OSS as a new domain, making four domains/themes in total. These domains were used as the interview guides. The findings were coded and charted against these domains. The coding was performed manually. NVIVO v10 software was used to store the interview data.

Then the inductive thematic analysis was conducted. The researcher identified crosscutting content from each deductive domain/theme as described above and grouped them into common themes. Two crosscutting themes were identified, namely, (1) Instability of Thailand's migrant policies, and (2) *De facto* powerlessness of the health sector. These themes are presented in the discussion subsection.

The original quotes in Thai are displayed in Appendix 9 to allow the (Thai-speaking) readers to check translating accuracy.

5.3 Results

The evolution of the HICS immensely interacted with the following aspects: (1) national security, (2) employment, (3) health insurance, and (4) the very specific measure launched after the 2014 coup d'état, namely, the OSS.

I. National security

Foundation of national security and immigration laws

As briefly mentioned in Chapter 3, the Immigration Act (1979) defines an 'alien' as any ordinary person without Thai nationality (Thai Immigration Bureau, 2004). In the Act, 'alien', is written in Thai as '*tang dao*'. However, in lay language, there are two specific Thai words, '*tang chad*', which is commonly assigned to 'foreigners', and '*farang*', which is usually assigned to Caucasian (white) foreigners. Thus the term '*tang dao*' is theoretically much broader than '*tang chad*' and '*farang*'.

However, in the common perception of Thai people, the word '*tang dao*' is set aside for 'cross-border migrants' travelling from less developed countries. This perception deviated from what is written in the Act, and at times these words were used interchangeably; not only in the lay language, but also in official documents.

The Office of Foreign Workers Administration (OFWA) of the MOL, is an apparent example of this confusion. The OFWA uses the term, '*tang dao*' (alien), in its Thai heading, which contradicts its English heading, where the word, '*foreign*', is used. One of the interviewees also highlighted this point.

"The bottom line of migrant health problems in Thailand is many people, particularly Thai NGOs, are overly afraid of using the term 'aliens' and try to replace it with more beautiful words like 'foreigners' or 'migrants'. This made us forget the non-nationals who cannot identify their country of origin. It is like hiding a problem; using a hand to cover the sun. Can we hide it?" [PM06]

The concept of defining 'alien' stemmed from the nation-state maxim. In the late 1800s, Thailand began to define its boundary with neighbouring countries in light of the expansion of British and French colonial empires. The state administration was reformed towards more centralised enforcement power in the same fashion as more

developed countries. Accordingly, in 1909, the first registration law was endorsed (the Census of People in the Kingdom Act).

In 1913 the first written Nationality Act came into force and was considered the first concrete tool in selecting the citizens of the country. At that time, the only criteria for authorising 'Thai nationality' was based on a person's place of birth, regardless of his/her parents' nationality (*jus soli* enjoyment). Similar reform processes took place later in neighbouring countries, after the declaration of independence from the British and French empires. Nationality laws were enacted for the first time in 1948 for Myanmar, in 1990 for Lao PDR, and in 1996 for Cambodia. The length of time in the introduction of nationality laws between countries is one of many factors that explains the incompleteness of population management in the region (Teerawekin, 2009, Napaumporn, 2012, Soitong, 2012).

The evolution of nationality laws in Thailand was very sensitive to both internal and external politics. One of the most important milestones in the history of nationality laws was the Regulation of Revolution Party No.337 (Por Wor 337), proclaimed in 1972 (Saisoonthorn, 2006). The most striking features of Por Wor 337 are:

- *'Revoking the Thai nationality of persons who were born in Thailand before 14 December 1972 of an alien father with non-permanent residence, or an alien mother with non-permanent residence, in circumstances where the lawful father is absent;'* and
- *'Refusing to grant Thai nationality to any person born since 14 December 1972 of an alien father with non-permanent residence, or an alien mother with non-permanent residence, in circumstances where the lawful father is absent.'*

Por Wor 337 was introduced due to a fear of communism in Southeast Asia. The purpose of this regulation was to prevent children of people from communist countries obtaining Thai nationality but it also had spill-over effects on people from non-communist countries (Saisoonthorn, 2006).

In 1992, the Regulation was repealed by the Nationality Act (second revision), but the concept of *jus soli* restriction remains in force today as presented in the Section 7bis of

the current 2008 Nationality Act (fourth revision), see Appendix 10 (Saisoonthorn, 2006, Rijken et al., 2015).

Despite the stipulation in the 1979 Immigration Act that illegal immigrants must be deported, Thailand's economy is hugely reliant on these migrant workers. Martin (2009) reported that cross-border migrants contributed over 6% of the country's GDP. For this reason, most previous governments exercised the power specified in Section 17 of the 1979 Immigration Act, which indicates that *'In certain special cases, the Minister, with Cabinet approval, may permit any alien or any group of aliens to stay in the Kingdom under certain conditions, or may consider exemption from being conformity with this Act'*, by permitting undocumented/illegal migrants from CLM nations to have legitimate residence for a given period (normally between 6-24 months) (Thai Immigration Bureau, 2004).

Between 1992 and 2012, there were more than twenty Cabinet Resolutions on this matter. These lenient measures have common characteristics in terms of demanding that Thai employers take their illegal migrant workers to register with the government and obtain work permits from the MOL. Nevertheless, there were subtle differences between the Resolutions of different periods. For instance, in 1996 the Resolution granted amnesty only to illegal migrants in 8 industries in 43 provinces, while the 2002 Resolution cancelled the area restriction but still restricted business types (Paitoonpong and Chalamwong, 2011).

Another example was the Resolution promulgated on 26 May 2009, requiring illegal migrants and dependants aged below 15 to register with the MOI within a couple of months. However, due to administrative procrastination, many migrants, especially in the fishery business, did not undertake the registration. As a result, the government extended the registration period to 30 September 2009. Yet, the new extension was made only for migrant workers in the fishery industries without including dependants of migrants. The Lawyers Council of Thailand (2011) reported that these 'confusing' and 'unsystematic' measures were more likely to create labour exploitation troubles than solve them.

"When you talk about migrant policy in Thailand, that's wrong. Because, there has never been a migrant policy in this country...Policy makers in this country never saw farther than the end of their noses, and never thought of addressing structural problems." [PM02]

Current national strategies for managing the citizenship status of non-Thais

To date, there are three important national strands in the government's attempt to register all 'non-Thais' in the country.

1. The non-Thai ID card introduced by the Bureau of Registration Administration (BORA) under the MOI in 2004

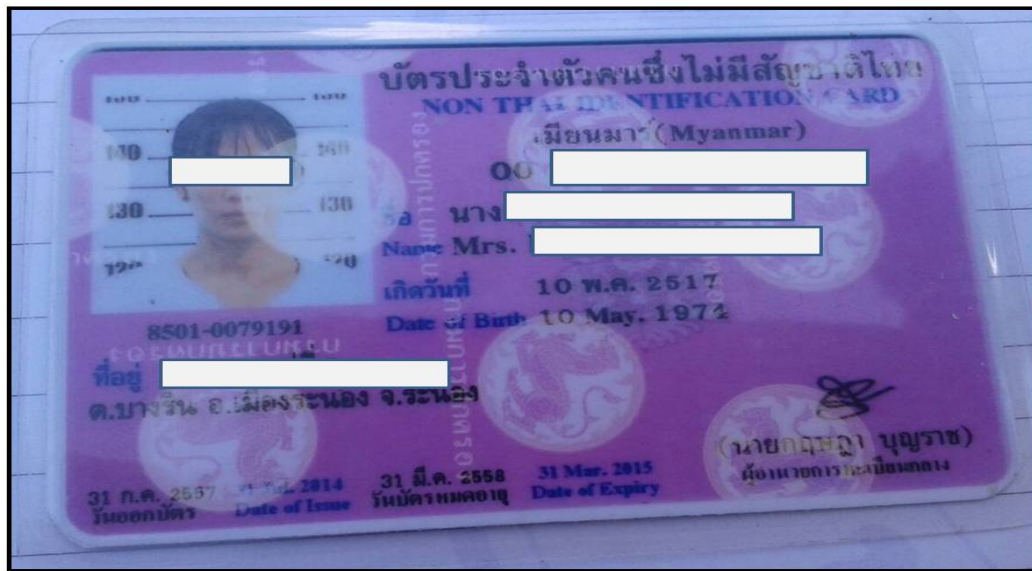
Before 2004, there were seventeen different ID cards for non-Thai nationals. Different ethnic groups were assigned different colours on the card. The colour system was replaced by a single colour (pink) ID card for all non-Thai nationals. The new card for non-Thais looks similar to that of Thai nationals, except for the numbering code. For illegal migrants from CLM nations, the number on the card starts with '00' (while for Thai nationals, the number starts with non-zero integers). Once registered, these illegal migrants would acquire Tor Ror 38/1 along with the ID card. It should be noted that the '00' card only served as temporary identification evidence while the nationality verification, so-called, the 'NV', was underway, see Figure 11.

Thus, the issuance of '00' card was considered a 'semi-legalisation' system (Chamchan and Apipornchaisakul, 2012). Once the NV was finished, their illegal status would be legalised, and they would acquire a temporary passport and would have the right to put their name in a household registry (Tor Ror 13), similar to regular foreigners.

Note that the passport of NV migrants is called a 'temporary passport'. In other words, it is a passport recognised in Thailand and CLM countries only; the temporary passport

holders cannot use this to travel abroad to any countries but Thailand and their country of origin.

Figure 11 Example of the '00' card for illegal CLM migrants



Source: Real picture taken from one of the interviewees

2. The National Strategy to Address Rights and Citizenship Problems of a Person, endorsed by the National Security Council (NSC) in 2005

This Strategy was often called the Stateless Strategy. Its highlights were (1) comprehensively registering all persons with citizenship status who have permanent residence in Thailand, and (2) affirming the basic human rights of a person while the resolution of citizenship status is underway (Ngamurulert et al., 2009). It has some components overlapping with cross-border migrants as some migrants are unable to return to their country of origin, and *de facto* become permanent residents in Thailand.

Yet, in practice, those who really benefit from the Strategy are only in-situ stateless persons, while cross-border migrants are left untouched. Napaumporn (2012) reported that as of 2011, more than 880 migrant workers from CLM nations were rejected for

their nationalities under the NV process and the exact figure of migrant workers failing the NV is still in question.

The most significant impacts of the 2005 Strategy are as follows.

- The MOI launched measures for registering in-situ stateless persons in Thailand and providing them with an ID card, where the code starts with '0' (not '00').
- The Ministry of Education (MOE) launched its internal policy through the Cabinet Resolution in 2005, ratifying the right to free basic education (grade 1-9) for all non-Thai nationals.
- The MOPH endorsed the 'HI-PCP' or the 'Stateless Insurance' for registered stateless persons.

There are some points to note in the 2005 Strategy. Firstly, the '0' card is just a recognition that the state recognises the citizenship status of a person. It does not mean that he/she is a Thai national. Should there be sufficient evidence that confirms his/her Burmese nationality, he/she should return to Myanmar or enter the legalisation process for CLM migrants as stated above.

Secondly, though the Strategy was endorsed in 2005, the actual survey on people with citizenship problems was physically conducted only between 2007 and 2009.

Thirdly, if a '0' ID card holder does not have evidence that proves they are a national of another country, and has been living in Thailand for a certain period (usually more than five years), he/she is eligible to apply for Thai nationality. However, in practice, the application process always takes time. Thus very few people were successful in changing their (problematic) citizen status to Thai nationals. This is reflected by the fact that number of '0' card holders remained relatively stable since the massive survey in 2005 (Suphanchaimat et al., 2013, Hasuwannakit, 2012b).

Lastly, while both the MOE and the MOPH used this Strategy as grounds to launch their internal policies, the MOE was more responsive to this political opportunity by submitting its proposal to the Cabinet for affirming rights to education to 'all' non-Thai

children. The MOE policy is that if a child does not hold an ID card, or if he/she holds any types of non-Thai ID card (that is, the '00' card or the '0' card), the MOE can issue a special ID for him/her. The MOE's ID is recognised only in MOE schools. The ID is generally known as the 'G-series' ID (GXXXXXXXXXXXXX). The most distinct features of the 'G-series' policy are (1) a 'G-series' child is eligible to enjoy free essential education, and (2) a school with 'G-series' students is eligible to receive an additional capitation budget (about US\$ 12-15 per head) from the MOE. Recently, in March 2015, there was an attempt to expand HI-PCP coverage to all 'G-series' children by launching this proposal to the Cabinet, however, it has not been approved by the existing government (Chotprueksawan, 2013, Bureau of Budget, 2015). One of the interviewees (PM06) mentioned that the MOE was more responsive when 'windows of opportunity' were open, whereas the MOPH moved much more slowly.

"I was involved in the drafting of the 2005 Strategy. At that time, the spearhead of the Strategy was Mr XXX, who then held a high position in the Ministry of Education soon after the 2005 Strategy was introduced." [PM06]

3. The National Strategy on Comprehensive Management of Illegal Cross-border Migrants Problems, endorsed by the NSC in 2012

In 2012 the number of illegal CLM migrants with a '00' ID card soared to over a million and seemed unlikely to decline (Office of Foreign Workers Administration, 2015) (see the growing number of migrant workers in the 'Three-nations' category in Figure 5). External pressures also played an important role. In 2010 Thailand was listed in the Tier 2 Watchlist of the Trafficking in Persons (TIP) Report, the second worst amongst all reporting levels. Countries in the Tier 2 Watchlist would be auto downgraded to Tier 3 in two years unless they made exhaustive efforts to combat trafficking problems (US Department of State, 2012). An apprehension about country demotion, combined with pressure from the business sector and civil society, provoked the government to show significant efforts in dealing with problems of illegal migrants (Thai Civil Rights and Investigative Journalism, 2012). Therefore, the NSC proposed a new strategy in 2012,

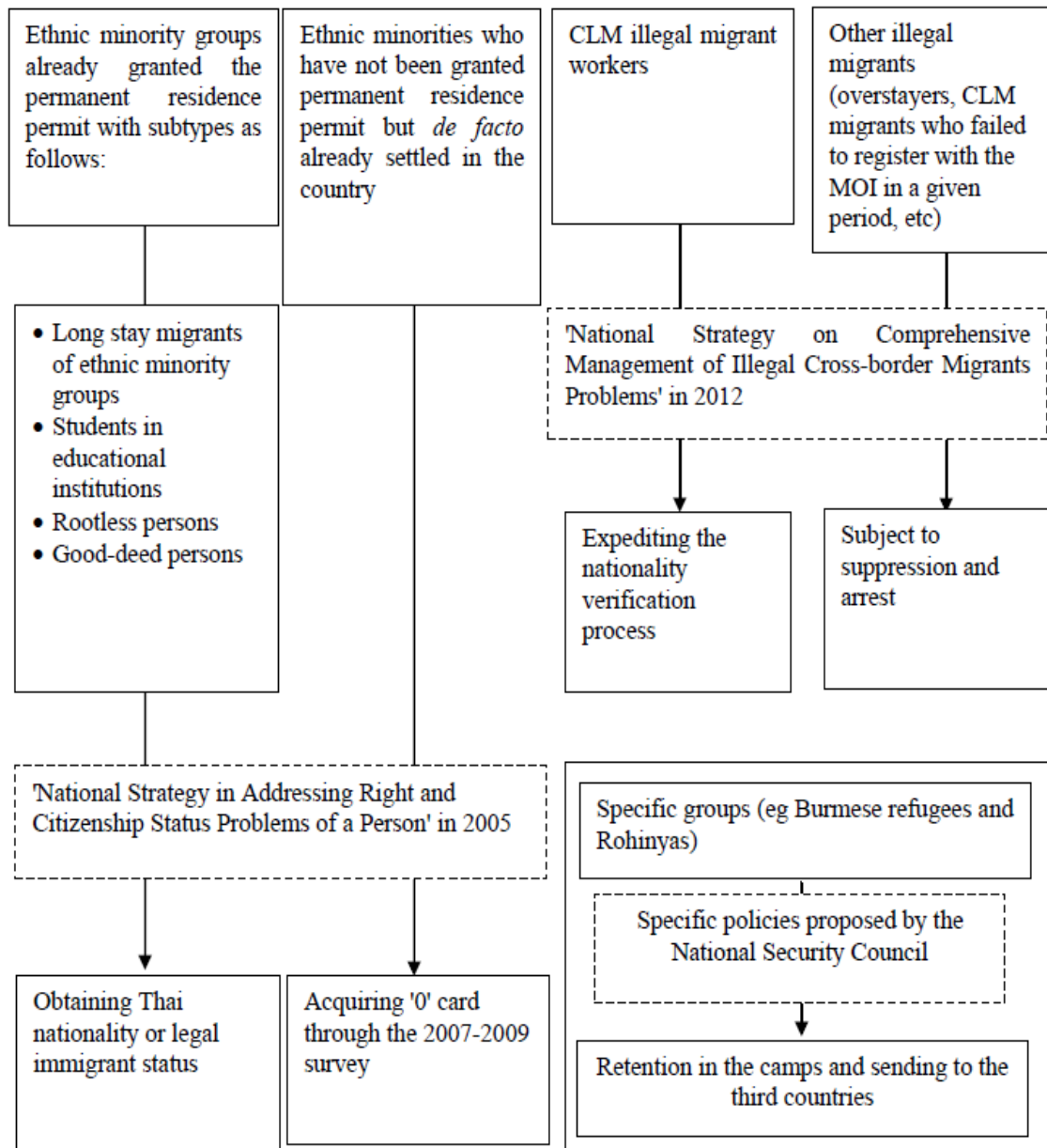
namely, 'the National Strategy on Comprehensive Management of Illegal Cross-border Migrants Problems'.

The 2012 Strategy did not provide new measures to tackle the illegality problems of migrants. It reiterated measures from the earlier Strategies and gave a strong message that those failing to register with the authorities would be subject to deportation. Hence, after the 2012 strategy, the amnesty laws ratified by the Cabinet Resolutions were cancelled as the government expected that 'all' illegal migrants would enter the NV process or be subject to deportation. One of the respondents expressed that the 2012 Strategy gave inadequate attention in affirming rights to health of migrants.

*"The 2012 Strategy belongs to the right-wing hawk. Unlike the 2005 Strategy, which ensures human rights of a person, the 2012 Strategy rarely touches this (humanitarian) issue. In the XXX international meeting, the Strategy was shamefully criticised."
[PM06]*

A summary of policies for tackling citizenship problems of an alien and/or a migrant in Thailand is displayed in Figure 12 below.

Figure 12 Summary of national security policies in dealing with illegal migrants and aliens in Thailand^x



Source: adapted from the Office of National Security Council (2012a)

^x The Strategy encompasses measures to deal with several migrant groups, including refugees and asylum seekers as shown in the lower right box of the diagram, but these groups are beyond the scope of this thesis.

II. Employment

History of the employment policy for migrants

The Office of Foreign Workers Administration (OFWA) under the MOL is the main organisation responsible for processing work permit applications for migrant workers, and assisting Thai employers to recruit cross-border migrant workers (Paitoonpong and Chalamwong, 2011). The history of the work permit issuance for migrants started in 1978, when the first 'Working of Alien Act' was promulgated. The Act indicates that an alien who wishes to work in Thailand must apply for a work permit, valid for one year, which can be renewed every year.

The distinct requirements for a work permit applicant are: (1) not being insane, mentally ill, or with a history of substance dependence, (2) not being sick of serious public threat infectious diseases^{xi}, (3) not being an illegal immigrant, and (4) not applying for work in any of the 39 reserved occupations. The 39 reserved occupations are indicated in the Royal Decree (1979), so-called the 'negative list'.

In principle, occupations in this list is reserved for Thai nationals only because they are occupations that are seemingly linked with Thai tradition and culture, for instance, wood carving, manual cloth weaving, and tour guiding. The list also includes 'manual labour', forestry and fishery and various kinds of labour works, such as shop-front sellers and bricklayers.

In the early 1990s, Thailand made considerable progress in its economy by moving from an agricultural-based to industrial-based economy. The fast economic growth resulted in labour shortages, particularly in sectors such as construction and fishery, which are often engaged in dirty, difficult, and dangerous work ('3Ds' jobs) (Napaumporn, 2012, Pholphirul and Rukumnuyakit, 2008). Thus low-skilled migrant workers from CLM countries became an attractive option for Thai entrepreneurs. Besides, wage rates in Thailand were generally more attractive than in neighbouring countries, creating a massive inbound migration of illegal workers from CLM nations, but the 1978 Working

^{xi} leprosy, elephantitis, stage 3 syphilis, drug addiction, and active tuberculosis

of Alien Act means that illegal migrants cannot apply for a legitimate work permit (Chantavanich and Vungsiriphisal, 2012). This situation forced the government to find a solution that enabled these (illegal) migrants to work lawfully in the country.

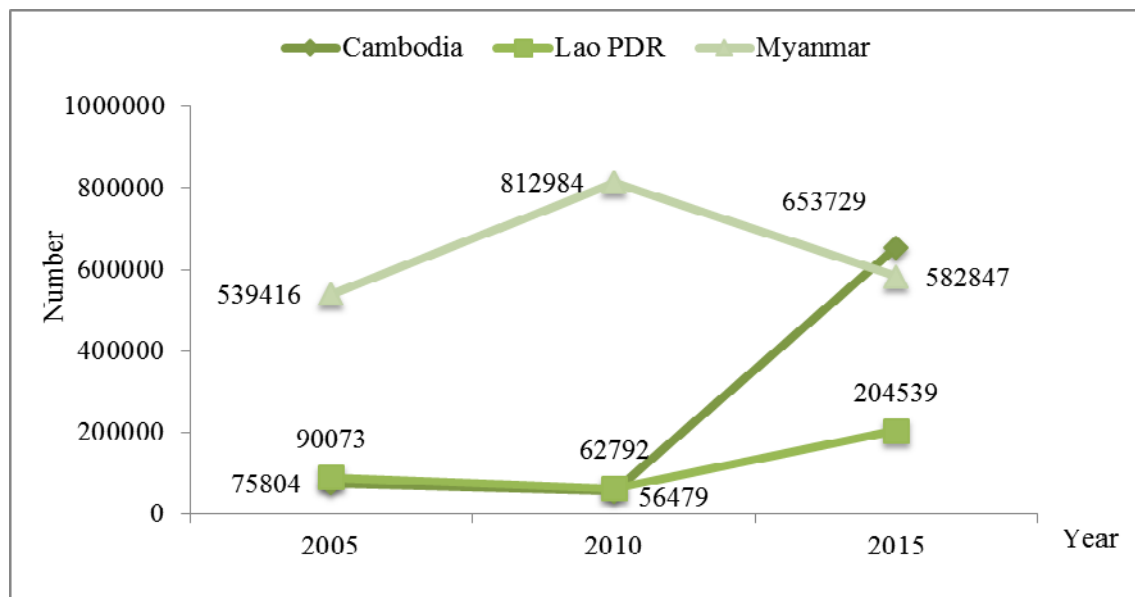
Similar to the MOI, the MOL has devised legal instruments to 'legalise' the illegal status of migrant workers. One of the key tools is the Ministry of Labour Decree of 2004 (the same period when the '00' ID card was introduced), which allows an alien, who 'is allowed to temporarily stay in the Kingdom while awaiting deportation', to be engaged with 27 occupations specified in the Decree (Thai Immigration Bureau, 2008). This approach was like a way out for migrant workers from the negative list.

Examples of the 27 occupations in the list are laundry workers, waiters in restaurants, and herdsmen. In essence, these 27 occupations can be categorised into two groups (1) manual labour and (2) domestic servants. Of note is that this regulation is enforced only for CLM migrants (Archavanitkul and Wachanasara, 2008).

In the early 1990s permission to work for irregular/illegal migrants was confined to certain provinces with heavy industries. Then, in the early 2000s, the permission for illegal migrants to work became a nationwide policy.

Before 2010, migrant workers from Myanmar made up the greatest proportion of CLM irregular migrants. However, the recent political reform towards democracy in Myanmar made many migrants return to their home land (Thet and Pholphirul, 2015). As a result, the number of illegal migrant workers from Myanmar gradually declined, and figures in 2015 show that the stock of Cambodian workers slightly outnumbered migrants from the other two nations, see Figure 13.

Figure 13 Numbers of migrant workers (with work permit) from CLM nations in Thailand



Source: The National News Bureau of Thailand (2015) and the OFWA (2015)

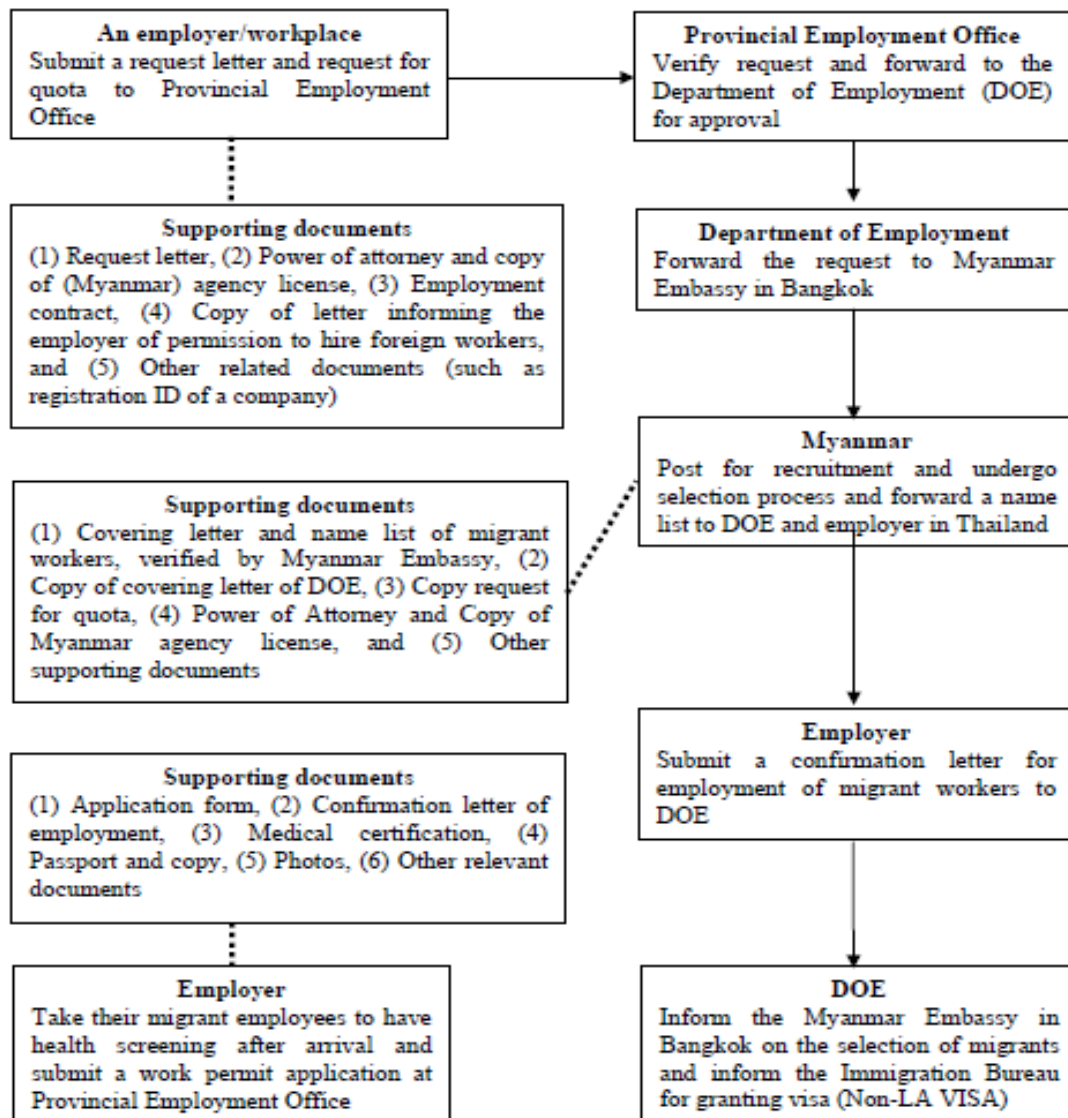
Current challenges in the recruitment of migrant workers

The NV policy and the amnesty laws are temporary measures for dealing with CLM migrants who have already crossed the border. There is another measure, the MOU that aims to deal with the problems of illegal migrants more proactively. The MOU was made between Thailand and CLM nations (Thailand signed with Cambodia and Lao PDR in 2002, and with Myanmar in 2003). However, the implementation of the MOUs was belated because of cooperation challenges between countries and limited capacity of relevant authorities to manage the process outlined in the MOUs. The deployment of migrant workers did not commence in Cambodia and Lao PDR until 2006, and was deferred in Myanmar until 2009 (Vasuprasat, 2008).

The rough framework of the MOU included: (1) proper procedures for employing migrant workers, (2) effective repatriation of workers who have completed the terms/conditions of employment, (3) protecting the rights and welfare of workers, and (4) effective action against illegal border crossing and human trafficking. Though the

MOU policy implied an active role by government authorities in aiding legal migration, private recruitment agencies were able to step in and fill this role instead because there were several formal and informal steps to deploy a worker through MOU procedure (Chantavanich and Vungsiriphisal, 2012), see Figure 14.

Figure 14 Example of the processes for recruiting Myanmar migrants via the MOU policy



Source: Adapted from Swaschukaew (2014)

It was estimated that the minimum time from sending a request to the Thai Department of Employment (DOE) to the arrival of a worker was around 60-90 days. The International Labour Organization (ILO) (2015) reported that huge administrative burdens and lengthy approval processes that were quite opaque and difficult to understand indirectly made employers and workers turn to private intermediaries. This was supported by one of the key informants below.

"I just knew that there was a quota (for migrant recruitment), but I had no idea how it (the MOL) allocated this quota. If I request 5 housemaids, I am not sure whether it (the MOL) will check this request." [PM02]

MOU migrants and NV migrants shared similar characteristics in terms of permitted length of stay in Thailand and acquired documents. For time permitted, migrants in both groups were allowed to have temporary residence for two years plus a two-year extension (four-year maximum). After that, they must return to the country of origin for three years before applying to return to Thailand again (Hall, 2012).

For documents acquired (see Figure 15), both groups would acquire a temporary passport and work permit. With a temporary passport, they were allowed to travel to any province in Thailand as regular migrants. However, they were not allowed to change an employer without informing the DOE first (with a fee incurred). Before the temporary passport was issued, they were allowed to live only within a certain area/province as stipulated in Tor Ror 38/1.

Figure 15 Work permit and temporary passport for NV and MOU migrants



Source: Real pictures from the author's interviewees

The expense for obtaining work permit varied according to type of work and length of stay, normally between 1,000 and 4,000 Baht (US\$30-121). Hall (2012) suggested that the entire price of the MOU process, including the cost of broker services, might be up to US\$ 1,100 per person. According to the ILO Convention on Private Employment Agencies, the entire cost of recruitment should be borne by an employer. Yet some employers avoided defraying this cost by paying the work permit expense in advance then deducting this from their employees' salary (Archavanitkul and Wachanasara, 2008).

III. Health Insurance

History of the HICS

Before exploring the HICS, it is worth mentioning a little about its relationship with the SSS. As briefly mentioned in Chapter 3, MOU and NV migrants were mostly engaged in low-skilled work either in the formal sector or the informal sector. In this regard, MOU and NV migrants in the informal sector, despite being fully legalised, were not

entitled to SSS coverage because the SSS covered only legal workers in the formal sector. In summary, migrants who were not entitled to the SSS included (1) undocumented/illegal migrant workers in both formal and informal sectors, (2) legal migrants working in the informal sector, and (3) dependants of migrant workers. To fill this policy gap, the MOPH promulgated the 'Health Insurance Card Scheme', or the 'HICS'.

One of the key informants (PM05) opined that all work permit holders in the formal sector should be insured by the SSS regardless of the completion of the NV (the SSS does not cover workers whose NV is not completed because those persons are still considered not fully legalised). However, it was very difficult to implement this idea in practice because there was always a lag time that the DOE needed for investigating the profile of applicants before issuing a work permit. This situation implied an implementation gap between the SSO (accounting for insuring migrant workers) and the DOE (accounting for issuing a work permit).

"There was an idea that once a work permit was obtained, and to avoid duplicate payment of premiums, the SSO should register this person (regardless of the completeness of the NV). But in practice, during the first two weeks, it (the DOE) needs to check information on that migrant, including his/her criminal background and so on. So that migrant is not fully eligible for the SSS. Accordingly, that migrant cannot be insured by the SSS during that time. This is a constraint in practice." [PM05]

"Even within the MOL, both parties (the SSO and the DOE) rarely talk to each other. Those responsible in insuring migrants work in the SSO. Those finding jobs for migrants work in the DOE. Those responsible for issuing work permit just do their job. They do not care if migrants will be insured for their health. It is not my business! Because it is not written in the law (that migrants with work permit must be insured)." [PM03]

The first health insurance launched by the MOPH for migrants was a 500 Baht (US\$ 15) health card (the same premium as the LICS at that time), which was endorsed in certain provinces. The premium then expanded to 1,000 Baht (US\$ 30) in 1999 and 1,200 Baht

(US\$ 36) in 2001, plus an annual health screening cost of 300 Baht (US\$ 9) (Srithamrongsawat et al., 2009).

The most remarkable change took place in 2004, the same period where the '00' card policy was established. The HICS was officially set up as a nationwide policy at that point. This implies that the policy is 'compulsory' because employers of migrants are required to take their migrant employees to visit a health facility for medical check-up and buy the insurance card as part of the entire registration process. However, the MOPH does not have specific legal instruments that can force migrants to buy the insurance and to punish their employers who refuse to buy the card for their employees. In other words, the policy is not 'compulsory' as intended.

"(Interviewer: What factors that you consider a bottleneck for operating the migrant insurance at this moment?) We must make the insurance system supported by a legal instrument. Without legal grounds supporting the system, it is not possible to set up an authority to work on this issue in the long run." [PM04]

Characteristics of the HICS

Before the OSS era, the HICS primarily targeted migrant workers; but for dependants of migrants, it was applied on a voluntary basis. The HICS covers a wide range of services, including health promotion. This is in contrast to the SSS, where health promotion activities were not included in the benefit package because the SSS had an agreement with the UCS, indicating the UCS is the main agency responsible for health promotion and disease prevention for all Thai citizens (Sakunphanit, 2010). Key attributes of the HICS are as follows.

Governing body

The Health Insurance Group (HIG) is the main governing body of the HICS. It is under the Office of the Permanent Secretary (OPS) of the MOPH. The organisation was set up in 1993 to deal with MOPH financing. Due to its background in health financing, the organisation was assigned by the OPS to manage the HICS in 2004.

Though the HIG has its own director, the organisation does not have true discretionary power. All official letters and announcements to local health facilities, regarding any changes in the HICS, must be signed by the Deputy Permanent Secretary, not by the HIG director.

Tangcharoensathien (2015) mentioned that the MOPH bureaucratic structure was obsolete and unresponsive to health system dynamics, in addition to its transparency issue. This factor also led to discontinuity in policy implementation since the Deputy Permanent Secretary was subject to change when there was a change in the government. Besides, one of the interviewees working in the HIG expressed her concern over a shortage of staff in the organisation and a shakiness of the government policies on migrant issues.

"There are only 10 staff members in the office. Two of them have just resigned. Seriously, I wish to resign too...The big-picture policy (on migrants) is always shaky. This consumes much of our time since we need to change our work according to a new policy. If the new policy was developed based on what we have done, this would lead to progress. But nowadays it is always volatile." [ADM_CO1]

Apart from the HIG, there are some authorities under the MOPH which have some functions related to the HICS. Examples of these authorities are the Bureau of Policy and Strategy (BPS) and the Bureau of Health Administration (BHA).

The BPS is responsible for collecting individual (both Thai and non-Thai) patient records from health facilities. However, the collection of records is just routine monitoring and not related to reimbursement. The BPS is also commissioned to feed draft strategies to policy makers upon request.

One of the MOPH strategies linked to the HICS is the 2012-2016 Border Health Plan. The Plan clearly stated that health facilities in areas where migrants were concentrated should develop 'migrant-friendly services', such as having migrant health volunteers, or establishing health education leaflets in non-Thai language. However, the Plan was

merely a guidance. The implementation of activities proposed in the Plan was subject to willingness/readiness of individual facilities (Bureau of Policy and Strategy, 2012).

The BHA's main duties are to support administrative works of the MOPH (such as launching guidelines or crafting ministerial announcements). In terms of the HICS, the BHA is responsible for launching health screening guidelines, contacting non-MOPH ministries on behalf of the MOPH, and monitoring quality of service.

Note that BHA is under control of another Deputy Permanent Secretary, who is not in charge of the HIG. One of the respondents mentioned that this overlapping function between authorities usually caused confusion in HICS implementation.

"They (the BHA) launched health examination regulations and other miscellaneous measures. But when local providers faced problems with the insurance, the BHA didn't solve the problems of local providers. So they (local providers) always speak to us (the HIG) instead." [ADM_CO1]

Financing mechanism

Healthcare financing refers to the means by which a health service is funded. This topic can be explored through the three basic functions: (1) revenue collection, (2) risk pooling, and (3) purchasing of health services.

For revenue collection and purchasing, the HICS receives remittances from the card premium. It does not matter if an employer purchases the card for his/her employees, or migrants buy it by themselves. The card price was 1,300 Baht (US\$ 39) since the inception of the policy in 2004 until 2013, when it rose to 2,200 Baht (US\$ 67). Year 2013 was also the time when the '365-Baht card' (US\$ 11) for a migrant child was launched. The rationale behind the instigation of the '365-Baht' card is described at the end of this subsection.

In 2014 the card price for an adult was reduced to 1,600 Baht (US\$ 48) to persuade more migrants to register with the OSS policy, but the card price for a child remained

constant. In addition to the card premium, there was an annual 600 Baht (US\$ 18) health examination cost, which a buyer must pay before being insured. The health examination cost was reduced to 500 Baht (US\$ 15) in mid-2014 during the OSS era (Health Insurance Group, 2013). Note that migrant dependants under 7 are not obliged to pay for the health check. This means, in total, an adult must pay 2,100 Baht (US\$ 64) for obtaining the insurance (1,600-Baht premium plus 500-Baht health check).

Risk pooling is a means to distribute financial risks. The HICS pool is divided into three pots: (1) registering hospital, (2) the PPHO, and (3) the MOPH.

The largest pot (~57%) is pooled at a hospital to cover the cost of services (both OP and IP treatments) provided to the card holders.

Another pot (~20%) is pooled at the PPHO to support all administration expenses and to encourage health facilities to undertake health promotion activities for outreach populations. A health facility is able to ask the PPHO for funding from this pot to support its health promoting projects, or the PPHO can use this money to launch its own health promoting initiatives.

Lastly, the rest of the card revenue (~23%) is pooled at the MOPH. This budget is used for subsidising (1) expense of high-cost care incurred by contracted facilities^{xii}, and (2) emergency treatment in case a patient visits a hospital located outside his or her registered province.

The interviewee, PM01, mentioned that he was involved in designing the HICS financing from the beginning. He also stated that it was the intention of policy makers at that time to have the largest portion of the card revenue pooled at local facilities rather than at the MOPH because this would enable the facilities to make best use of the income from selling the card to match their own needs.

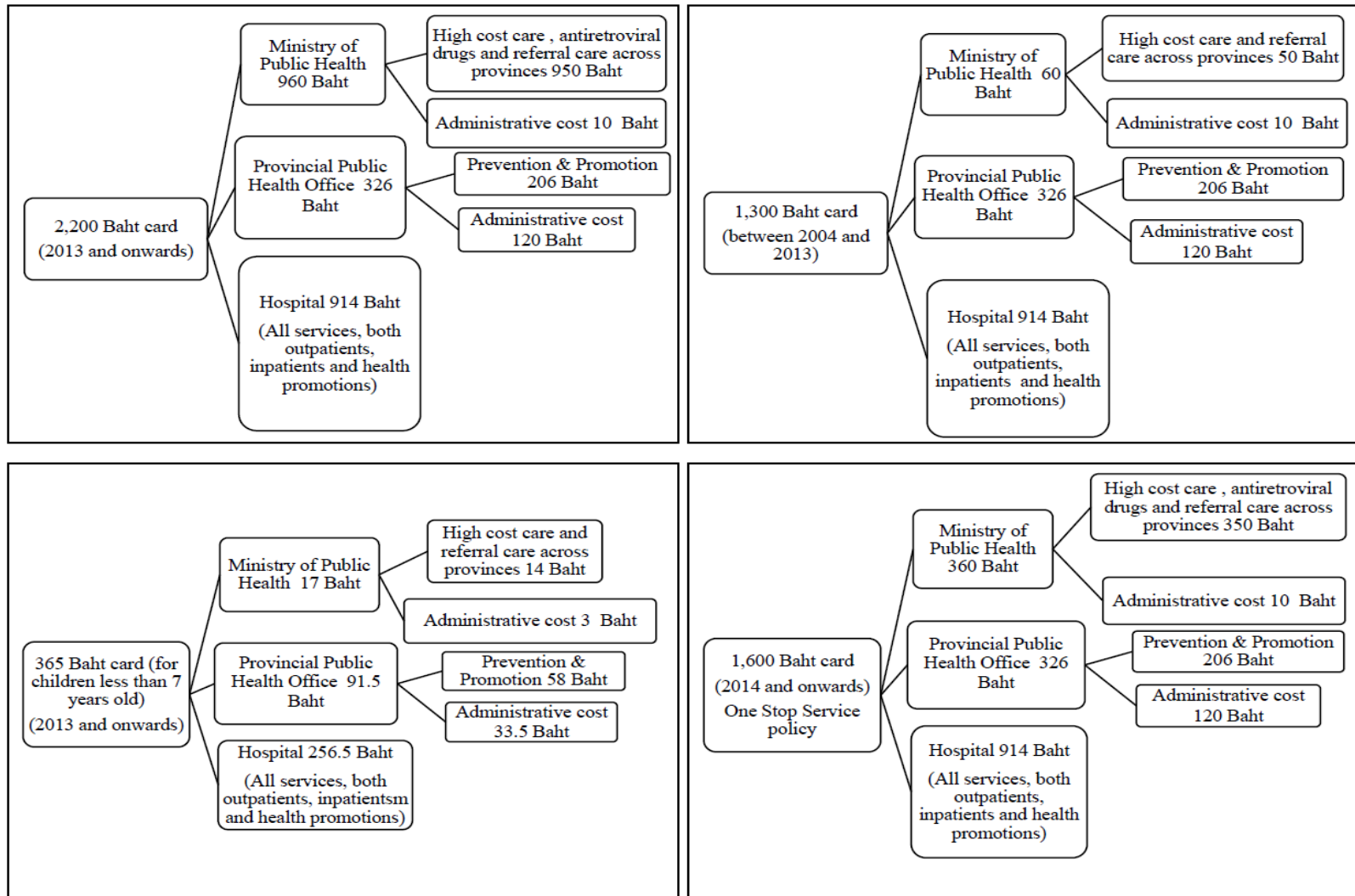
^{xii} A treatment is considered 'high-cost' if the IP's adjusted Relative Weight (adjRW) is equal to or larger than 4. AdjRW is the indicator reflecting disease severity and health resource used for IP care. Admission with higher adjRW number means the disease of that episode is more severe (and requires more resources for treatment) than that of a lower adjRW number.

"We intended to have reverse financing design to the UCS. Since each province has its own specific context. So the money should be pooled only where needed but distributed as much as possible." [PM01]

If a patient bypasses his/her registered hospital to attend another hospital within the same province in an emergency condition, the receiving hospital must be liable to take care of treatment expense first, then be reimbursed from the registered hospital. For a bypass of an emergency condition to another province, the receiving hospital can be reimbursed the treatment cost directly from the MOPH. For a bypass of a non-emergency condition, the treatment charge is incurred by a patient (Health Insurance Group, 2013).

A summary of the financing mechanism of the HICS is presented in Figure 16.

Figure 16 Financing mechanism of the HICS in different periods



Source: adapted from the HIG (2013)

The reimbursement for 'high-cost' care is like a reinsurance system. A contracted hospital must absorb high-cost treatments for migrants as well as ART for HIV/AIDS cases first, then be reimbursed this from the MOPH^{xiii}. Before 2013, the money pooled at the MOPH was the smallest in size amongst the three pots but, after 2013, the MOPH pool has become much enlarged due to additional earmarked fund for HIV/AIDS treatment. Note that there is no additional budget for ART in the 365-Baht card but the card still covers treatment for HIV/AIDS in children. Two interviewees (PM03 and ADM_CO1) mentioned that they experienced some hospitals that refused to transfer part of the card revenue to the MOPH and wished to take the financial risk on their own.

"Some hospitals are bluffing by not sending (high-cost) money to us (the MOPH). They may think that they have already sold a large number of cards so they don't want to pool the high cost with us." [ADM_CO1]

Health screening

Before buying the card and obtaining a work permit, a migrant applicant must pass the health check^{xiv}, which includes several measures including chest X-ray, blood examination for syphilis, and leprosy screening (Health Insurance Group, 2013). Results of the health check are divided into 3 tiers.

- Tier 1: An applicant, who is fit enough, and does not have any serious communicable diseases, will be issued a work permit and be eligible to buy the insurance card.
- Tier 2: An applicant who is infected by either TB, leprosy, syphilis, or parasites, will be obliged to have further treatment before being issued a work permit and buying the insurance card.

^{xiii} The MOPH subsidises this expense based on DRG with global budget (normally about 10,500 Baht or US\$ 318 per adjRW)

^{xiv} The full measures are (1) chest X-ray (followed by sputum examination in tuberculosis suspected case), (2) blood examination to investigate microfilaria and syphilis infection, (3) urine analysis for checking narcotic drug use and amphetamine plus pregnancy test for woman, (4) leprosy screening, (5) provision of a single dose of Diethylcarbamazine (300 mg of DEC) and a single dose Albendazole (400 mg) for treating parasites, and (5) other health screening where doctors deem appropriate

- Tier 3: An applicant, who is infected with any of the following conditions: active tuberculosis, obvious leprosy or filariasis that causes 'social disgust', stage-3 syphilis, narcotic drug addiction, alcoholism, and psychosis, or suffers any sickness that may hamper his/her job based on an individual doctor's opinion, will be reported to the Immigration Bureau for deportation.

This guideline has been used and remains unchanged since 2004. The conditions specified in Tier 3 were adopted from the Decree No.14 (1992) which gave details of conditions for banning suspicious immigrants from entering the country.

Recent data from the MOPH showed that the proportion of migrants falling into Tier 3 was about 0.9% of all registered migrants. However, the accuracy of this figure was in question, especially the reporting of TB cases (Bureau of Health Administration, 2015). This was because the term 'active tuberculosis' in clinical sense was somewhat different from the interpretation specified in the ministerial announcement. In clinical practice, 'active tuberculosis' referred to a patient with abnormal chest X-ray and positive sputum examination, while the health check in the field performed a chest X-ray only but not sputum test because the HICS guideline indicated that a further sputum exam would be undertaken only if an abnormal chest film was found. The whole process for acquiring sputum results usually took time, but the report to the MOPH was normally based on chest X-ray only. One of the interviewees (PM03) opined that the health checks and dividing the findings to different tiers were not useful compared to insuring 'all' migrants at the first place, and, in his view, the classification of Tier 2 and Tier 3 was very subjective.

"I am the one that is not convinced that we should force migrants to have health screening. Even though it sounds good... But I am an epidemiologist. I know that a yearly health check does not benefit you that much. But if you take all of them to the insurance, this is the best disease surveillance system. It is a win-win situation. Now it is like you need to know whether a migrant is having diseases and you ask him/her to pay you to get this answer. But if you insure all of them, it means that I promise to protect

your health all year long. That migrant will benefit from the treatment and you will be able to know his/her health status." [PM03]

Benefit package

Registered migrant workers and dependants are eligible to obtain health benefits at the hospital where they had health screening. However, in some provinces, such as Ranong province, the PPHO introduced its own measure by allowing a beneficiary to access health services at all public facilities within the province (see Chapter 6 for more detail).

The HICS benefit package includes OP and IP treatments, emergency care, health promotion, and disease prevention. Nonetheless, some treatment items are not included, such as treatment of psychosis and drug dependence, and renal replacement therapy for chronic renal failure.

Another important feature of the HICS is that the benefit package remained unchanged since its inception in 2004, until the year 2013. Potential explanations for this change are explained in the later subsection.

Contracted health facilities

All public hospitals under the Office of the Permanent Secretary of the MOPH, including district hospitals and provincial hospitals as well as network health centres, are contracted facilities. The only exception is in Bangkok where hospitals under the Bangkok Metropolitan Administration and hospitals under the Department of Medical Services of the MOPH serve as contracted facilities.

The insurees need to visit the hospital where they first registered. This is a gate-keeping mechanism similar to the UCS. In cases where the designated hospital is unable to provide suitable treatment for severe diseases, the patient can be referred to a higher-level contracted hospital within a province first, then to a higher-level hospital outside the province.

Key reasons for the changes in the HICS and remaining challenges

One of the most important changes in the HICS took place in 2013, when the government launched the Cabinet Resolution on 15 January 2013 to officially allow 'all' migrants and dependants to buy the insurance. There were three major changes indicated in the Resolution: (1) the expansion of the benefit package to cover HIV/AIDS treatment alongside an increase in the card premium, from 1,300 Baht (US\$ 39) to 2,200 Baht (US\$ 67), (2) the introduction of insurance for migrant children aged under 7 with an annual price of 365 Baht (US\$ 11), and (3) the announcement that the MOPH at that time was independent from the MOI and the MOL.

The target population of the 2013 HICS is 'all non-Thais' who are not covered by the SSS. A remarkable point is that the term 'workers' does not appear in the Resolution. It implied that in 2013 migrants without a work permit or any identification document were eligible to buy the insurance card (Ministry of public Health of Thailand, 2013).

A key informant (PM01) mentioned that key reasons behind the 2013 HICS changes were (1) a possibility that the Global Fund programme would no longer support ART for illegal migrants in Thailand, and (2) external pressure that forced the country to show more effort in combating trafficking problems.

For the first reason, the Global Fund support contributed to about 41% of budget used for HIV prevention activities. It also served as the main supporter for ART for uninsured migrants in Thailand. With reference to the 23rd Global Fund Board Meeting in 2011, a new 'Eligibility' policy was adopted. It indicates that an upper middle income country will no longer be eligible to submit a new proposal to the Global Fund. Therefore, the inclusion of ART into the benefit package of the HICS in 2013 was considered a solution for tackling this problem (Patcharanarumol et al., 2013).

Secondly, during that period, there was external pressure in the risk that Thailand would be downgraded to the Tier 3 Trafficking Report (and finally, in 2014, Thailand was labelled as a Tier 3 trafficking country). The US government reported that more than

23,000 Cambodian trafficking victims departed Thailand in each year and the Thai government did not show 'adequate' efforts to combat the trafficking crisis (Embassy of the United States in Thailand, 2013).

Thus the change of the HICS in 2013 was regarded as a means of bringing 'underground' migrants into the open. Note that the '365-Baht' price was not calculated from the actual cost of treatment. On the contrary, it was set up as a 'campaign' (as the total card price was equal to one Baht per day) or the country's 'Corporate Social Responsibility' (CSR), to show efforts in taking care of vulnerable populations, especially, migrant children.

The Public Health Minister at that time even announced that this was the cheapest insurance in the world (Thairath Online, 2013). Yet, one of the interviewees (PM02) opined that the 365-Baht card, in essence, reflected a fuzzy management of illegal migrants in Thailand rather than a CSR.

"Children and women are potential victims of human trafficking. I am also a member of the White Ribbon (a campaign against violence on women and children) [The interviewee showed the White Ribbon badge to the researcher while interviewing]...That is why we made the 15-January-2013 insurance policy to enable us to insure all migrants in Thailand....and the '365-Baht' card is the country's CSR. ...And if we take care of them well, once they return home, they will definitely wish to come back to us." [PM01]

"This (the 365-Baht card) shows how the government has brain but no wisdom. How can they say that this is a charitable gift?...If the problem is so huge, it should not be CSR...Concerning structural problems, if the problem is so big, it means we must do something (systematically). We should know how 'strict' we are going to be in dealing with these illegal migrant children." [PM02]

Though the 2013 HICS policy was relatively open to illegal migrants, the number of the card holders was quite low. As of December 2013, around 12 months after the Cabinet

Resolution came out, there were only 66,000 card holders, far from its target of 1 million (ASTV Manager Online, 2013).

Moreover, there was a problem with the interpretation of the eligibility of the card buyers because the 2013 MOPH announcement did not indicate the nationality of a buyer. This led to a problem as in some areas, particularly in the northeastern region, there were European pensioners, who have settled in Thailand, and even some foreigners living in Lao PDR, attempting to buy the insurance card. Some hospitals in the northeastern region complained to the MOPH that the HICS made them risk running a deficit since most European pensioners had chronic non-communicable diseases (NCD), such as diabetes mellitus (DM) and hypertension (HT).

Before 2013, these patients were liable to pay out-of-pocket. However, after 2013, because of the card, they were able to enjoy services free of charge. The bottom line for this point is because the annual treatment expense for these foreign patients was substantial, and even much higher than the card price.

Note that the card used the term, 'foreigner', on its English title but used the term, '*tang dao*', in its Thai title (see Figure 17). To resolve this confusion, the MOPH sent an official letter to all facilities in July 2014, asking health facilities to 'temporarily stop' selling the card to '*farang*' (which is a lay Thai term referring to Caucasian or white foreigners, and this term really appeared on the MOPH letter to the local facilities) and to await further announcements. Yet, so far there has not been any official message from the MOPH informing the health facilities what should be done next for this matter (Ministry of Public Health of Thailand, 2014a).

One of the interviewees (PM03) highlighted that the reason why the MOPH asked all hospitals to pause the selling of the card to western foreigners was not only the confusion in the texts, but more importantly, because the policy was designed for vulnerable migrants, not for those the interviewee considered as better-off groups, like European pensioners.

Figure 17 Picture of the health insurance card in 2013



Source: adapted from the HIG (2013)

"The problem of this policy (the Cabinet Resolution on 15 January 2013) is 'who is the target population?'. When policy makers talk to the public, they said 'everybody'. Then, it created problem. Can a foreign husband of a Thai wife in Udonthani (one of the provinces in the Northeast) come to buy the card? Healthy foreigners will not buy the card for sure. Those who bought the card are sick foreigners, who used to pay the hospital over 60,000-70,000 Baht a year. Now they just pay 2,200 Baht. Of course, they will be happy. So, we launched a letter telling the hospitals to stop selling the card (to western foreigners)." [PM03]

"[Laughing] Oh!, they use the term, 'farang' (referring to Caucasian foreigners). The MOPH must answer whether these foreigners are aliens in legal terms." [PM06]

IV. One Stop Service policy

The OSS is the most recently launched measure. Failure to convince migrants to buy the card in 2013 is just one of the key factors resulting in the instigation of the OSS policy. Other important reasons are domestic political unrest and turbulent relation between Thailand and Cambodia during 2013-2014.

Political instability occurred in 2013, triggered by the People's Democratic Reform Committee (PDRC), protesting over the elected government. The protesters viewed the

government as a puppet of the former prime minister, Thaksin Shinawatra, who was accused of corruption and damaging the country's democracy (Nguyen et al., 2014). The turmoil led to the coup d'état and the establishment of a junta, so-called, the National Council for Peace and Order (NCPO) in July 2014. The NCPO claimed that overthrowing the government was a measure to prevent a potential clash between the PDRC and the pro-Shinawatra supporters (Red Shirt group).

During the crisis, there were reports that some Red Shirt leaders hired Cambodian migrants to join the group (Thearith, 2014). This claim coincided with a report by the Cambodian government that the Cambodian prime minister appointed the controversial ex-prime minister of Thailand to be an 'adviser of economics' to Cambodia. Some Red Shirt supporters were exiled to Cambodia and vowed to resist the junta from outside Thailand (Thearith, 2014, Cartalucci, 2013). A month after the coup d'état, the coup leader broadcast that the military would strictly regulate the migrant workforce in Thailand (Keck, 2014). Days after the speech, Cambodian newspapers began reporting a large number of illegal migrant workers journeying back home. The Phnom Penh Post (2014) also reported that undocumented/illegal migrant workers were at risk of being killed, not just arrested and deported. These rumours spread rapidly all over the country, resulting in a massive voluntary exodus of 170,000-220,000 Cambodian migrants. Such a huge number of Cambodian migrants returning home produced negative effects on both the Thai and Cambodian economies, causing a loss of more than US\$ 1 million per day in cash flow between both countries (Thearith, 2014). One respondent commented that this phenomenon reflected a mismanagement of migrant policies of the government.

"I am more than happy to see more than 100,000 Cambodian migrants fleeing out of the country. It makes the government realise that they (migrants) are not voiceless [Bang the table!]. I wish Thai people would petition the government too." [PM02]

To restore the country's reputation, the NCPO officially announced a series of measures to resolve this conflict. Accordingly, the NCPO Order No.67/2557 (2014a) was broadcast on Thai media on 16 June 2015, stating that: *'The NCPO is considering an amendment of laws and regulations in addressing illegal migrant problems in a*

sustainable manner...Meanwhile, the country is accused by many humanitarian NGOs and civil groups of violating human rights...These claims are not based on fact at all.' A couple of weeks later, the NCPO formed a special committee, so-called, 'the National Policy Committee to Address Issues of Migrant workers and Human Trafficking', chaired by the Deputy Chief of the junta. About half of the committee members were from representatives of the armed forces, while the rest were Permanent Secretaries from various ministries, including the MOPH.

The Committee promptly instigated the 'OSS' policy in four provinces along the Thai-Cambodian border. The Order No.70/2557 (2014b) stipulated that Cambodian migrant workers who wished to work in Thailand, either the newcomers or returnees, must be registered for Tor Ror 38/1, having a health check and obtaining a work permit at designated places under the OSS. The OSS was shortly expanded across the country with an aim to register 'all' illegal migrant workers and dependants (plus legal migrants whose work permits had expired) within a given period (25 June 2014 to 21 August 2014). Then, the NCPO found that there were many more migrants than expected, making it impossible to register all of them in a few months. Thus, the OSS deadline was extended to 31 October 2014 with an intention to complete the NV process by 31 March 2015 (National Council for Peace and Order, 2014c).

"Initially, this (the OSS) was a measure to pull Cambodian migrant workers back to Thailand. And finally, there was a policy to cover all irregular migrants. But our data are of bad quality. I asked in the meeting how many Cambodian migrants who were in this exodus came back to us? Nobody can answer this. At that time, many constructions in Thailand, let's say roads, express ways, and so on, were badly affected." [PM03]

Some key attributes of the OSS are as follows. Firstly, it required the MOI, the MOL, and the MOPH to work together in designated places within a province to facilitate the registration process.

Secondly, the NCPO explicitly declared that there would not be any further extension of the OSS after 31 October 2014. Illegal migrants and dependants failing to register with the OSS by 31 October 2014 would be deported.

Thirdly, the OSS targeted only 'migrant workers' and 'dependants' from CLM nations. However, it did not specify a definition of 'dependants', to whom this measure applied.

Fourthly, the essence of the OSS is similar to the pre-OSS policies, that is, an illegal migrant must (1) register for the '00' card, (2) be issued with a work permit and (3) pay for health insurance. The new '00' card specifies the name of the employer and registered hospital on the back of the card, see Figure 18. Note that other essential documents, namely, the work permit document and the health insurance card, are still issued as usual.

Figure 18 Picture of the '00' card issued during the One Stop Service



Source: Real picture taken from one of the interviewees

Fifthly, the OSS initially aimed that the NV process would be completed by 31 March 2015. However, it appears that the process was belated, meaning a number of registered migrant workers and dependants did not obtain a valid passport. The government therefore opened the second round of OSS between 1 April 2015 and 30 June 2015 to renew the '00' card only for those who had registered in the first round of OSS but whose NV process had not been completed.

Sixthly, each province has discretion in designing the detailed function of the OSS. For example, in Ranong province, all migrant workers were required to have their health check carried out only by Ranong provincial hospital, despite registering for health insurance with other district hospitals within the province.

Seventhly, the MOPH reduced the price of the health check from 600 Baht (US\$ 18) to 500 Baht (US\$ 15), and health insurance card from 2,200 Baht (US\$ 67) to 1,600 Baht (US\$ 49). Moreover, it introduced subsets of the 1600-Baht card, namely, the 500-Baht (US\$ 15) card for 3-month insurance and the 900-Baht (US\$ 27) card for 6-month insurance. The main reason for setting up these cards was that newly-registered migrants working in the formal sector were required to have their salary deducted for at least 3 months before being fully eligible for the SSS. The 3-month and 6-month cards hence served as an interim insurance for migrants in the formal sector who were awaiting the SSS entitlement.

Lastly, the NCPO did not clearly specify whether the 2013 HICS policy was functioning as there was no text indicating that the 2013 HICS policy was replaced by the OSS, let alone explaining the difference in the terms used between both announcements, and this resulted in confusion in policy implementation, which is detailed in Chapter 6.

It is obvious that the OSS aimed at perfect coordination between ministries. However, some problems still existed. A conspicuous example of imperfect coordination was reflected by a discrepancy in the number of registered migrants between authorities. By the end of 2014, the MOI claimed that the stock of registered migrants and dependants was as large as 1,626,235, whereas the MOPH reported a smaller figure at 1,470,778;

about 10% difference. This difference became larger in mid-2015, where the MOI reported the figure of 1,103,728, around 30% higher than the 757,284 figure of the MOPH (Bureau of Health Administration, 2015).

"Speaking in lay language, once an illegal migrant passes the OSS door, he will become a legal migrant...The government used to say that they would be able to clear all illegal migrants within two months, which I told them that was impossible...See, then they extended...The MOL also negotiated with us to reduce the insurance price to reduce barriers. Then the negotiation began and the price was set to 1,600 Baht...But there exist problems, you can recall Burmese guys that were accused of killing a British girl [During the interview period, there was news reporting that two British backpackers were murdered in Thailand by Burmese migrant], they still have not yet joined the OSS...Like dependants issue, to what extent we will cover? Only one wife? Parents of migrants? What is the cut-off age of dependants? These questions need lots of further negotiations. And I believe that even you ask the government, they cannot answer..."
[PM03]

In conclusion, several subtypes of the insurance card for migrants, which were still in effect at the time of writing (including the 2013 HICS policy), are displayed in Table 15 on the following page.

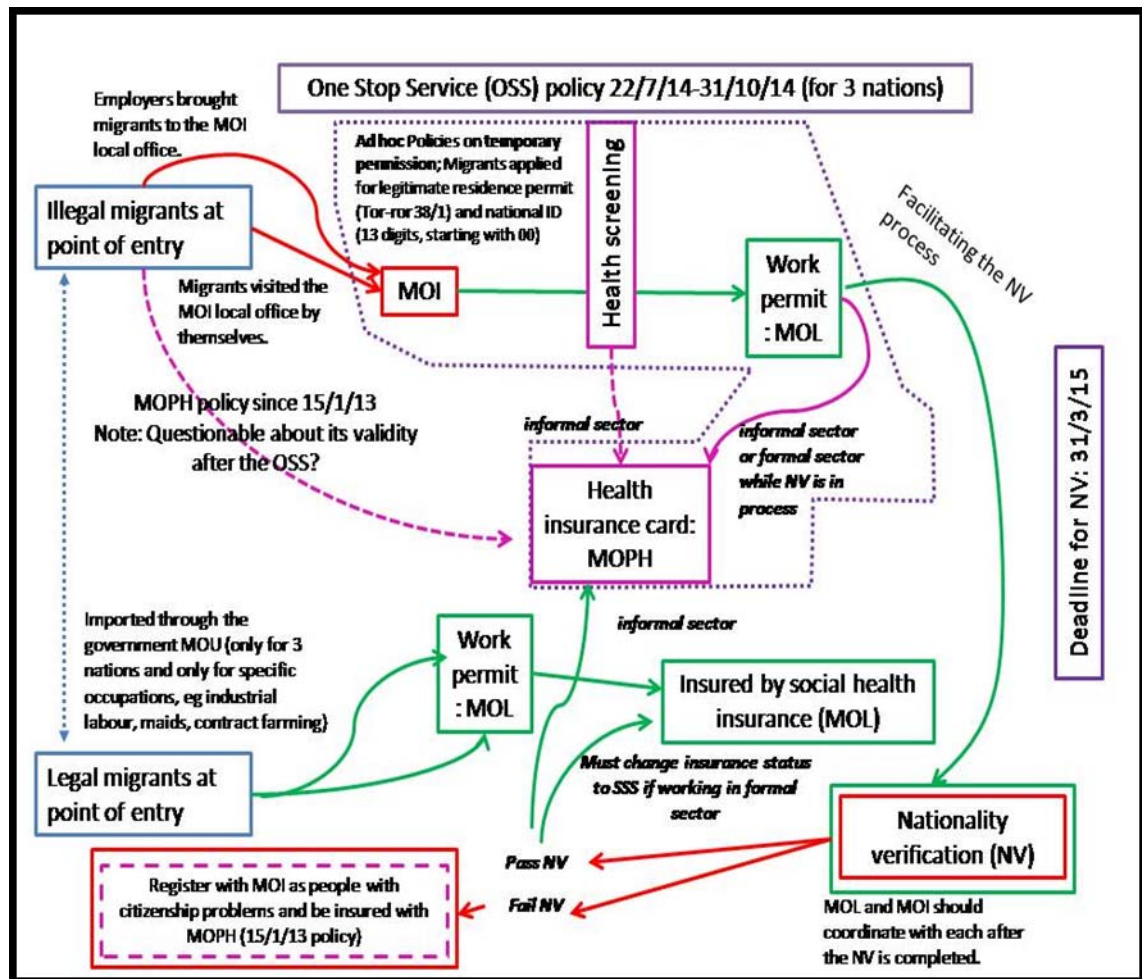
Table 15 Characteristics of several subtypes of the insurance card for migrants

Card	Premium	Length of coverage	Beneficiary	Beginning from	Benefit package	Legal basis
Health Insurance Card for 'migrant'	2,200 Baht + 500 Baht for health check	1 Year	All non-Thai populations, except for tourists, and Caucasian foreigners	15 January 2013	Outpatient, inpatient, and health promotion, disease prevention services (including HIV/AIDS treatment, and other high-cost care; excluding renal replacement therapy for chronic renal failure and treatment for psychosis and drug dependence)	Cabinet Resolution on 15 January 2013
Health Insurance Card for 'migrant child'	365 Baht	1 Year	Migrant child aged less than 7	15 January 2013		
Health Insurance Card for 'migrant worker'	1,600 Baht + 500 Baht for health check	1 Year	Migrants who registered with the One Stop Service by 31 October 2014	7 July 2014	Outpatient, inpatient, and health promotion, disease prevention services (including HIV/AIDS treatment, and other high-cost care; excluding renal replacement therapy for chronic renal failure and treatment for psychosis and drug dependence)	NCPO Order No 118/2557
	900 Baht + 500 Baht for health check	6 months				
	500 Baht + 500 Baht for health check	3 months				
Health Insurance Card for 'a child of migrant workers'	365 Baht	1 Year	Child of migrant workers, aged less than 7, registered with the One Stop Service by 31 October 2014	7 July 2014		

Source: adapted from the HIG (2013)

A summary of the complete registration process that a migrant is supposed to undertake is presented in Figure 19 below.

Figure 19 Entire registration process of all ministries in which a cross-border migrant in Thailand is supposed to participate



Note

1. Green = MOL policies, Red = MOI policies, and Purple = MOPH policies
2. The 2013 HICS policy is indicated by a dashed arrow as it was not clear if the policy was still in effect after the OSS.

Source: Author's synthesis

5.4 Discussion

This subsection extracts key themes from the results subsection. Part of this is discussed again in Chapter 8. With the use of thematic analysis, two important themes were extracted, namely, (1) Instability of Thailand's migrant policies, and (2) *De facto* powerlessness of the health sector.

I. Instability of Thailand's migrant policies

It is obvious that the entirety of migrant policy in Thailand is considerably dynamic. The constant shift in policies reflects how the country coped with the changes in its contextual environment and political dynamics over time. As proposed by Leichter (1979) exogenous factors, namely: (1) situation factors, (2) structural factors, (3) cultural factors and (4) international factors, always play a vital role in policy formulation and implementation. The evolution of migrant policies in Thailand is conspicuous proof of Leichter's proposal. Going beyond that, the researcher discovered that some exogenous factors were not always 'exogenous'. In contrast, they might become embedded in, and part of, Thai politics. For instance, the first Nationality Act employed the *jus soli* principle (birth-right citizenship), but due to a fear of communism during the cold war, the subsequent Nationality Acts were amended in a way that opposed this principle.

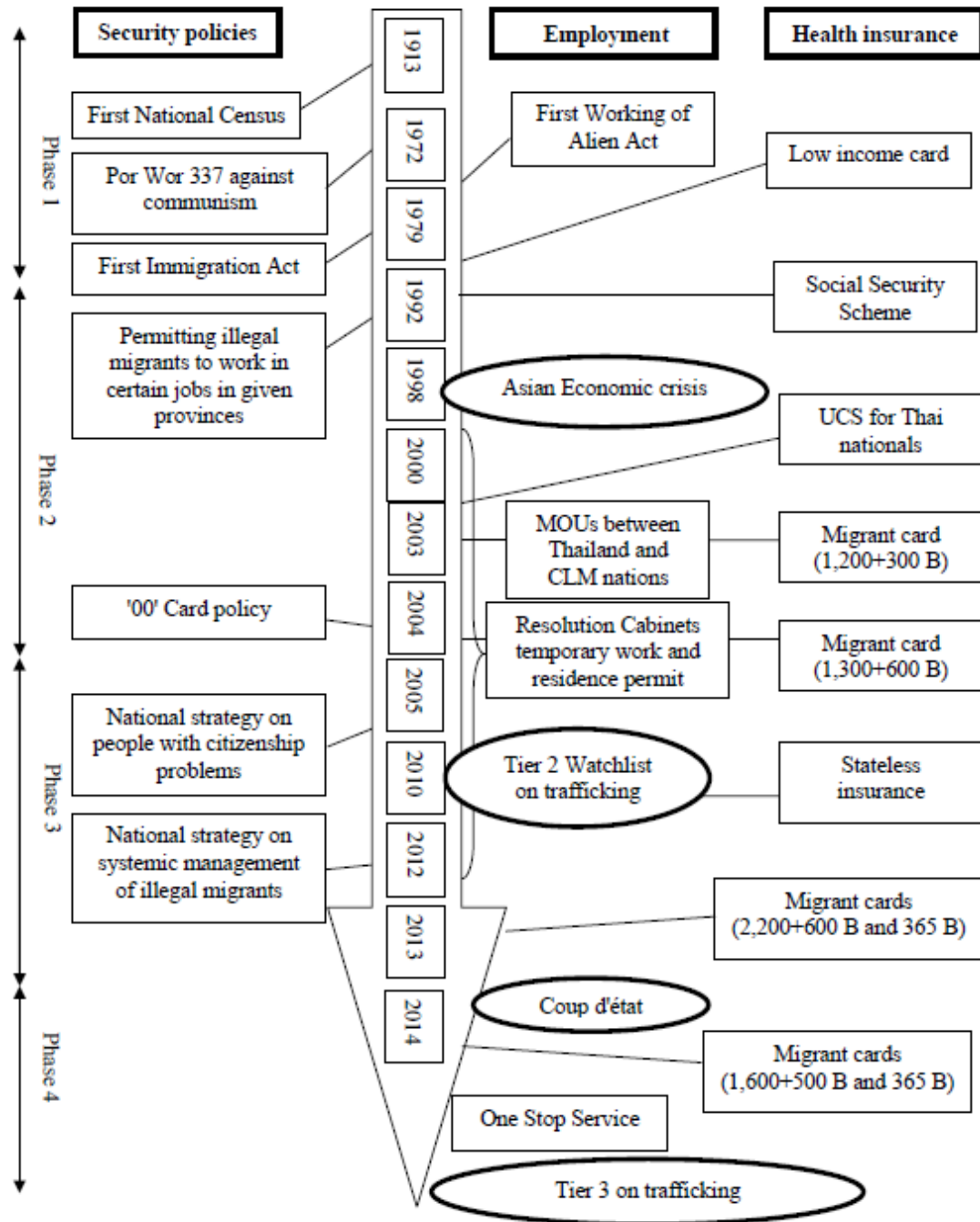
Based on the researcher's own synthesis, migrant policies in Thailand can be divided into four phases/eras. The first era place took place from the early 1900s to the 1990s, as the sense of nationalism grew in response to the entrance of colonialism in Southeast Asia, and became more pronounced in 1970s in the light of fear of the communist regime. This point is mirrored by the special law (Por Wor 337), which revoked the Thai nationality of a person born to non-Thai parents. Nationalism was prioritised over health rights and economic prosperity. In other words, the international factor became part of the cultural values and the structure of migrant policies in Thailand.

The second phase began in the early 1990s. The country was aiming to industrialise its economy but the shortage of low-skilled labour was intense. A huge influx of (illegal) Burmese migrants, fleeing from political violence in Myanmar, was on one hand perceived as a security threat, but on the other hand, was a solution to the country's labour shortage. In this regard, 'economics' was used as a legitimate reason to turn a blind eye to the illegal status of migrants, and has been exercised by all governments.

The third phase commenced after 2004, where the '00' card was an important milestone. The health insurance scheme and the system for health screening for migrants were set up nationwide. A period between 2004 and 2013 was the time when the health security concept permeated national migrant policies, as evidenced by the introduction of the 365-Baht card for a migrant child, and the expansion of the benefit package to cover ART. One may claim that the openness of the card policy in 2013 reflected an effort of the Thai government to provide health protection to all people in Thailand, and this point was supported by the fact that the ex-minister at that time raised the idea of providing health protection to 'all' populations in Thailand, including foreign expatriates and tourists (see Chapter 3). However, evidence to support this claim was merely suggestive as none of the interviewees explicitly mentioned this. Moreover, it is difficult to claim that this change was due to a genuine intention of policy makers to promote humanitarian values. As a matter of fact, pressure from civil society and international actors, particularly the allegation of human trafficking in Thailand, strongly pushed the country in this direction. In other words, health protection for migrants was used as a tool to avoid this accusation.

The fourth era, which continues to the present time, began in mid-2014 immediately after the coup against the elected government. The nationalist perspective has reclaimed its dominant position again. Upholding the 'nation' is currently a core value of Thai citizens, as declared by the junta (Areerat, 2014). Summary of the evolution of migrant policies is presented in Figure 20 below.

Figure 20 Evolution of migrant policies in Thailand (synthesised by the author)



Source: Author's synthesis

Note: The ovals next to the central arrow refer to the external environment at a particular time.

The introduction of the OSS, from one angle, is the attempt of the government to 'sweep and clean' problems of illegal migrants. Yet, from another angle, whether it is true or not that migrants are engaged in the political movement, it is noticeable that migrant issues are dragged into Thai politics. Immigration has been framed as a vital policy topic, which can easily grasp public interest.

This has happened not only in Thailand, but also in other regions. An immigration crisis in Europe in 2015 caused a series of public debates between both political wings (Sanandaji, 2015). In 2015 the Conservative Party in the UK made a commitment during the election campaign that it would cap net migration in the UK and restrict migrant rights in order to protect the benefits of UK taxpayers. The party gained strong support from the public despite sparse evidence to support the claim that migrants undermine the benefits of the UK citizens (Partos, 2015).

Interestingly, none of the recent changes in the Thai policy have tackled the problem of migrants at the structural level. Key changes in the past were about amendments to the card price and a re-opening of the registration period. The OSS is an attempt to overhaul the whole sphere of migrant policies by requiring all relevant authorities to work 'simultaneously' in the 'same' venue, and this tactic seemed to be successful (at least superficially). By the end of October 2014, the number of registered migrants reached its highest point (about 1.7 million) in the history of Thailand's migrant policies (one might argue that this success is not due to the OSS *per se* but because of the fear of the military government). However, it is difficult to claim that the policies of different ministries are truly integrated.

Furthermore, the root cause of irregular migration starting at the border has not been addressed. The only measure that seems to be an innovation in preventing further illegal crossing is the MOU policy, which still demands much further work in operational details. Without this effort, the MOU measure cannot work effectively, as evidenced by the fact that the number of (regular/legal) migrant workers recruited through the MOU increased very slowly compared to other types of illegal migrants (Office of Foreign Workers Administration, 2015).

Besides, policy makers at times act like street-level bureaucrats in the way that they adapt or change policies within their discretion without tackling the root cause of the problems. One instance is the restriction of permitted jobs for migrants. In spite of amending laws and regulations on job restrictions and imposing a long term recruitment plan, previous governments always used Cabinet Resolutions as a quick measure to tackle this matter. Resolutions were much easier to achieve than an amendment to the Act, but do not tackle the root of migrant problems.

The policy making process in Thailand is congruent with what Lindblom (1979) referred to as the 'incrementalist model', that is, policy makers often explore a small number of alternatives in dealing with problems and tend to select options that differ minimally from existing policies. Once migrant insurance was assigned to the MOPH, it became politically difficult to overhaul this system or think of alternatives, such as delegating responsibility to the NHSO or to the SSS, let alone deal with challenges in harmonising the three major insurance schemes (the UCS, the SSS, and the CSMBS) for Thai citizens (Evans et al., 2012).

This situation made the management of health insurance for migrants in Thailand different from other developed countries. In the literature review (Chapter 2), it is clear that, in many countries, once undocumented/illegal migrants are registered by the state authority, they will be enrolled into the mainstream public insurance scheme(s) of the host country. In contrast, in Thailand, after registration, undocumented/illegal migrants cannot be insured by the UCS like Thai nationals. This creates a huge burden on the MOPH, whose capacity is quite limited, as discussed subsequently.

II. *De facto* powerlessness of the health sector

The findings above showed that health authorities appeared to have limited power in formulating migrant policy, relative to the MOI and the MOL. Health authorities in this regard are not only the MOPH, but also the NHSO and the SSO. The SSO seems to have identified a comfort zone in dealing with only formal-sector fully-legalised migrants, a far smaller number than irregular migrants in the informal sector. Likewise, the NHSO

has limited discretion, covering only Thai citizens as stipulated in the judgement of the Office of the Council of State on the National Health Act (2002). Though the NHSO has recently launched its new strategy, attempting to expand its function to 'all' residents in Thailand as indicated in its vision (National Health Security Office, 2014), the MOPH is still in effect the only authority which has a physical role in liaising with other ministries on national migrant policies. This situation more or less reflects the competition/conflict between the MOPH and the NHSO.

The decision-making role of the MOPH is subordinate to other ministries. Particularly during the OSS epoch, the basic requirement before being a HICS beneficiary is being registered with the MOI. This implies that the MOI is at the forefront of all steps in migrant registration. In this regard, it is very likely that the system may miss some migrants who fear being exposed to the MOI officers. This situation also happens in some European countries. For example, although the Spanish insurance system is open to all migrants, a number of undocumented/illegal migrants were still missing from the system due to fear of being deported if they presented at the municipality (Gray and van Ginneken, 2012).

The only progressive change in MOPH policies came in 2013, when the HICS was opened to all migrants. Yet the 2013 HICS is regarded as voluntary insurance, which is at risk of adverse selection problems (as mentioned in the interview that European foreigners with chronic diseases opted to buy the card). This implies a lack of power of the MOPH in controlling and measuring the implementation of the policy at the ground level.

Internal bureaucratic inefficiency and outdated public administration also make this situation more complex. As expressed in the interview, the HIG lacked skilled staff, infrastructure and know-how to deal with a vast number of migrants. The vertical structure of the MOPH was not responsive to rapid changes in migrant policy. The criticism regarding obsolete bureaucracy applied to all state agencies, not only the MOPH.

However, lessons from the past show that there were some MOPH successes in propelling some innovative policies, and all of which were driven in the period where 'windows of opportunities' opened. The UCS was a good example of this. It was promoted by reformist groups in the health sector combined with strong support from civil society, right after the landslide victory of the new political party in the late 1990s (Tangcharoensathien et al., 2007). Another example was the compulsory licensing (CL) of ART and antiplatelet drugs for ischemic heart diseases soon after the former coup d'état in 2006. Chotesungnoen (2007) suggested the strongest determining factor of CL success was the autonomy of the working panel, which expanded its work beyond the MOPH bureaucracy by working closely with civil society.

Nevertheless, in terms of migrant health, the MOPH was not able (or was not willing) to grasp the 'windows of opportunities' well enough. The Stateless Insurance is one example of this. In 2005, when the NSC launched the national strategy to deal with citizenship problems of permanent residents in Thailand, the MOE was successful in ratifying the right to education of non-Thai children through the G-series system. In contrast, the MOPH was not responsive enough to this opportunity and took about five years after the MOE in delivering the Stateless Insurance. One might even contend that the instigation of the HI-PCP did not originate from the MOPH bureaucracy *per se*, but arose from media pressure from NGOs and border hospitals, which complaint to the Cabinet about the hospitals' financial catastrophe (Hfocus, 2015).

5.5 Conclusion

The evolution of migrant policies reflects high-level politics and power play between state authorities: (1) the MOI, which upholds security interests, (2) the MOL, which aims at protecting economic interests, and (3) the MOPH, which accounts for health protection. The HICS is part of the entire nexus of migrant policies, where the MOPH appears to have a less dominant position in the policy decision making. All migrant policies in Thailand are dynamic and sensitive to both internal factors, such as changes in the government and pressures from the civil society, and to external factors. Ideally, the HICS is supposed to function seamlessly with other migrant policies, particularly the

process of obtaining work permit and the nationality verification, but, in practice, there are a number of constraints, including bureaucratic inefficiency, poor law enforcement, and lack of intersectoral integration. In 2014 the OSS was endorsed by the junta in order to fill the gaps between different authorities' migrant policies, and to respond to the exodus of migrant workers, resulting from the political unrest in Thailand. Though the OSS was successful in registering a large number of undocumented/illegal migrants, the information systems between ministries have not been really integrated and other supporting mechanisms to resolve the rights and legal status problems of migrants have not been in place.

Chapter 6: Responses of local healthcare providers, relevant stakeholders and migrants towards the HICS

6.1 Introduction

While Chapter 5 elaborated on how the HICS was formulated and how the policy was perceived by policy makers, this chapter sheds light on how the HICS functioned in reality and how frontline officers, NGOs, and service users interacted with the HICS. This chapter also serves as a link between Chapter 5 and Chapter 7 as it complements Chapter 5 in terms of to what extent the policy was implemented as intended and why it appeared this way in practice, as well as explaining the quantitative outcomes of the policy in Chapter 7.

The introductory subsection describes (1) the context of Ranong province and (2) lives of migrants in the province, to help the readers gain better insight into the study site's context. The results subsection is divided into two parts: (1) perceptions of local policy implementers, and (2) perceptions of migrants and employers. The discussion subsection presents key themes synthesised from the interview findings through thematic analysis approach, and these are discussed again in Chapter 8 together with emerging themes from other chapters.

I. Summary of Ranong province's characteristics

Ranong province is the northernmost province in the southern region of Thailand. Its total population (in the civil registry) is about 170,000. It is the least populated province in the country. However, the province has the largest ratio of migrants to Thai population, relative to other provinces. The volume of the HICS beneficiaries in the entire province is approximately 40,000. This is commensurable to one fifth of the total population in the civil registry (Ranong hospital, 2014b).

Ranong province comprises a large diversity of ethnic groups, including Thai citizens, migrant workers and dependants (mostly from Myanmar), foreign tourists, and stateless people (Ranong Provincial Public Health Office, 2014).

In terms of geography, it is located on the Kra Isthmus, a slim land strip connecting Thailand with the Malay Peninsula. The long coast facing the Andaman sea makes the province one of the wettest places in Thailand, and this biosphere makes it suitable for rubber and palm planting as well as fishing (Srivirojana et al., 2014).

The province is composed of five districts. Muang (headquarter) district and Kraburi district are the study sites for this research since they are the two districts with the largest number of migrants. Muang district is the centre of transportation and city business. Its economy mostly depends on the service sector and fishing industries.

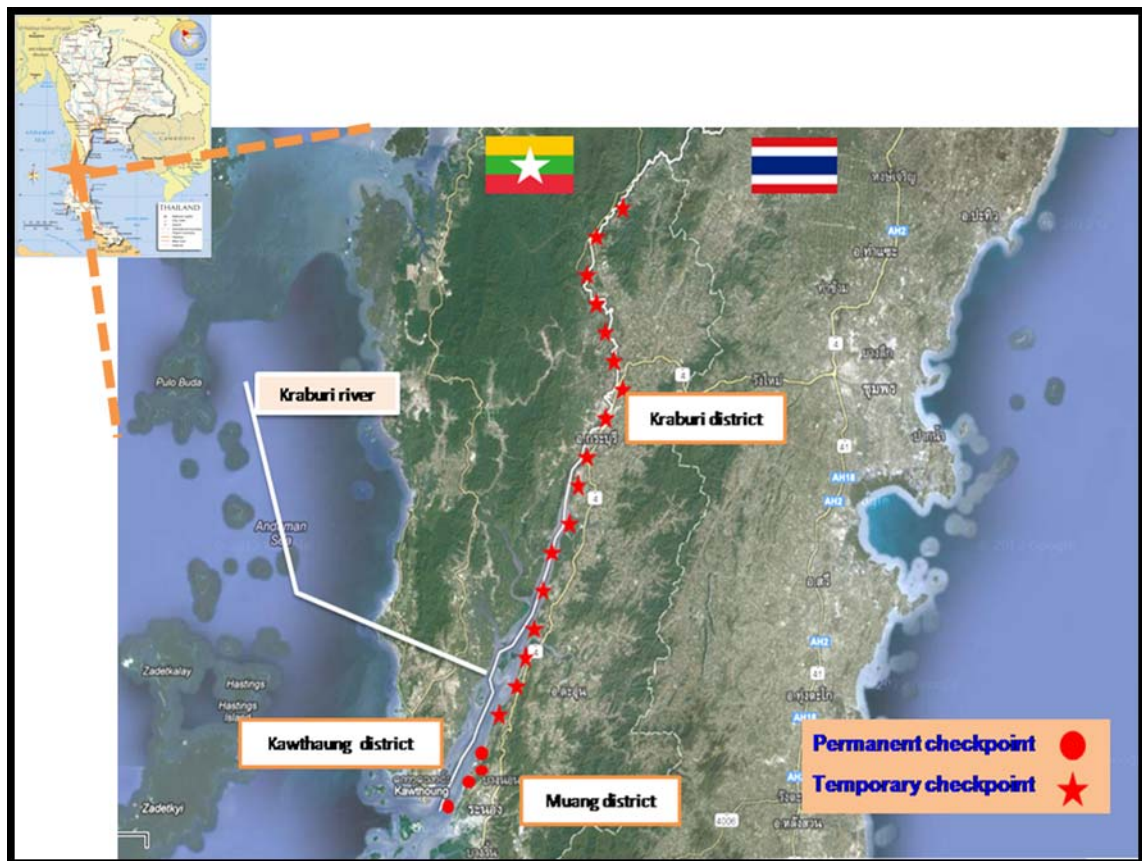
Kraburi district is about 60 kilometres north of Muang district. It is more rural and less populated. Most of the residents in Kraburi district are in the agricultural sector, particularly rubber planting (Srivirojana et al., 2014).

Migration from Myanmar to Ranong province has taken place for years. Muang district is connected to Kawthaung district, the southernmost area of Myanmar (also known as 'Victoria Point' during the British empire). It is now one of the busiest border trade cities in the South of Myanmar.

Moreover, aside from Kawthaung district, migrants from diverse areas in Myanmar (such as Myeik and Dawei) often travel to Ranong province. Commuting between Muang district (through official border control) and Kawthaung district normally takes about half an hour by local ferries.

In each month there are more than 40,000 people travelling between the two districts. Note that this figure counts only those passing the permanent border checkpoints (Department of Disease Control (branch no.11), 2014). The figure might be much higher if it were to include the number of travellers to and from temporary (natural) checkpoints.

Figure 21 Geographical location of Ranong province



Source: Ranong PPHO (2014)

Though this study focuses on the migrant population from Myanmar, another population of interest is displaced Thais. Displaced Thais are people believed to have Thai ethnicity but not registered as Thai nationals. Their history lies in the fact that in the past, there was no clear cut boundary between Siam (the name for Thailand at that time) and Myanmar until 1868, when Myanmar was governed by the British government. Thailand reached consensus with the British government to establish a clear demarcation line dividing the country from Myanmar, using the Kraburi river as a natural landmark (Suphanchaimat et al., 2015).

Although the demarcation process led to the establishment of the modern Thai state, it resulted in negative consequences for population management, since many of the Thai-ethnic population on the western bank were left behind and were labelled as non-Thai

citizens. During the 1980s and 1990s, many displaced Thais travelled back to Ranong and nearby provinces to flee from political upheaval in Myanmar, and then claimed Thai nationality from the government. Offspring of this population also suffered from this complication as they were not recognised as Thai nationals. It is estimated that there are about 28,000 displaced Thais residing in Thailand, and this problem led to the recent revision of the Nationality Act in 2012. The key change in the Act was that some displaced Thais, who have strong links to Thai-national ancestors, are eligible to apply for Thai nationality through DNA testing or interviews with witnesses of their birth. However, the process of nationality verification is slow. So far about 2,000 displaced Thais have successfully claimed Thai nationality (Chumchon Thai Foundation, 2012). This implies that, currently, some displaced Thais are still recognised as people with citizenship problems or stateless persons; some of them are even regarded as Burmese migrants. Some displaced Thais have created families with Burmese migrants, making it more difficult to manage this issue effectively. This situation inevitably affected how healthcare providers dealt with the HICS in the real world as presented in the story of a displaced Thai, Kan, in the household of one of the interviewees (MK4) in the results subsection.

II. General background of lives of migrants in Ranong province

The growing economy in Ranong province has attracted many migrants from Myanmar for years. Burmese migrant workers have been deeply embedded in the province's economic structure, and some of them finally set up their lives in Thailand. Some migrants used Ranong province as a starting point to migrate to other provinces where economic opportunities are more promising (Srivirojana et al., 2014).

In one migrant household, there are about 4-5 family members on average. It appeared that the system for house leasing was not clear. Some migrants had not signed a contract with landlords, and some did not even have their name on the official documents, such as Tor Ror 38/1 or Tor Ror 13 (Suphanchaimat, 2015).

Migrant communities in Ranong province comprise not only migrant households, but also Burmese schools and temples, most of which are run by NGOs. Buddhist Burmese migrants are the majority of non-Thai populations in the province (Ranong Provincial Public Health Office, 2014). Due to high population density, community hygiene is an important public health concern. Srivirojana et al (2014) reported that the case fatality rate due to cholera amongst Burmese communities in Ranong province was around 15 cases per 100 migrants in 2011, about sevenfold the rate in Thai citizens (see Figure 22).

Figure 22 Picture of shelters for migrants in one of the migrant populated areas in Muang district



ชาวต่างชาติที่จะมาเช่าบ้านถ้าไม่มีบัตรถูกต้อง
ตามกฎหมายหากถูกเจ้าหน้าที่จับกุม
ทางเจ้าของบ้านจะไม่รับผิดชอบใดๆทั้งสิ้น
မြန်မာများအိမ်လှည့်လျှင်သက်ဆိုင်ရာ
မှတ်တိုင်ရမည်။ဘတ်မရှိပါကဖမ်းမိလျှင်
အိမ်ပိုင်ရှင်မှလုံးဝတာဝန်မယူပါ။

A notice displayed at the entrance of migrant community in the study site indicating that if an illegal/undocumented migrant renting a residence here is caught by the police, the landlord will not assume any responsibility.

Source: Real picture from the fieldwork

Where migrants work in fishing, normally a boat has a crew of 17-18 workers, including a pilot, an engineer, and a cook. In most boats, the pilot and the engineer are Thais while

the rest of the crew are Burmese migrants. A boat goes offshore for about 30 days and comes back to a dock for about 3-5 days. The income of workers on trawling boats depends on the amount of fish caught, varying between 9,500 and 12,000 Baht (US\$ 288-364) per month (Department of Labour Protection and Welfare, 2015). Then, the fish and shrimps are passed to fish docks and distributed to migrant workers for peeling and processing. For small-scale fish docks, this process is done in private migrant houses rather than in well-established factories (see the story of the interviewee, Za, in Appendix 11 as an example).

The lives of migrants in Kraburi district are somewhat different. Most migrant workers in Kraburi district are involved in rubber planting. Kraburi's migrant communities are less populated compared to Muang district. This is because, normally, a Thai landlord/employer divides his/her whole land into sub-areas (~6 acres/sub-area), and assigns each sub-area to a household of migrant employees. Each household is responsible for rubber tapping in the area assigned and earns revenue from rubber selling according to the amount of tapped latex. The revenue is shared between the landlord and the employees. The share is agreed in advance and is subject to the market price. Normally, no contract is needed for the share agreement; verbal agreement suffices.

The most suitable period for rubber tapping is in the late rainy season and the winter season (October to February). Accordingly, during the summer time, some migrant workers travel to other districts to seek jobs while some travel back to Myanmar, then come back again in the winter time (Ranong Provincial Public Health Office, 2014). Thus it seems that Kraburi migrants behave more like 'circular migrants'^{xv} than those in Muang district (see the story of the interviewee, MK6, in Appendix 11 as an example).

^{xv} With reference to the IOM definition in 2011, circular migrants are 'people travelling between countries either in temporary or long-term movement, which may be beneficial to all involved, if occurring voluntarily and linked to the labour needs'.

6.2 Methods

The author used in-depth interviews and document review as the main data collection tools. For document review, the data were mainly retrieved from minutes, proceedings, and official letters sent by the MOPH and relevant authorities to local facilities. Most in-depth interviews were conducted at the respondents' workplaces or at migrants' households.

For the interviews with migrants, some interviews were regarded as group interviews rather than in-depth interviews since some migrant informants preferred to have their family members take part in the interview. Some interviews, particularly those with migrant informants, were conducted more than once. Local health staff and NGOs introduced the researcher into migrant communities. The first interview normally started with informal discussion to build up rapport. Once migrants became more familiar with the researcher, the following interviews were exercised in a more structured fashion (that is, with tape recording, consent approval, and photographing), see Chapter 4 for more detail of the interview process.

The respondents are divided into: (1) implementer group, and (2) service user group, numbering 28 interviewees in total. The implementer group is composed of ten health staff members, two non-MOPH officials, and two NGO representatives. The service user group consists of four Thai employers and ten migrants (see Table 16 and 17).

Data analysis was done through an inductive thematic approach. The interview and the document review data were coded manually with the use of NVIVO v10 software as a filing storage. The original quotes in Thai are displayed in Appendix 9. The emerging themes (first-order themes) in each interviewee group are displayed in the results subsection. The crosscutting contents of the first-order themes were identified to develop higher constructs (second-order themes), which are discussed in the discussion subsection.

Table 16 Key characteristics of the interviewees (group 1: local implementers)

Code	Age	Sex	Current workplace	Role and responsibility regarding the HICS
RN_PHO1	~40	Male	Ranong Provincial Public Health Office	Administrative staff
RN_PHO2	~50	Male	Ranong Provincial Public Health Office	Executive staff
RN_RNH1 [†]	~50	Male	Ranong hospital	Executive staff
RN_RNH2 [†]	~42	Female	Ranong hospital	Insurance staff
RN_RNH3	~29	Female	Ranong hospital	General practitioner
RN_KH1	~50	Female	Kraburi hospital	Insurance staff
RN_KH2	~55	Female	Kraburi hospital	Executive staff
RN_NGO1	~50	Male	Foundation A	NGO
RN_NGO2	~40	Male	Foundation B	NGO
RN_HC1	~42	Female	Health centre A in Kraburi district	Executive staff
RN_HC2 [*]	~45	Female	Health centre B in Muang district	Executive staff
RN_HP1	~60	Female	Health centre B in Muang district	Village health volunteer
RN_MOI1 [*]	40	Male	Ranong Department of Provincial Administration, the MOI	Executive staff
RN_WP1	~55	Male	Ranong Provincial Employment Office, the MOL	Executive staff

Note: * Telephone interview

† The interviewee, RN_RNH1, was also present in the interview with RN_RNH2 as she helped provide some information for the interview to RN_RNH2. Nevertheless, the researcher conducted another round of in-depth interview only with RN_RNH2 to mitigate respondent bias.

Table 17 Key characteristics of the interviewees (group 2: service users)

Code	Age	Sex	District	Role/responsibility	Workplace /occupation	Years in Thailand	Tor Ror 38/1*	Work permit	Insurance card	Health status
RN_E1	~62	Male	Muang	Employer	Construction enterprise owner	NA	NA	NA	NA	NA
RN_E2	~42	Female	Kraburi	Employer	Rubber field owner	NA	NA	NA	NA	NA
RN_E3	~65	Male	Muang	Employer	Fishery company owner	NA	NA	NA	NA	NA
RN_B1 [†]	?	Male	Muang	Employer/broker	Fishery company owner	NA	NA	NA	NA	NA
MM1 [‡]	41	Male	Muang	Migrant	Unemployed	15	✓	-	- (expired)	HIV
MM2	42	Male	Muang	Migrant	Karaoke shop owner	20	✓	✓	✓	TB lungs
MM3	34	Female	Muang	Migrant	Translator at health centre	17	✓	✓	✓	Healthy
MM4 [§]	47	Female	Muang	Migrant	Unemployed	20+	✓	✓	✓	DM and HT
MM5 [§]	50	Female	Muang	Migrant	Street vendor	20+	-?	-	- (expired)	Healthy
MM6	58	Female	Muang	Migrant	Shrimp peeling employee	10+	✓	✓	✓	Dyspepsia

Code	Age	Sex	District	Role/responsibility	Workplace /occupation	Years in Thailand	Tor Ror 38/1*	Work permit	Insurance card	Health status
MK1	64	Male	Kraburi	Migrant	Unemployed	20+	-?	-	-	COPD
MK2	32	Female	Kraburi	Migrant	Rubber field worker	6	✓	✓	✓	Pregnant
MK3	53	Female	Kraburi	Migrant	Rubber field worker	23	✓	✓	✓	DM and HT
MK4 [#]	34	Female	Kraburi	Migrant	Housemaid	10+	✓	✓	✓	HT

Note: *Tor Ror 38/1 is personal profile containing 13-digit ID, which is equivalent to the legitimate residence permit.

†Telephone interview

‡Group interview: The interviewee's wife also joined the interview to help the interpreter translate the interviewee's words.

§ Group interview: MK4 and MK5 are siblings and neighbours. Both of them took part in the interview at the same time.

Group interview: The interviewee's (Thai) husband also joined the interview to help the interpreter translate the interviewee's words.

6.3 Results

I. Perceptions of local implementers

There were five emerging themes from the interviews with the local implementers, that is, (1) Migrants overly taking advantage of the Thai healthcare system—Concern of healthcare providers, (2) Adaptation of policies—Positive or negative?, (3) Unclear policy message—Devil is in the detail, (4) Lack of inter- and intra-sectoral coordination, and (5) Relaxation of law enforcement.

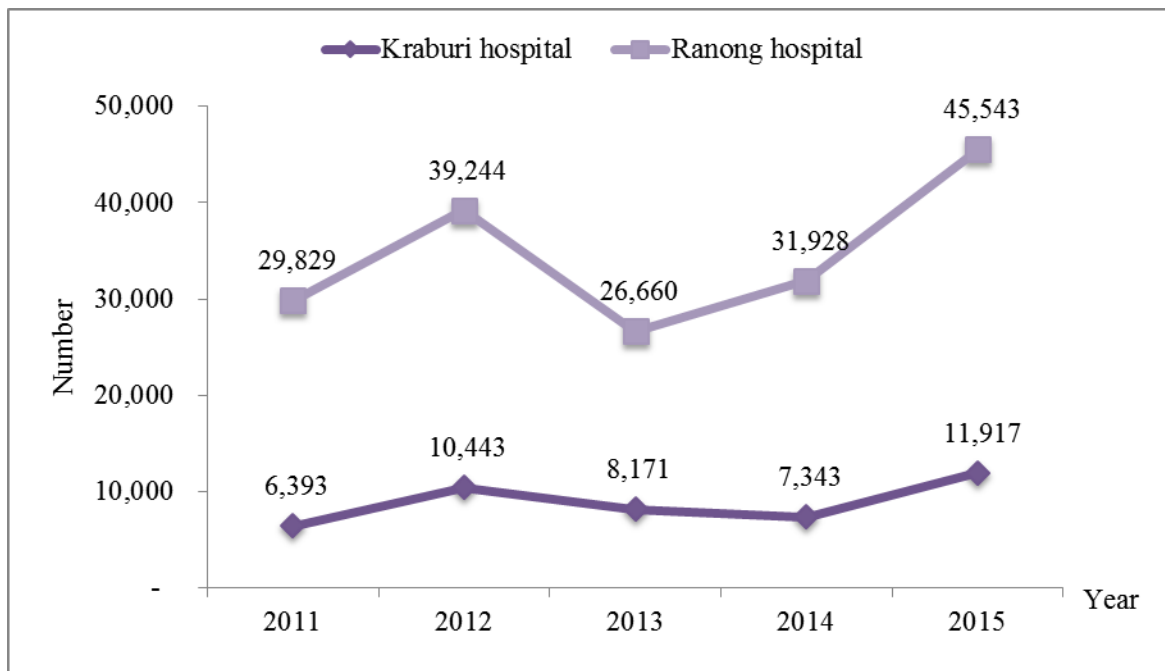
Migrants overly taking advantage of the Thai healthcare system— Concern of healthcare providers

Four from ten interviewees (RN_RNH1, RN_RNH2, RN_RNH3, and RN_HC2) mentioned that the HICS provided 'too-many' rights for migrants. A remarkable example was the HICS child birth benefit. Essentially, HICS mimicked the UCS in terms of benefit package (and offered less than the UCS in some high-cost items, such as haemodialysis for end-stage renal diseases [ESRD] patients and psychotic diseases treatment), but the HICS was superior to the UCS in terms of child delivery. The UCS allowed beneficiaries to have free delivery up to two births, while the HICS did not limit the number of deliveries (National Health Security Office, 2014). The use of this delivery benefit was more evident in hospital-level facilities, where over one fifth of migrant inpatients were admitted due to obstetric condition (see more detail about the disease pattern of migrant patients in Chapter 7).

"I think the health card gives right to a migrant patient equal to or even more than a Thai patient, especially in case of pregnancy. Thais can enjoy two pregnancies at most but the Burmese are allowed to have free deliveries with unlimited number...pregnant again and again...Now, in Ranong, there are more Burmese residents than Thais. In my opinion, we will face problems in the future, particularly problems with these Burmese children, who will be brought up in Thailand." [RN_HC2]

One of the interviewees (RN_RNH1) stated that the right to be 'insured' by the HICS should be restricted to 'healthy' migrants only. This view was derived from the fact that though migrant health cards were a 'revenue generator' for a health facility (especially one with a large number of insured migrants), the facility could not derive maximum benefit from the revenue. This was because part of the revenue was used to subsidise the unpaid debts of uninsured patients. An example of this was the unpaid debt absorbed by Ranong hospital, equivalent to approximately 2-3 million Baht (US\$ 66,000-99,000) per year. However, the card revenue was somewhat unpredictable as it was subject to the number of card holders, which varied year by year due to the fluctuations in registration policies, see Figure 23.

Figure 23 Number of the HICS beneficiaries registered with Ranong and Kraburi hospitals between 2011 and 2015



Source: Ranong hospital (2014b)

Note: The figure was the cumulative number of registered migrants at the start of a given fiscal year. For instance, the figure, '11,917', refers to the number of card holders registered with Kraburi hospital at the beginning of fiscal year 2015.

Although the number of registered migrants soared at the beginning of 2015, there was a question over the credibility of this figure, regarding whether there was double counting. The healthcare providers of Ranong hospital also noticed that about 26,000 of the 45,000 registrations in the latest year were done within just 3 months (July 2014-October 2014) because of the stringent enforcement of the OSS. This matter implied that had the OSS not occurred, the registration numbers might have been much smaller than this. Nonetheless, the increase in registration volumes at Ranong hospital contributed to an enlargement of its net revenue by about 11.9 million Baht (US\$ 360,000) (see Table 18).

"Last year (2013), we got profit from the card...But we need to use this money to cover the uninsured as well. See!, We are generous. Last year (2013), we shouldered the unpaid debt by 2.5 million Baht, so, 11.9 million Baht left. But this is the money that we will use to care for all migrants throughout the whole coming year. Certainly, this (money) won't be adequate." [RN_RNH1]

Table 18 Revenue from selling migrant health insurance cards and the related expense from treating migrant patients at Ranong hospital at the end of fiscal year 2014

Items		Baht	US\$
Revenue	(1) Revenue from the health card (adults)	32,130,428	973,649
	(2) Revenue from the health card (children)	932,890	28,269
	(3) Revenue from health check	24,286,600	735,958
	(4) Total revenue ((1)+(2)+(3))	57,349,918	1,737,876
Expense	(5) Cost of treating insured migrant outpatients	13,602,750	412,205
	(6) Cost of treating insured migrant inpatients	19,049,339	577,253
	(7) Cost of health check	10,255,700	310,779
	(8) Unpaid debt from treating uninsured migrant outpatients	38,553	1,168
	(9) Unpaid debt from treating uninsured migrant inpatients	2,486,248	75,341
	(10) Total expense ((5)+(6)+(7)+(8)+(9))	45,532,590	1,379,775
Total revenue – total expense ((4)-(10))		11,917,328	361,131

Source: Finance and accounting unit of Ranong hospital (2014)

Note: Financial sheet of Ranong hospital in earlier years and financial sheet of Kraburi hospital were not available.

Besides, the above perspective was linked to the problem of adverse selection, as experienced by some frontline staff. Three health provider interviewees (RN_RNH1, RN_RNH2, and RN_RNH3) opined that the policy was 'overly' open, and this created room for 'counterfeit employers' as well as 'non-worker migrants' to unfairly take advantage of the Thai healthcare system. The term, 'brokers', was commonly used as a jargon amongst hospital staff to refer to 'counterfeit employers', though in reality there existed both real and counterfeit brokers.

"There are people who are hired to act as an employer and even attorney. There was a woman with stage-3 breast cancer came to the hospital to buy the card. She was over 80. The employer said that she was his household maid. The attorney emphasised that if we didn't sell the card, he would sue us. The attorney might receive 5,000 Baht and the employer might receive 3,000 Baht from that migrant. Certainly, she cannot work at such an advanced age." [RN_RNH1]

Adaptation of policies—Positive or negative?

All health provider interviewees were aware of the adaptation of the HICS in the field. Three health provider interviewees (RN_PHO2, RN_RNH1, and RN_KH2), who were executive staff of the PPHO and the hospitals, detailed how the HICS policy was adapted and why such adaptation was necessary.

Some adaptive practices originated from the PPHO while some were the internal policy of a facility. Some were a genuine policy, while some were a different interpretation of the MOPH's message.

The researcher categorised these adaptations into two groups: (1) positive and (2) negative. Note that the term, 'positive' in this respect refers to the adaptation of policy that (seemingly) facilitates access to care or expands rights to care of migrants; whereas the term, 'negative', means the opposite. The 'positive adaptation' does not necessarily lead to positive health outcome or to an increase in the satisfaction of healthcare providers towards their work. The key innovative/adaptive policies found in the fieldwork are as follows.

Positive adaptation

1. Fee schedule for treatment with externality benefit

Since there is no private hospital in the province (there are some private clinics without admission beds), public facilities are the main choice of care; and in practice it is difficult for healthcare providers in the public sector to inhibit non-Thai populations from receiving services. The PPHO hence initiated a fee-schedule policy to incentivise local staff to provide certain services to 'all' patients regardless of the patients' nationality/immigration status.

The services specified in the fee schedule were those with externality benefits, namely, child vaccination, antenatal care and family planning. The PPHO agreed to pay the health facilities 10 Baht/case (US\$ 0.3) for vaccination, 70 Baht/case (US\$ 2) for a provision of contraceptive pills, and 1,000 Baht/case (US\$ 30) for contraceptive implants.

This initiative was applied to insured and non-insured migrants, as well as stateless patients. The budget used in this policy was accumulated from part of the card premium (326 Baht per card; see detail of the card remittance arrangement in Chapter 5), earmarked at the PPHO. This is a within-province reinsurance system. Note that the UCS also had a comparable system for its Thai beneficiaries. The NHSO normally paid a health facility based on a fee schedule for particular treatments that needed a rapid scale-up at the country level; for example, metabolic disease screening and PAP smear for cervical cancer screening (Tangcharoensathien et al., 2015a).

One of the interviewees (RN_HC2) opined that this system really helped migrants have better access to care, especially for the vaccination programme.

"I think now there are more Burmese children than Thai children for the EPI (Extended programme on immunisation)...The PPHO gives us some money per head for the service (EPI) provided. But we need to submit this info (to the PPHO) on a monthly basis." [RN_HC2]

2. Withdrawal of gate-keeping regulation within the province

Normally, an insuree (of all insurance schemes but the CSMBS) was required to visit a primary care facility (a health centre or a district hospital) first. In other words, the district hospital served as a gatekeeper for a patient. Should a patient bypass a gate-keeping hospital without a referral document, an out-of-pocket payment would be incurred, except for emergency conditions. However, this system was difficult to apply in a small area like Ranong province, where the residents were highly mobile. Hence an internal policy that abrogated the gate-keeping regulation was introduced by the PPHO. This measure has been applied to the HICS and the HI-PCP since 2010. Soon after, Thai UCS patients complained that they had less privilege than non-Thai patients as UCS patients were still required to conform to the gate-keeping regulation (Suphanchaimat et al., 2015). As a result, the PPHO expanded this policy to all public insurance schemes, including the UCS.

The PPHO served as the 'internal clearing house' for verifying the utilisation records of patients across health facilities. If a patient in Kraburi district bypassed Kraburi hospital to go to Ranong hospital, he/she would not be obliged to pay out-of-pocket. The PPHO, after verifying the patients' data, asked Kraburi hospital to pay Ranong hospital for the treatment cost. The payment rate was 700 Baht (US\$ 21) per each OP visit, and was about 10,000 Baht (US\$ 303) per adjRW of each IP visit. Note that the payment rate varied year by year and there was a debate over the benefit of this policy, as voiced by one of the interviewees (RN_RNH1). Higher-level hospitals claimed that the fixed payment rate did not reflect its actual treatment cost and this system created room for smaller hospitals to be inert in providing services and to take advantage of a bigger hospital.

"If a patient from hospital X comes to us, he will not need to pay for the service. We will send the bill to the PPHO to be reimbursed for 700 Baht per case. But there is now a debate. Because sometimes the medicine cost is about 3,000 Baht but we earn only 700 Baht. If the PPHO insists on applying this system, next time we will prescribe medicine at the cost of not more than 700 Baht." [RN_RNH1]

3. Migrant health workers and migrant health volunteers—Key players for promoting migrant-friendly service

Ranong province was one of the earliest areas in the country to introduce 'migrant-friendly service' initiatives. Note that 'migrant-friendly service' is a broad term, encompassing a wide range of activities. Initially, the initiative focused on HIV/AIDS prevention and education, and shortly later, the programme was expanded to general health services, including the establishment of bilingual leaflets (Thai-Myanmar), provision of condoms, and NCD screening (Sirilak et al., 2013).

The most well-known activity under this initiative was hiring migrants as health workers. Around five years ago, the PPHO, in collaboration with the Fishery Association, employed a Burmese physician and two Burmese nurses to provide outpatient care to Burmese patients only at Parkklong health centre, one of the health centres situated near the ferry port. The monthly salary was 30,000 Baht (US\$ 909) for the Burmese physician and 15,000 Baht (US\$ 455) for the Burmese nurse. Suchartsunthorn (2015) reported that the initiative was beneficial in reducing the number of referral cases to Ranong hospital, and migrants seemed to be more comfortable in utilising services performed by physician with the same ethnicity.

This initiative was abrogated in 2014 due to budget constraints. Although the MOPH also recognised this initiative, promoting this policy as a nationwide programme was controversial. This is because the regulation of the Thai Medical Council (TMC) stipulates that, in order to practice lawfully in Thailand, a foreign doctor must sit the license exam as a new Thai graduate though he/she has already passed the license exam in the country of origin (Thai Medical Council, 2015). Thus the employment of the Burmese health professionals in this case was not authorised by the TMC.

The activity that was still in effect was the hiring of 'migrant health workers' (MHWs) to work at health centres. In addition, low-skilled migrants were recruited to work as 'migrant health volunteers' (MHVs). The MHV initiative was comparable to the recruitment of local Thai residents to work as 'village health volunteers' (VHVs). The

monthly salary of MHWs was about 5,000-5,500 Baht (US\$ 152-167). The PPHO was responsible for arranging a training workshop once a year when recruiting MHVs and managing refresher courses for MHWs. Note that there was no salary for MHVs. The function of MHVs was providing health education to communities and relaying messages from the health centres for any important events, such as disease outbreaks.

Most MHWs and MHVs were former illegal migrant workers who had completed the NV process. Being MHWs and MHVs was not limited to only the Burmese migrants. A Thai national was able to serve as an MHW as well if he/she was fluent in Burmese and had ever participated in the training workshops held by the PPHO. At the time of writing, there were 34 MHWs and 350 MHVs in Ranong province. Sirilak et al (2013) suggested that MHVs tended to have positive attitudes to providing care and their work was beneficial in bridging language and cultural gaps between migrant patients and health professionals.

Six out of fourteen interviewees (RN_PHO1, RN_PHO2, RN_HC1, RN_HC2, RN_HP1, and RN_NGO1) emphasised that MHWs and MHVs were key health workers in the province, since a sole reliance on 'formal' health workers might not be sufficient to address the health problems of 'hidden populations', including illegal migrants and stateless people.

This matter was confirmed by the fact that doctor-to-population ratio of Ranong province fell below the national average if the population count included non-Thai citizens. Note that the shortage of dentists and nurses (relative to the national average) was lesser than that of doctors, see Table 19.

Table 19 Population to health workforce ratio in Ranong province

Health workers in Ranong province		Population to health worker ratio (XXX:1)				
Type	Number	National average	Bangkok	Southern region	Ranong province*	Ranong province†
Physicians	61	2,538	895	3,125	2,845	4,476
Dentists	28	8,740	5,515	13,100	6,199	9,752
Pharmacists	46	6,200	4,143	7,551	3,773	5,936
Professional nurses	468	550	332	558	371	584
Assistant nurses	11	NA	NA	NA	15,779	24,822
Public health workers	81	NA	NA	NA	2,143	3,371
Village health volunteers	2,964	NA	NA	NA	59	93
Migrant health workers	34	NA	NA	NA	NA	2,926
Migrant health volunteers	350	NA	NA	NA	NA	284

Note: * Only Thai citizens, † Thai citizens plus registered migrants and stateless people

Source: Data on population to health workforce ratios at national and regional level were retrieved from the Health Information System Development Office (HISO) in 2012 for doctors and in 2008 (the most recent year with complete data) for other health workforce cadres (HISO, 2012). Data on the health workforce in Ranong province were gathered from the PPHO (2014).

Though hiring MHWs was widely accepted as an effective means to promote better health access in migrant patients, its programme sustainability was still in question. This problem was derived from the fact that the majority of MHWs were ex-illegal Burmese workers who successfully passed the NV. By the MOL law, illegal immigrants taking part in the NV process were allowed to work only in 'low-skilled' jobs (see Chapter 5).

The above regulation created conflict between the MOPH and the MOL since health assistants or translators were considered 'high-skilled' workers. In addition, MHWs could not be hired as a 'government officer' in the normal civil post system (where civil

servant salaries are directly disbursed by the MOF) because a person posted in a civil service position must hold Thai nationality.

MHWs were thus always employed as temporary (unofficial) staff. Since the salary of temporary staff could not be reimbursed from the MOF like salaries for Thai official staff, the budget for employing MHWs was mobilised from various sources.

Before 2012, this budget was financed by local NGOs. However, after the NGO project was curbed due to financial constraints, the PPHO inevitably absorbed the cost itself; and this situation created a concern over the sustainability of the MHW employment programme, as expressed by the respondents below.

"We employ 34 MHWs. Before 2012, all money (used for hiring the MHWs) was from NGOs. In 2012 the NGOs quit. So we needed to shoulder this cost. Frankly, we don't have enough money. But we still had some savings in our purse, about 10 million Baht. I may be able to extend this project (hiring MHWs) just for the next 2-3 years."
[RN_PHO2]

"We (as an NGO) mobilised money from many sources, such as the Australian Embassy, AusAID, and recently from Global Fund; but now Global Fund is about to fade away....So we try to reduce our work size, from 9 provinces to 4 provinces."
[RN_NGO1]

"The PPHO may not support the hiring of MHWs for this year. They (the PPHO) said they have no money. Our MHW earns only 5,000 Baht for her salary. That is low, compared to if they work in a factory." [RN_HC2]

4. Campaigning the health insurance card in Myanmar

Though the HICS was designed to ensure the health security of migrant workers and dependants, who are residing 'in Thailand', the PPHO also promoted this policy in Kawthaung district in Myanmar with an aim to recruit more 'clients'.

The card was marketed in leaflets, or cut-out boards written in Burmese. The campaign was formally initiated in 2013 as at that time the policy was relatively open and any migrant was able to buy the card regardless of whether or not he/she had Tor Ror 38/1 and/or work permit.

From the perspective of the PPHO, this measure benefited the province in its entirety, as in 2013, the province earned more than 70 million Baht (US\$ 2 million) from selling the card.

"We tried to tell the hospital to sell the card to as many people as possible. Some hospitals said they wouldn't sell the card to children because of a fear of running deficit. They said they wouldn't sell the card to sick people. I told them we should not think like that. We must sell the card to them and ask them to persuade other migrants to buy the card. Finally, the province earned more than 70 million Baht (from selling the card). I even promoted this by making a huge cutout written in both Thai and Burmese. I even travelled to Kawthaung district to seek more clients. The reason for doing this was because the hospitals were very inert." [RN_PHO2]

Three interviewees (RN_RNH1, RN_RNH2, and RN_RNH3) opined that the campaign in Kawthaung district contributed to an increase of the number of 'sick' buyers, and this might undermine the financial benefit of the facility. In practice, it was difficult to check whether the buyer was really residing in Kawthaung district, and selling the card to those residing in Myanmar was subject to the 'strictness' of frontline staff of each facility.

"There was a time when the PPHO went to Kawthaung district to campaign for the card but the hospital did not agree with such campaign. It happened before the advent of the One Stop Service. The bottom line is if we can make mass sales, this will be financially worthy. But it is not like that because we found the majority of the buyers are sick or pregnant migrants. We used to face a case with thyroid disease and renal disease. We asked his history and he could not answer naturally. Finally, he confessed that he was from Kawthaung district" [RN_RNH3]

5. Seeking support from NGOs to fill the gaps of service

The local health facilities at times sought support from NGOs or civil groups to help implement some initiatives that faced a bureaucratic constraint. For example, NGOs stepped in during the process of hiring MHWs by acting as employers of migrants. On paper, the NGOs indicated that they hired migrants as housemaids or labour workers in the NGO offices, but, in practice, these migrants worked as MHWs at the health centres.

Another initiative founded by the NGOs was a foundation of primary healthcare centres, so-called, 'health posts', in communities with high density of migrants. The health post in this account was different from the 'health centre', which is the lowest basic official health facility under the MOPH. In practice, the health post was a community dispensary operated by trained Thai VHV. Some VHV used their own house as the health post.

All residents in the communities (both Thais and non-Thais) were able to buy basic medicine (such as antipyretic drugs, wound dressing set, and oral dehydration salts) at the health posts. The VHV were trained once a month by the PPHO. The by-product of this programme was to imbue a sense of ownership and saving awareness in migrants. This was because health posts were set up as a co-operative. Both Thai and non-Thai residents were eligible to apply for membership of the co-operative.

A respondent (RN_HP1), working in Muang district, reported that about a quarter of the co-operative's members were migrants. Normally, the medicine sold in the health post was supplied by Ranong hospital at low cost. The profit from selling medicine is distributed to all shareholders at the end of a year. The cost of joining the co-operative was about 50 Baht (US\$ 2) per share unit.

However, the programme had not been thoroughly evaluated, either in terms of its effectiveness or the health outcomes of the residents. Moreover, an interviewee observed that this initiative received inadequate monitoring.

"I used to speak in the meeting (between the VHVs and the inspectors from health centres) as well but they (the inspectors) had never visited the community. I told them that we need the officials to come and check whether many small-sized grocery stores here sell medicine because I found that those drug sellers have never attended the training." [RN_HP1]

Negative adaptation

1. Imposing special conditions in obtaining and using the card

Ranong hospital created its own regulations restricting the rights of migrants to purchase and use the card. The first measure is barring 'sick' migrants from buying the card, and the second measure is imposing a one-month lag time after the card was purchased (Ranong hospital, 2014a). All of these measures were derived from the practices in the private insurance arrangement.

For the first measure, the 'sick' condition here was not a list of diseases as in Tier 3 of the regulation. It relied on an individual physician's judgment as to whether an applicant was 'healthy' enough to work. Note that pregnancy was not a restriction in acquiring the card. Three interviewees (RN_RNH1, RN_RNH2, and RN_RNH3) mentioned that such measures were essential in preventing counterfeit brokers and in protecting the hospital's financial benefit. They also highlighted that this practice was not against the HICS regulation as the text in the MOPH announcement indicates that *'An applicant, who is infected by either of the following conditions...or is having any sickness that may hamper his/her job based on individual doctor's consideration, will be reported to the Immigration Bureau for deportation.'*

In other words, even if a migrant had already acquired all essential documents (such as the work permit, and the '00' card) as per the OSS regulation, this could not be a guarantee that an applicant would be able to buy the card as the final judgement was based on the discretion of a health practitioner.

"I used to meet a chubby woman with heart failure. She said she was working as a maid. It seemed that she was still able to work (therefore this case was able to buy the card). From my experience, most of the buyers passed the health check. There were only 2-3% not passing the health check. Let's say if we face a cancer patient, we will not let them pass the health check since cancer requires high-cost care" [RN_RNH3]

"All of these measures (such as forbidding unhealthy migrants from being insured) were initiated by us. These measures put us at risk of being sued. To insure a patient, the MOPH should give us the right to say yes or no...May I ask you something? When you buy a health insurance from a private company, does it accept every case? If you take a guy, who is going to die soon, to the company, will it accept?" [RN_RNH1]

In contrast, one of the interviewees suggested that this measure might create unfavourable consequences in terms of limiting the insurance pooling size for the entire province.

"Some hospitals said they won't sell card to pregnant and sick migrants. So who is smarter than whom? Do you think migrants are not smart? They all know. If you are fair enough, you should sell the card to pregnant (and sick) cases. Of course, it might run a deficit. But these migrants will persuade more people to buy the card, this will make us earn more in the end." [RN_PHO2]

The researcher also checked with the HIG as to whether it was possible to interpret the HICS policy in such fashion. The HIG officer, who was also the interviewee in Chapter 5 (ADM_CO1) expressed that the text appearing in the announcement should be interpreted in the way that 'not fit for work' meant an applicant was developing serious infectious diseases specified in the Tier 3 diseases list (namely, active TB, elephantitis, filariasis, etc). Therefore, in her opinion, the interpretation that solely relied on individual health practitioner's discretion, whether an applicant was 'healthy' enough, was invalid.

"We have used such text for several years. It means that only patients with such diseases (active TB, filariasis, elephantitis, etc) can't buy the card. It is the problem of that hospital. If this case is voiced to us, we will be on patient side." [ADM_CO1]

Besides, Kraburi hospital and Ranong hospital also introduced a parallel policy, indicating that migrant mothers must buy the 365-Baht card for her baby right after delivery. In practice, the health staff at postnatal ward strongly encouraged migrant mothers to buy the card for their babies. However, if a migrant mother refused to buy the card for her baby right after delivery, but later on, her (uninsured) baby was sick after being discharged from the hospital, the mother had to pay out-of-pocket for the treatment and she was allowed to buy the card for her baby again only if the treatment for that episode was finished.

The second internal policy of Ranong hospital was imposing a one-month lag time between purchasing the card and using the card. A card holder had to wait at least one month in order to be able to enjoy services free of charge.

If a beneficiary utilised services within one month after purchasing the card, the patient was to pay out-of-pocket. This mechanism served as the second gate for preventing migrants from 'overly' taking advantage of the system.

"To enjoy the right, the system should not allow an immediate effect. There should be a one-month lag time like private insurance company. We used to see a patient. He did not buy the card, then he got an accident, and had fracture of femur. He was admitted in the orthopaedic unit. He didn't have money. Then, our staff advised him to be discharged from the hospital first. Then, he bought the card. And he could buy it since at that time our staff were confused about the policy. One day later, he was admitted again (to enjoy the treatment free of charge)." [RN_RNH1]

One of the interviewees (RN_RNH2) accepted that the above restricting policies might not be effectively implemented in practice. This was because the unhealthy migrants were still able to buy the card at hospitals where the internal policy was more relaxed.

Moreover, due to the repeal of gate-keeping mechanisms in the province, after an unhealthy migrant bought the card from a more relaxed hospital, he/she was still able to come back to the more stringent hospital where he had been refused permission to buy the card.

"(Interviewer: So what will you do when facing unhealthy migrants who really wish to buy the card?)..I will tell them to buy it at another hospital. Since then they can use service anywhere in the province." [RN_RNH2]

2. Inhibiting the selling of the 2,200 Baht card to non-worker migrants after the OSS policy

The OSS policy did not stipulate whether the 2,200-Baht card (according to the Cabinet Resolution on 15 January 2013) was still in effect. Healthcare providers in the province perceived that, after the finish of the OSS re-registration by 31 October 2014, illegal migrants were not allowed to buy the insurance card. This interpretation was in accordance with the political atmosphere at that time as the junta repeatedly informed the media that illegal migrants who failed to register with the OSS would be arrested.

As a result, all health provider interviewees opined that the 2,200-Baht card no longer had any role for migrants after the OSS. From the provider perspective, a migrant worker or a dependant of migrant worker, who wished to buy the current insurance card (1,600 Baht) must have already registered with the OSS and acquired the 00 card (13-digits ID) and work permit first.

However, providers in Ranong province interpreted that the 2,200-Baht card was still valid for stateless populations who failed to register with the HI-PCP; and most of this population is a group of 'displaced Thais'. The interviewee, RN_RNH2, reasoned that the uninsured displaced Thais were not required to take part in the OSS and thus they were not permitted to buy the 1,600-Baht card. As a result, the only channel left for the uninsured stateless population was the 2,200-Baht card.

This interpretation of policy did not explicitly appear in the MOPH announcement, but it emerged from the day-to-day problems faced by local health staff as there were some displaced Thais who bought the card in 2013 asking to renew the card (Ministry of Public Health of Thailand, 2014b).

"During the One Stop Service, the MOPH said the target population was migrant workers. So we perceive that a buyer must have work permit (in order to be eligible to buy the 1,600-Baht card). And what about those without work permit? Yes, they are still eligible. But the card price is 2,200 Baht and he/she must be a displaced Thai."
[RN_RNH2]

Unclear policy message—Devil is in the detail

As briefly shown in Chapter 5, there were conflicts and discordance both between and within migrant ministerial policies. This subsection emphasises the aforementioned point by showing how an unclear policy direction leads to confusion at the implementation level. There were two key examples regarding this matter: (1) the difference between how the MOPH and the MOI defined the term, 'dependants', and (2) whether or not an illegal CLM migrant was still able to buy the card if he/she failed to register with the OSS.

Since the junta did not define 'dependants', this rendered a variety of interpretations by related authorities. According to Section 44 of the Labour Protection Act (1998), it was illegal to employ a child under fifteen years of age. This meant a child aged less than 15 could not be issued with a work permit. However, the HICS policy defined the cut-off age for 'dependant' at 7. The problem arose when the OSS policy was introduced, as the OSS tied obtaining insurance with a possession of a work permit.

Literally, a migrant child aged less than 7 was eligible to buy the card at the cost of 365 Baht, while a child aged between 8 and 15 was required to buy the card at the same price as an adult. This served as a barrier to attaining the insurance as most migrants

considered that the adult price was too expensive for a child (see 'Perceptions of service users' in the subsequent section).

Two interviewees (RN_RNH2 and RN_RNH3) at Ranong hospital mentioned that a migrant aged between 8 and 15 was eligible to buy the card only if he/she held a work permit (which is impossible by law). As a result, the hospital stopped selling the card to children aged between 8 and 15 and was awaiting clarification from the central government.

"The term, 'dependant', for the MOPH is different from the MOI. Now we are selling the card to only those below 7. For those between 8 and 15, we have not opened (the card selling policy) yet. Because the term, 'dependent', for the MOI uses the cut-off at 15. (Interviewer: So far, is there any consensus for this difference?) No!, we have stopped selling the card (for children aged 8-15) at this moment" [RN_RNH3]

The second example was a confusion about whether or not the HICS insurance card endorsed before the OSS was still valid, as briefly described under the 'negative adaptation' topic. The unclear message led to different interpretations between facilities. The staff in Ranong hospital understood that the facility was allowed to sell the 2,200-Baht card only to displaced Thais, who failed to register with the HI-PCP. The healthcare staff in Kraburi hospital mentioned that the 2,200-Baht card could be sold only to a migrant patient who already had Tor Ror 38/1 but had failed to register with the OSS. Additional references by Patomsirilak et al (2016) suggested that some health facilities (in Bangkok, for instance) interpreted that the 2,200-Baht card was no longer valid at all, because if they sold the 2,200-Baht card, it might appear that they were supporting illegal immigrants.

One of the respondents (RN_PHO1) shared his experience in voicing this issue to the MOPH. However, he stated that the answer from the MOPH was unclear and the MOPH even informed the ground-level providers to decide what they deemed appropriate.

"(Interviewer: If I were Burmese, and I somehow did not join the One Stop Service, what would you do to me?) We dare not sell the card. Suppose we sell, there might be a question whether we are against the national policy. (Interviewer: Have you ever raised this issue to the MOPH?) I did. Dr XXX (policy maker in the MOPH) told me that 'Yes!, you may sell them the card but do this covertly. ' I then replied that 'Sir!, if you said so, no local facility will dare sell the card.' Because nobody will protect our action if that migrant is caught and charged by the police." [RN_PHO1]

In early 2015, the HIG launched a HICS instruction handbook to all PPHOs. The handbook indicated that the electronic registration programme of the 2,200-Baht card was still in effect and local health staff were still able to sell the card to 'anybody' (even without the 13-digit ID). Then, the HIG electronic system would generate the 'artificial' 13-digit ID to a card buyer, starting with '00H' (ie 00Hxxxxxxxxxx) (Health Insurance Group, 2015). This ID generating system was called the 'H-series'. It was imitated from the G-series system of the MOE.

However the H-series could not be used for securing budget from the government like the G-series because the G-series system was endorsed by the Cabinet Resolution in 2005 while the 'H-series' was just an internal programme of the MOPH or, strictly speaking, it was the internal programme of the HIG and was not recognised by other departments of the MOPH (The Thai Cabinet, 2005).

Follow-up interviews with the local providers in Ranong province found that they were aware of this recent change in the MOPH policy. However, it was difficult to ensure that this awareness led to concrete actions. A recent report from the HSRI (2015) suggested that the H-series message from the MOPH did not properly reach the healthcare staff in many provinces (such as Krabi province and Pitsanulok province) despite the fact that the guideline paper was distributed to all PPHOs.

The researcher also checked this point with one of the interviewees (ADM_CO1) working at the HIG. The interviewee reiterated that, in her view, the MOPH message was 'clear enough'; that is, all migrants are always eligible to buy the card regardless of

nationality status and regardless of whether they had ever registered with the OSS. However, the reason why the HIG could not explicitly announce to the wider public that the HICS policy was 'always open' (rather than just sending the handbook to the PPHOs) was that, as a 'bureaucrat', it was difficult to send a strong message that was against the overarching national policy, particularly during the junta era. As a result, what the MOPH could do best was create room for everybody to be insured, even though such room was implicit.

Aside from the two major contentious issues presented above, there was a minor concern about whether or not the 30-Baht fee was still applied to an insured migrant. The HICS policy was first adopted in 2004 and mimicked the UCS system which at that time imposed a 30-Baht fee per visit on a patient as a 'symbolic' charge. In 2007, the 30-Baht fee policy was revoked by the NHSO, however, there had not been a clear message from the MOPH as to whether migrant patients still needed to pay the 30-Baht fee. All healthcare provider interviewees still understood that as long as the MOPH did not explicitly terminate the 30-Baht fee for the HICS, it was justifiable to collect the this fee from a migrant user, but the interviewee at the HIG (ADM_CO1) suggested that the local providers should interpret the HICS in the same way as the UCS, that is, the 30-Baht fee collection from a migrant patient should be cancelled (Patcharanarumol et al., 2011, Srithamrongsawat et al., 2009).

Lack of inter- and intra-sectoral coordination

Not only was there confusion about policy content, how the policy was communicated was also a critical problem as raised by six of fourteen interviewees (four healthcare providers and two non-MOPH officials). The interviewee from the MOI, RN_MOI1, exemplified this point through the situation during the OSS implementation. Since the OSS was quickly endorsed and authorities were not informed how to operate this measure in detail, many constraints arose, including a debate about who should absorb the cost of setting up the OSS.

"There were some legal and administrative constraints re the reimbursement of extra stipend for staff or the problem about human shortage. Because when you summoned lots of staff in a short time to work in a special venue, you needed to ask for help from many authorities. The government might say that it is your duty. But it is difficult for us (the MOI), as the host (of the venue) to ask for support from others. Because if we cannot give them an extra stipend, they might ask why they have to participate in this event (the OSS). I wish to stay at my workplace so that I can save my travel cost."
[RN_MOI1]

The finding from the MOI staff was congruent with the perceptions of MOPH staff. Two interviewees (RN_RNH1 and RN_RNH2) from the health sector reported that they felt that the health sector was 'voiceless', and the feedback mechanism from the ground level to the central authorities was also lacking.

"(Interviewer: Could you please tell me about the coordination between you and non-MOPH authorities?) Frankly, we are voiceless. The two parties (the MOI and the MOL) will inform us after they had already talked to, and agreed with each other."
[RN_RNH2]

Conflict between ministries was derived from not only a lack of cooperation but also a misunderstanding of roles/responsibilities between authorities. An instance was drawn from the argument between the MOPH and the MOI. Though the MOPH intended to have all registered migrants buy the insurance card, the MOPH did not have any legal power to 'penalise' migrants or employers of migrants, who refused to buy the card. This was because, literally, the HICS was just a ministerial announcement. Such a situation created difficulty for the MOI staff when dealing with the MOPH staff during the OSS, as reflected by the interviewee below.

"To be honest with you, I think we at times have difficulties when working with the MOPH. I may not understand the culture and the way of thought of the health sector. For example, the MOPH always told us to force everybody to buy the insurance. But if they could not afford the price, can we force them (to buy the card)? To my knowledge,

it is just a ministerial announcement. The MOPH told us to speak in the same language (that all migrants are obliged to buy the card). That makes us feel uncomfortable (to say so)." [RN_MO11]

As well as conflict between ministries, there were also within-ministry communication problems. These took place not only in the MOPH, but also in the MOL, as suggested by five of fourteen interviewees (RN_PHO1, RN_PHO2, RN_RNH1, RN_RNH2, and RN_WP1). An obvious instance was raised by RN_PHO2, suggesting that the three main organisations under the MOPH which were responsible for the migrant health issue, namely, the BHA, the BPS, and the HIG, were not always working in harmony (see functions of these three agencies in Chapter 5). This situation led to confusion in policy implementation as local providers were overloaded by a large quantity of disparate information. Another example of within-ministry conflict was discussed by RN_WP1. After the Department of Employment (DOE), issued the work permit to migrants, the DOE did not always check if those migrants were later insured with the SSS.

"There are three main agencies at the central level that deal with migrant health, namely the BPS, the BHA, and the HIG. I used to be invited to attend the meetings about migrant health in the MOPH. In the morning, there was a meeting by the HIG, and then in the afternoon, there was a meeting by the BPS. And the meeting agendas (between authorities) were the same. So, who is insane? If you cannot talk amongst your teams at the central level, you should not invite the local level like us. We are frontline staff. The order must be clear, then we can act according to the order. If the order is blurred, that's pointless." [RN_PHO2]

"The work permit is issued by me as the registration officer. But, in case there are employers who refuse to pay monthly contribution for their employees, the SSO should be the plaintiff, not the DOE...I have power to check only whether you are working in the site according to what it is shown in your work permit." [RN_WP1]

Relaxation of law enforcement

Three respondents (RN_MOI1, RN_WP1, and RN_NGO2) divulged that not all migrants-related laws/measures were strictly enforced. From a different angle, this practice might be regarded as an adaptation of policies that happened in non-MOPH sectors. Though other interviewees did not comment directly about this issue, they all admitted that they were aware of this relaxation and this practice was not something strange in the province. Two conspicuous instances were raised, (1) the zoning policy, and (2) the relaxation of the measure that required migrants to travel back to their country of origin after their residence permit expired.

The 'zoning policy' originated from the idea that it was almost impossible to prevent the influx of illegal migrants from Myanmar, particularly in an area with a very long border like Ranong province. Moreover, it was widely accepted that there were a vast number of illegal migrant workers in the fishery industries in the province. The respondent, RN_MOI1, mentioned that based on his experience, if the deportation law was strictly exercised, this might lead to conflicts between the prosecutors and local entrepreneurs. To solve this problem, the 'zoning' system was instigated. The system implied that the prosecutors were more 'relaxed' around the fish docks where migrant communities were concentrated; but the prosecutors tended to be less 'relaxed' around the city centre. This practice was like turning a blind eye to the illegality problems and serving as a compromise between economic necessity and security concerns.

"In our area, we tried to block the influx of migrants. But we admit that we still face some limitations. In many work sectors, if we always caught illegal migrants, there might not be enough workers left. Then, we might have problems with the entrepreneurs. So we need to use other measures aside from law enforcement. For example, we tried to create the zoning area that we will be somewhat strict in the inner city and will be more relaxed in the outer zone." [RN_MOI1]

The second example was the relaxation of the measure of the MOL that required a temporary pause on NV and MOU migrants who reached the 4-year maximum stay in

Thailand. In principle, these migrants needed to return to their home country and were not permitted to re-enter Thailand for another three years. However, in practice, this rule was not strictly enforced. Some migrants went to the border control and had their visa stamped as if they had left the country and then came back to Thailand right away. Paithoonpong and Chalamwong (2011) reported that this practice was not uncommon, and it was found not only in cross-border migrants but also in foreign tourists. Foreign immigrants possessing tourist visas were not permitted to work in Thailand and had a permitted length of stay for a maximum of three months. However, many tourists avoided this rule by taking on paid jobs and making quarterly 'visa runs' to nearby countries' cities, such as Vientiane and Penang, then returning to Thailand to resume their paid employment.

"(Interviewer: Normally, how long is a migrant required to pause before coming back to Thailand again?) In fact, they came back immediately, just get their passport stamped and then re-enter the country. But, in theory, they should pause. I knew this from my own experience. I knew one of the immigrants who did this." [RN_NGO2]

In addition, the interviewee (RN_NGO2) opined that while the wider public perceived that the OSS was a 'stringent' measure in clearing the illegal/undocumented immigrants, in practice, it was quite relaxed in examining the immigration history of the participating migrants. Some legalised migrants (who had passed the NV before the OSS), whose passport and work permit were about to expire, abandoned their passport and work permit and acted as illegal migrants in order to re-register with the OSS (instead of returning back to their country of origin country to legally apply for a working visa).

"During the OSS, there was a transition period where the visa of some legalised migrants was about to expire and they needed to journey back to their home country. As a result, they turned themselves into illegal migrants again in order to enter the OSS instead of legally extending their visa and passport ...Because it was cheaper, faster, and more convenient, then re-entered the NV again. Thus, the increase of the registration volume (during the OSS) might be false. I think the figure was too high." [RN_NGO2]

II. Perceptions of service users

This subsection describes the key themes from the interviews with service users. Six common themes were identified, namely, (1) Difficulties in managing the insurance for migrant employees, (2) Diverse reasons for seeking the insurance card, (3) Ambiguity of employment status, (4) Support from family and employers, (5) Satisfaction with the health service and the card policy in general, and (6) Uncertain future of the vulnerable. The first theme was mainly raised by the employer respondents, while the other five themes were described by migrant interviewees. Note that, to protect confidentiality of the respondents, names of respondents below have been changed.

Difficulties in managing the insurance for migrant employees

All four employers (RN_E1, RN_E2, RN_E3, and RN_B1) articulated that the HICS created difficulties for employers. From their outlook, the HICS should not be a compulsory measure. The rationale behind this idea was that most migrant workers, especially those working in offshore fishing boats, were very mobile. Besides, most seafarers spent much of the time offshore. Thus the employers mentioned that it was not worth paying for the insurance for their employees as they had fewer chances to enjoy services.

This problem was coupled with the registration of migrant workers. Legalised migrants (those who passed the NV) were able to travel throughout the country. From the perspective of employers, this regulation created the risk of losing their employees. In contrast, (illegal) migrants, who had not completed the NV, were not allowed to move outside the registered province. As a result, it was more likely that illegal migrants would not leave their employers.

The situation of migrant sea workers in Thailand became more complex following EU sanctions in 2015. The EU attempted to crack down on illegal, unreported, and unregulated (IUU) fishing with the threat of import restrictions. In April 2015 Thailand acquired a warning, so-called, the 'yellow card', from the EU due to an allegation of IUU

fishing as well as slave labour and trafficking on fishing vessels. Such a situation caused the country's fishery industry to fall into disarray and prompted the government to issue a new Royal Decree on Fishery to respond to this pressure (The Nation, 2015). The new Decree imposed 'stricter' supervision and a 'more severe' punishment on those who breached the law. This created massive strikes from many domestic fishing entrepreneurs since they deemed that this new regulation was 'unfair' and 'impractical' (for example, downsizing the permitted fishing areas of local fisheries), and those likely to benefit most from the Decree, were large-scale enterprises (Isranews Agency, 2015). Kwan-on (2015) suggested the stringent supervision created fear of being arrested in many migrant sea workers because some migrants worked offshore over months and at times exceeded the permitted length of stay/work in the country. Accordingly, some migrants might leave their employers before the boat embarked on a journey, or right after the boat landed.

"I always opposed the HICS. If that is for land migrants or those at the fish docks, I will be OK with it. But for seafarers, I totally disagree because they don't have a chance to use the insurance. They are always aboard. I lost over a million for the insurance. Some migrants stayed with me for just a couple of months, then they left their work. And who paid for their insurance? It is the employer! I didn't even have a chance to deduct their salary to recover my expense. The policy makers did not understand this setting. Do you think this policy is successfully implemented? I think it was just 30% successful."
[RN_E3]

Another problem raised by the interviewees was the red tape in the registration. Two employers (RN_B1 and RN_E2) pointed out that the registration process was burdensome. As a result, a reliance on private intermediaries or brokers was considered an effective means to overcome this difficulty despite causing additional expense. The Thai Chamber of Commerce (2014) also reported that there were a number of unregulated employment intermediaries or 'ghost' brokers in Thailand.

"Now there emerges a new job that helps complete the registration for migrants on behalf of the employers...It is more convenient but I had to pay more (laugh!). It

charged me 500 Baht per head of migrant. But the registration takes numerous steps, and is very tiresome, and there are so many people. That's why I don't want to get involved. So I am OK with hiring them (brokers)." [RN_E2]

Diverse reasons for seeking the insurance card

Of the ten migrant interviewees, seven were insured. For the insured respondents, there were diverse reasons in obtaining the card: from health benefit, security benefit, and even having no specific idea about the card (since the employer initiated it).

Almost all respondents (except MM3, who was a translator at the health facility) stated that they did not have clear knowledge about the card benefit. Two respondents (MK2 and MK4) stated that they did not have a specific intention when buying the card. They viewed the health card as part of the 'package' when they registered with the authorities (through the assistance of employers or brokers).

Two respondents (MM4 and MM5) had a misconception that the card did not cover treatment of traffic accidents (in fact, the card covered traffic accident treatment in the same way as the UCS). One of the interviewees (MM6) shared her experience that the card benefit went beyond health issue by protecting her from the officials, who threatened her with deportation. She also expressed that, recently, just after the junta came into power, there was news that the military might arrest the uninsured migrants. As a result, she decided to join the OSS.

While some health providers expressed that the insurance was spoiled by sick migrants, the interview with migrants found that only two of the seven card holders bought the card after they felt ill (MM2, and MM4), and one of the uninsured (MM1) sought the card when he was first diagnosed with HIV/AIDS (but at the time of writing, the card had already expired and had not been renewed). The story of MM2 (case study 1) shown in Appendix 11 was an example of this account.

Ambiguity of employment status

The seminal intention of the OSS was to 'sweep and clean' all illegal migrants in the country. A migrant granted a legitimate residence permit in Thailand must be a 'worker', with a clear job description and employer details. However, in the real world, especially in places like Ranong province, where most migrants were engaged in low-skilled jobs and transportation across the border could be done very easily, the employment status of migrants was not always clear. The above story of Monn (MM2) showed that there was a disparity between 'job written in the work permit' and the 'real job', in which a migrant was being engaged.

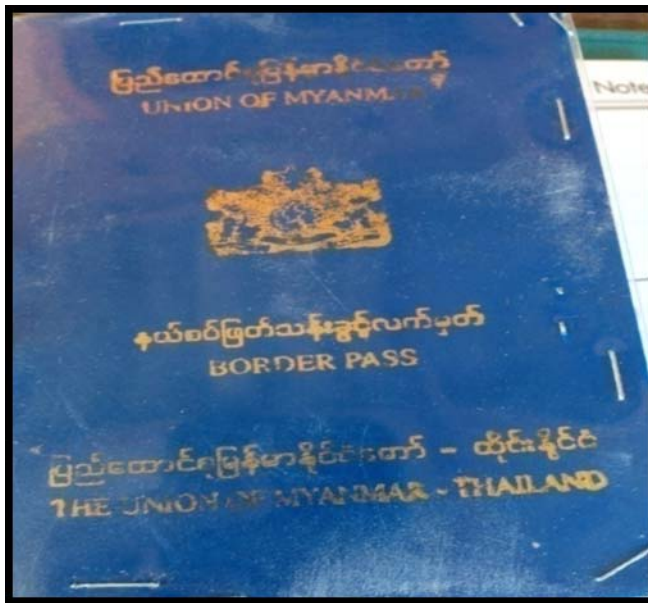
For this issue, there were three respondents whose life story could reflect the complexity of employment status. The first case was Tho (MM2), a 42-year-old illegal immigrant, who had been residing in Thailand for over 20 years. He joined the registration process during the OSS. Tho was running his karaoke shop in Muang district. Strictly speaking, registered migrants in Thailand were allowed to work in certain jobs only (see Chapter 5), but 'shop owner' is not in the list of permitted jobs. However, his work permit indicated that he was a labour employee. The real shop owner was his Thai employer, allowing Tho to run the shop freely as though it was Tho's asset. Tho needed to pay a monthly rent (about 5,000 Baht (US\$ 152)) to his employer.

At the other end of the spectrum was the case of a 'migrant worker' without 'work permit'. Aye-Mo (MM5)'s story matches this scenario. She was a 50-year-old migrant who had been living in Thailand for more than 20 years. She had never been registered with the MOI. Thus she did not hold Tor Ror 38/1, and this explicitly meant that she could not apply for a work permit. Yet it was difficult to claim that she was an 'illegal resident' as she always held a 'border pass'.

The border pass was a document, authorised by the mutual agreement between the two nations, that allowed Thai and Burmese residents to commute between the border towns (in this case, crossing from Ranong province to Kawthaung district, and vice versa), with a maximum stay of not more than two weeks. The border crossing by the border

pass was valid for visiting the border town only. Onward travel to other places still needed visa and passport. In other words, the border pass was like a lenient border control that facilitated the travelling of inhabitants for short-stay tourism or business purposes, see Figure 24.

Figure 24 Appearance of the border pass



Source: Real picture taken from the interviewee

Aye-Mo always had her border pass stamped at the border biweekly as if she travelled from Myanmar. She always bought goods from the border and earned a living by selling them to her neighbours. Her overall health was still good; therefore buying the health card was not of interest at this moment. She mentioned that the card was too costly. If she wished to buy the insurance card, she would need to seek assistance from a broker to help her acquire a passport and a work permit first.

The last example was more complex. It was the story of Za's family (MM6), an illegal immigrant family from Myanmar, see her life story in Appendix 11 (case 2) for more detail. Za had been dwelling in Muang district for over ten years. Za peeled shrimps for

a living and had already acquired a work permit. However, the employer specified in the work permit was not the employer that hired her to peel shrimps. All of her documents (work permit, health card, and Tor Ror 38/1) were managed by a broker, and Za stated that she had no idea about her 'de facto' employer.

Support from family and employers

In general, migrants in Kraburi district appeared to have better living conditions than those in Muang district. Of the four migrant interviewees from Kraburi district, three were already insured and had completed the NV (MK2, MK3, and MK4). The interviewees from Kraburi district had higher income, lived in more spacious houses, and received better support from peers and family members.

A potential explanation of this phenomenon, as expressed by one of the employer interviewees, (RN_E2), was that most rubber field owners tended to treat their migrants nicely. The 'nice' treatment included provision of better shelters, fringe benefits, higher wages, and helping migrants to undertake the registration process. The interviewer opined that the likely explanations for this phenomenon were: (1) most migrants in Kraburi district were indeed 'not-poor' (some even owned their business on the other bank of Kraburi river) and (2) the rubber market price in Thailand had declined over recent years; therefore without proper treatment, migrant rubber field workers might leave for other provinces to seek more promising jobs.

"The current migrants are those who expect that the rubber price may go up. But there are fewer new workers now. Some of our migrants even have their own rubber field on the other bank (of the river). It is like they use us as their learning field (laugh!)."
[RN_E2]

Three of four migrant interviewees (MK2, MK3, and MK4) in Kraburi district still had connections with their relatives in Myanmar. In contrast, almost all migrant interviewees in Muang district were distanced from their relatives in Myanmar. The only case in Muang district that still maintained her links with peers or relatives in Myanmar was Ae

(MM3), who had quite a good education background and was now serving as an interpreter at the health centre.

Kraburi district is separated from Myanmar by the Kraburi river. Travelling from one bank to the other is very cheap and convenient (about US\$ 2 per head per trip by a speedboat). Therefore, migrant interviewees in Kraburi district stated that they travelled back to Myanmar quite often for various reasons (such as visiting relatives, joining cultural/religious festivals, or looking after their rubber fields in Myanmar). Jin (MK2) was an example. She lived with her husband and her one-month-old baby in a small house provided by the rubber field landlord. She did not pay for accommodation, except the utility bills. Everybody in the household was insured and had already acquired temporary passports through the assistance of the landlord. Her cousin from Myanmar also crossed the river to help her take care of her child every other day. Jin planned to take her son back to Myanmar to enter a school there. Another similar instance was Wei (MK3). The detailed story of Wei's life is presented in Appendix 11 (case 3).

Satisfaction with the health service and the card policy in general

All respondents who were insured by the HICS, opined that they were generally satisfied with the services they received. Wei (MK3) articulated that the hospital usually provided good quality care. Ayee (MM3) and Tho (MM2) confirmed that most doctors at the hospital were very kind, however frontline administrative staff and nurses tended to be less nice. They preferred visiting a hospital over a health centre as doctors were always available there (in the Thai context, services at a health centre are normally operated by nurses). They were happy with the card since it saved considerable treatment expense (compared to not having the card).

Nevertheless, a private clinic still had an important role in health-seeking behaviour, particularly in non-severe illnesses and for the uninsured migrants (see the case story of Su [MK1] in the subsequent subsection). Over half of the interviewees (~7/12) reported that they visited a private clinic when they got ill. Cho (MK4) emphasised that the critical advantage of visiting a private clinic was the shorter waiting time, though there

was always a cost incurred (ranging from 200 Baht [US\$ 6] to 500 Baht [US\$ 15] per visit).

It was worth mentioning here that Cho's family had some distinct features. She had been living with her Thai husband for over ten years without a marriage document. Legally speaking, with a long stay in Thailand and strong link to the country (through a marriage with a Thai national), she was eligible to apply for Thai nationality (but, in practice, she might need to complete the marriage document first). Cho's husband expressed that he had ever explored if Cho was able to obtain Thai nationality, but he finally forwent this idea after experiencing the red tape. As Cho was diagnosed with hypertension that demanded continuing treatment, her husband helped her acquire insurance by informing the official that he had hired Cho as a housemaid. Thus, in the work permit, Cho was acknowledged as a housemaid employee with her husband as a Thai employer, and this enabled her to be insured with the HICS.

Though Cho was satisfied with the status quo since at least she was insured, she said that it would be better if the insurance coverage could expand to her family members. The important aspect of Cho's family was that it consisted of members of more than three nationalities. In the household, there were Cho (Burmese), her husband (Thai), her husband's son born by his ex-wife (Thai), and her husband's daughter in law, Kan (displaced Thai). Kan did not have a birth certificate or any identification document since her parents died when she was very young. She spoke Thai fluently and was familiar with Thai culture. People in the community always recognised her as displaced Thai.

Strictly speaking, Kan would have been insured with the HI-PCP if the national survey for stateless people by the MOI (according to the 2005 National Strategy, see Chapter 5) had been done completely. Although, in fact, the HICS allowed Kan to buy the 2,200-Baht card even though she was undocumented (see details of the H-series in 'Unclear policy message—Devil is in the detail'), the health centre staff, who occasionally visited Kan's family, were still ignorant about this system, let alone Kan and her family. However, Kan was still healthy. Obtaining the card was not her primary concern at this

moment. In addition, the family was still satisfied with the services received at the public health facilities. Cho and her husband stated that they felt that the facilities always welcomed every patient regardless of his/her nationality and insurance status.

All of the insured interviewees opined that the card was beneficial in reducing out-of-pocket payments. Jin (MK2) added that the card was very useful for a child as the child's card price was very small. She had bought one for her baby right after giving birth. Nevertheless, the interviewees still had limited knowledge of the card in several aspects, such as why the price was raised (from 1,300 Baht to 2,200 Baht) and whether the card covered traffic injury treatment. Almost all knowledge of the card was received from informal discussion with peers or neighbours. Ayee (MM3) shared her experience as MHW that the policy changed too fast and it was difficult to keep pace of all changes.

"The advantage of the card is if we have surgery or if giving birth, we pay only 30 Baht...But the policy changed very quickly. We went to tell the villagers (about the card), and then it changed again, and the villagers came to blame us (for giving wrong information)." [MM3]

Besides, Ayee confirmed that most migrants preferred to be insured with the HICS over the SSS. Although, in theory, employers in the formal sector should have their migrant employees switched from the HICS to the SSS once the NV process was finished, in practice, very few migrants (and employers) were willing to do so. She opined that the payroll contribution of the SSS was much higher than the HICS premium despite the SSS granting more fringe benefits such as unemployment allowance and pension allowance. Moreover, the process of obtaining these additional benefits was cumbersome and even contradicted the mobile behaviour of most migrant workers.

"The Social Security Office told that they will give us the money back when we reach 60 years of age, and also when we die. Who will guarantee that we will receive that money? And they say they will give us 1,000 Baht when we leave for our home. But you must send notice (to the SSO) in advance...Who knows that their cousin will die by next month? Just 1,000 Baht!, I can collect it by myself." [MM3]

Uncertain future of the vulnerable

While all of the insured respondents mentioned that they were satisfied with the services provided by the HICS, there existed some migrants, particularly the most vulnerable ones, who gained little benefit from the scheme. Coupled with their low socioeconomic status, these vulnerable migrants were placed in a deadlock, that is, unable to engage in the (formal) labour market and in the same time, unable to return to the home country, as mirrored by the following cases.

The first case was Su (MK1), a 64-year-old man with chronic obstructive pulmonary disease (COPD). Su had suffered from breathing difficulties for years. Though he was still able to maintain his basic living functions, the disease prevented him from being involved with labour intensive work. This condition was possibly due to his excessive smoking when he was young. Su used to live in Dawei district in Myanmar before (illegally) travelling to Thailand about two decades ago.

Currently, he was dwelling with his 33-year-old daughter and his three grandchildren in a shelter in the palm field owned by his daughter's employer. His daughter was insured and had already got temporary passport and work permit through the assistance of the employer. The shelter was provided free of charge but the dwellers were responsible for other expenses. As the total expense of the household was on par with their income (about 10,000 Baht (US\$ 303)/month), the family did not have enough savings to return to Myanmar and was not capable of setting up a new life in Thailand.

Su's daughter mentioned that her employer did not mind if Su stayed with her, but as Su was unable to work, he refused to take Su to register with the officials. None of her children were insured either. As a consequence, Su did not have any documents with him, making him a totally undocumented person. Su claimed that he used to possess some official documents several years ago but those documents were lost. Su said that he had no idea about the card and had never heard about the OSS. When he felt chest discomfort, he usually asked his grandchildren to buy some unlabelled medicine from Myanmar as it was cheap (less than 6 Baht [US\$ 0.2] per package), see Figure 25.

Figure 25 The interviewee (MK1)'s house and the example of unlabelled medicine



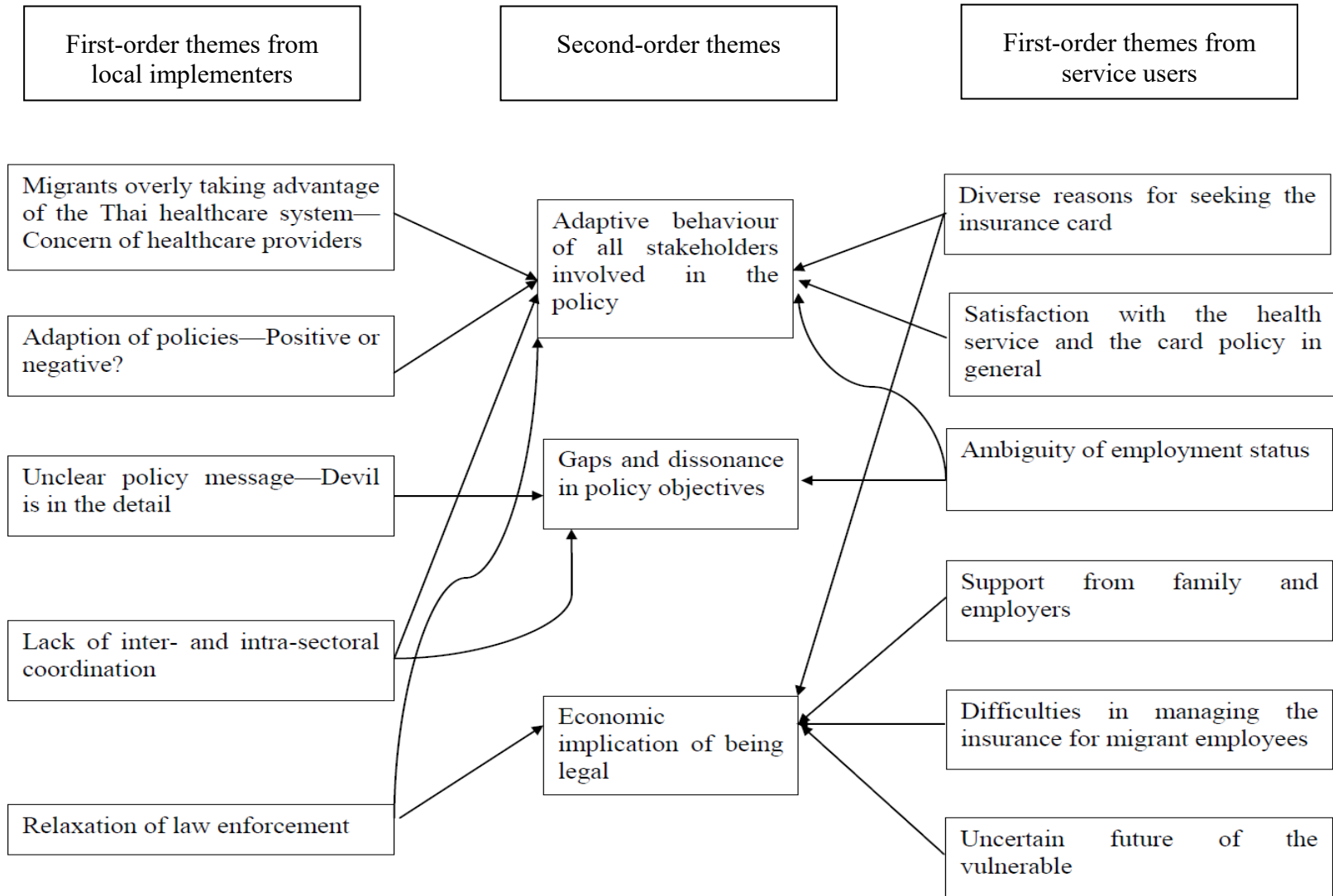
The second preferred choice of care for Su was the private clinic. He had visited it 3 or 4 times. The expense for each visit was approximately 500 Baht (US\$ 15). Note that he had never been to the hospital. However, the MHW from the nearby health centre came to visit him occasionally.

The second case (Tan, MM1) was more complicated. While Su still had family support, Tan faced a more difficult situation as the only financial supporter of the household was his wife, who was affected by HIV/AIDS like him. Moreover, his health status was much deteriorated by the disease, causing difficulty in his basic daily activities. Tan had previously had the insurance card but then his card expired and he could not renew the card since the hospital created a new internal policy that prohibited 'sick' migrants from buying the card. Tan's life narrative is displayed in Appendix 11 (case 4).

6.4 Discussion

This subsection discusses the higher constructs (second-order themes) emerging from the above findings. Three important themes were identified: (1) Adaptive behaviour of all stakeholders involved in the policy, (2) Gaps and dissonance in policy objectives, and (3) Economic implications of being legal. Note that these themes were not mutually exclusive. As a matter of fact, they closely interacted with each other. The relationship between the first-order and the second-order themes is exhibited in Figure 26 on the following page.

Figure 26 Association between the first-order themes and the second-order themes



I. Adaptive behaviour of all stakeholders involved in the policy

It is very striking that all stakeholders adapted their behaviour towards the HICS policy. The term, 'stakeholders', here includes not only street-level bureaucrats but also the clientele (service users). This phenomenon reflected the concept proposed by Lipsky (1980) that frontline workers of government agencies routinely interacted with the clients in implementing the policy and had some discretion over which service should be given. The local implementers were *de facto* not only 'implementers' as at times they acted like policy makers (who changed the policy in the way that might contradict the initial policy directives).

At the macro-level, while the 'formal' directive of the government attempted to 'clean' illegal immigrants from the country, the ground-level officers changed that directive to a 'zoning system' since it was impossible to block a massive influx of migrants into the province. While the MOPH intended to provide the insurance for migrant residents in Thailand, the PPHO adapted this policy by promoting the card to residents in Myanmar as the PPHO perceived that, in the Ranong setting, it was impossible to prevent the movement of people between the two countries.

At the meso-level, while the PPHO encouraged its affiliated hospitals to sell the card to all migrants, regardless of health status, with the aim of enlarging provincial risk pooling, some hospitals breached this agreement by restricting the eligibility criteria only to healthy buyers, in order to protect their own financial balance sheets.

At the micro-level, in a hospital that prevented unhealthy migrants from purchasing the card, its administrative staff also referred, or at least advised, the buyer to purchase the card at another hospital where the card-selling policy was more relaxed.

When the adaptive behaviours were coupled with poor supervision from the central authorities (like the MOPH in this case), it seemed that the local authorities were *de facto* given a considerable degree of discretion to distort the policy implementation.

From the user side, most respondents considered that they were content with the services in general and preferred being insured with the HICS to the SSS. Some migrants got away from the HICS rule that requires the buyer to have a physical employer by engaging private intermediaries, brokers, and personal networks to look for someone who could assume the employer role.

Some employers refused to have their migrant employees and dependants of migrants involved in the registration process to avoid the costly expense. However, since such treatment risked losing migrant employees, some employers found a middle way, by bestowing accommodation and other fringe benefits to counterbalance the benefits that migrants would receive if they took part in the registration.

Interestingly, the above point has broadened the perspectives on the SLB theory, that is, adaptive behaviours occurred not only in government officers but also in the users/clientele, and appeared at all levels of policy implementation.

Erasmus (2014) argued that street-level bureaucrats often exercised a variety of 'coping' practices, for instance, rule breaking, careless rule enforcement, and suspicion of patients. Similar coping behaviours were apparently reflected by the practices of the respondents of this study, such as promoting the card in Myanmar (rule breaking), zoning system (careless rule enforcement), and perceiving that migrants were taking advantage of the system unfairly (suspicion of patients).

II. Gaps and dissonance in policy objectives

The implementation problems of the HICS could not be analysed without taking into account influences from other ministries. It was apparent that the MOPH, the MOI, and the MOL had not worked in harmony. As long as the MOPH concerned itself purely with health matters and ignored citizenship status problems, measures to protect health of migrants could not function sustainably and effectively (just as the employment status of MHWs had not been resolved, even though it was widely accepted that MHWs were key human resources in the health system). The MOI focused only on national security

through the registration process, without an effective long term plan to deal with unregistered migrants aside from just deporting them. The MOL limited its function only to migrant workers with employers, ignoring the fact that not all migrants are workers, and some are self-employed.

When a policy was hastily endorsed (the OSS for instance) with different policy directions, it created confusion in the field. This problem was intermingled with vague policy messages, for example, diverse interpretations of the term 'dependants'. Furthermore, NGOs were dragged into this confusion as support for public authorities (for example, offering financial support to health facilities for hiring MHWs) but the involvement of NGOs was quite haphazard. A reliance on NGOs to deal with gaps in ministerial policies might not be successful in the long run (like when financial support for MHWs ended in 2014).

Note that the conflicting policy directions were present even within the same ministry. An instance was the tension between the PPHO and some hospitals in the province. While the PPHO wished to have as many card holders as possible, in order to gain better risk sharing, some hospitals perceived that such idea might create a financial risk for them because it might aggravate adverse selection. Some facilities imposed a special rule that allowed only the healthy to buy the card in order to maximise their financial benefit from the policy, then used this money to subsidise unpaid debts from treating the uninsured (despite the fact that some hospitals saw overall financial gain even without such special rule).

Interestingly, the researcher noticed that there was a specific pattern where respondents opined that migrants were exploiting the Thai healthcare system. The majority of respondents expressing this opinion were providers in high-level health facilities, particularly the provincial hospital, while health staff in the health centres did not show significant concerns over this. Potential explanations are as follows. Firstly, insurance cards were not purchased at health centres. Thus, health staff at provincial/district hospitals were likely to face more migrant-related work than those at health centres, even excluding dealing with counterfeit brokers. Secondly, the provincial hospital was

the last station of the referral line and the provincial in-house regulation that waived the gate-keeping mechanism might create room for migrants (and also Thai patients) to bypass the health centres. This situation might make providers in higher-level facilities feel that they were shouldering too much burden from treating migrants who were supposed to be cared for at lower-level hospitals. Though the PPHO tried to manage this problem by setting a fixed payment per visit that the referred hospital could be reimbursed from the referring hospital, this was still perceived as unfair treatment by staff at higher-level facilities, since the unit cost in bigger hospitals tended to be higher than in smaller hospitals (see the response of RN_RNH1 in 'Withdrawal of gate-keeping regulation within the province' subsection).

Another important problem was a lack of feedback mechanism from local implementers to policy makers, which intensified the confusion in the implementation of the HICS. Feedback in this regard encompassed both (1) a linkage between the central authorities and the implementing agencies, and (2) communication means that could link the service users to the central authorities. This research found that though there existed some vestigial feedback channels that linked the local implementers to policy makers, such as a launch of consultative letters, or attendance at seminars or consultative meetings arranged by the MOPH, a feedback mechanism that could help service users voice their concern directly to policy makers was completely missing. This omission might derive from the fact that some local providers did not understand the root cause of migrant health problems and did not serve as a mediator that helped properly connect the users to the central authorities.

III. Economic implications of being legal

A striking finding of the fieldwork was a concern over the economic burden when entering the registration/legislation process. While the literature review highlighted that language and cultural differences were important barriers in providing services, both healthcare providers and migrant patients mentioned this less compared to the economic constraint. This phenomenon might be due to the fact that cultures and life styles of the

Burmese and the Thai residents in Ranong province were quite alike. Thailand and Myanmar are both agriculture-based countries, and the majority of the residents are Buddhists. Though the language difference was quite distinct, some Burmese (for example, the respondents, MK2 and MM3) were able to speak Thai quite fluently. This study also presented the case of a Thai national building up family with a Burmese migrant (MK4). Therefore, the economic constraint regarding registration process might be more worrisome than language and cultural barriers.

Almost all migrant respondents shared experiences of getting involved with brokers during the registration process. Some employers expressed unwillingness to pay the work permit fee and the health card premium for their employees since the fees were too costly (even though all the employers involved in this study deducted those fees in monthly instalments from their employees' salary). This finding was consistent with the earlier study by Paithoonpong and Chalamwong (2011) suggesting that some employers were reluctant to enter their employees in the registration process. The Economist (2013) revealed that some migrants were hoodwinked by unscrupulous brokers. Some brokers were even engaged in trafficking syndicates, which smuggled migrant hopefuls with a promise of better paying jobs in Thailand. Motlagh (2012) contended that there were some 'good brokers', who assisted migrants and employers to pass through the registration process straightforwardly and lawfully, or even helped their migrant clients tackle corrupt officials. However, the chance of meeting 'good brokers' was somewhat unpredictable. It should be noted that though this research did not aim to explore the corruption issues in Thailand, it is difficult for the government to deny that Thai officialdom may be complicit in labour abuses, and that most of the time, Thai governments have treated the trafficking issue like the elephant in the room (Parkinson, 2015, Environmental Justice Foundation, 2014).

This problem became more complex when it was intermingled with instability of policies, which caused frequent openings and re-openings of the registration period (see Chapter 5). Most migrants (and employers) were confused by the frequent changes in policy and this situation indirectly created room for (unscrupulous) brokers or private intermediaries to intervene. Suphanchaimat and Napaumporn (2015) exemplified this

point by showing a case of a Laotian immigrant from Pitsanulok province, who joined the NV process at least five times (that meant this migrant possessed five passports). Such an example clearly contradicted the legal intention, as once an immigrant completes the NV, he/she will be fully legalised and there is no need to undertake the NV again.

Another important observation from the fieldwork was that what migrants were really concerned about was not the cost of the health card alone, but the cost of the 'whole package of documents' (health card, work permit and passport). This implied that though in theory the junta expected that the reduction in the card premium and tying the health insurance with work permit might give workers more legal protection from ruthless employers and encourage employers to buy the card for their employees; in practice, it merely created new opportunities for graft.

As long as the cost of being 'legalised' is too expensive, migrants are likely to engage with fraudulent brokers (or even with traffickers). Besides, this problem might create negative impacts in terms of public health threats such as a risk of untreated infectious diseases where some unhealthy migrants are left uninsured. Without adequate measures to tackle the root cause of illegality, such a vicious cycle cannot be broken, regardless of how many OSS policies are launched in the future.

6.5 Conclusion

This chapter has shed light on the perceptions of healthcare providers and relevant stakeholders involved in the implementation of the HICS. With an unclear policy message and lack of effective monitoring system, an adaptation of policy was predictable. Some local officers adapted the policy in various ways that might optimise their benefits and these adaptations could bring about both 'positive' and 'negative' impacts on service users. Some adaptive practices, such as imposing an extra-rule that barred unhealthy migrants from being insured, might be regarded as a deviation from the public insurance concept, while some practices, for instance, a removal of fee schedule for some treatment items, might be considered an innovative means for promoting the

health of migrants. As a matter of fact, problems arose at a very early stage of the policy process, starting from policy formulation, as a result of the dissonance in policy directions between ministries and even between authorities in the same ministry. In addition, the implementation problem was more nuanced than just a deviation from the policy objectives since the policy objectives might not be clear from the outset. Charitable organisations played an important role in filling the gaps in public services, but this support might not be sustainable. It is clear that the policy adaptation could occur at all levels, from policy makers at the MOPH, to executive staff at the PPHO, and to frontline health staff at local facilities. The lack of a feedback mechanism was noticeable, and this intensified the complexities of implementation. The cost of registration was a vital concern from the viewpoint of service users. Adequate support from employers was the factor that determined participation in the registration process and the purchase of the insurance card. A reliance on brokers in passing through the registration process was common in both migrants and employers, but this might create opportunities for graft if they encountered unscrupulous brokers.

Chapter 7: Impact of the HICS on utilisation and out-of-pocket payment of the beneficiaries

7.1 Introduction

This chapter investigates the effect of the HICS on its insurees at the point of care. The study aims to fill the knowledge gaps (mentioned in Chapter 3) that occur because, since the introduction of the HICS in 2004, very little is known about the outcomes of the policy. In addition, earlier research often missed the consideration of using uninsured migrants and the UCS as 'natural comparators'.

This chapter commences with a brief description of methods used (for more detail, see Chapter 4), followed by the results subsection. Each part begins with the findings from descriptive statistics. Next, results from univariate and multivariate analyses, with a battery of econometric techniques, were employed. The chapter is completed by the discussion subsection where the important elements of the results are explained and linked with the earlier qualitative chapters.

7.2 Methods

This subsection contains two parts: (1) data source, and (2) statistical methods and variable management, with contents as follows.

I. Data source

The study employed facility-based data, which recorded actual IP and OP attendance of all patients at the facilities. Corresponding with the study areas in qualitative chapters, data from Ranong provincial hospital and Kraburi district hospital were explored.

For OP use, since a patient can enjoy services at health centres, which are the smallest units of the public primary care network at subdistrict level, data from two health

centres, namely, health centre A from headquarter (Muang) district and health centre B from Kraburi district, were included. These health centres are situated in the subdistricts with a high density of migrant populations.

The data were tracked over the last five fiscal years (FYs), that is, from 1 October 2010 to 30 September 2015. However, data availability varied by facilities. For instance, OP data of the health centres were available only from FY 2012, hence the OP utilisation analysis was exercised only from FY 2012 onwards. Of note is that newborn admissions were excluded in most analyses except for the analysis by descriptive statistics. This practice was performed in order to (1) avoid double counting with delivery admission, and (2) prevent misclassification bias derived from the fact that in practice there was a slight delay in buying the insurance card for a newborn after birth.

II. Statistical methods and variable management

The main outcome variables were (1) volume of use (visits/person/year) and (2) out-of-pocket payment or OOP (in Baht/visit). Note that OOP in this setting was an exact amount paid by a patient in each visit, not a cost incurred by health facilities. For IP OOP, there was a limitation in data availability, that is, the individual IP OOP data of Ranong hospital were incomplete due to a recent change in the electronic IP data collection software in Ranong hospital. Thus the IP OOP analysis was performed only in Kraburi hospital.

For utilisation analysis, as the dataset was collected as an individual record, data management was needed before applying the econometric techniques. Therefore, multiple visits per individual in a given fiscal year needed to be linked together via the unique identifier, namely, the hospital number or HN. The researcher regarded HN as the most appropriate unique identifier in this setting, despite recognising that it was not flawless. Further discussion on this point is presented later in the discussion subsection of this chapter and in Chapter 8.

The key independent variable was the insurance variable, coded 0 for the uninsured, 1 for the HICS, and 2 for the UCS. With respect to traditional epidemiological or clinical research, the HICS was like exposure/treatment group, while the uninsured and the UCS were control groups (control 1 and control 2, respectively).

Aside from the insurance status variable, the analysis also took into account the effect of the key confounders/covariates, namely, sex (male/female), age (years), disease status (in terms of ICD10 and DRG), employment status (employed/unemployed), hospital level (provincial hospital/district hospital), and domicile (registered address).

These covariates came together with the raw dataset. However, in the econometric analysis, some variables were slightly modified to have more explanatory power, for instance, age was converted to age group (0-7 years, 8-15 years, 16-30 years, 31-60 years, and over 60 years) and domicile was converted to hospital proximity (any individual with address located in the same district as the facility was coded 1 [proximity] and coded 0 [non-proximity] if otherwise). The researcher also added a variable that captured the change in contextual environment of the policy over time by including the OSS variable (post-OSS/pre-OSS). The OSS variable was coded 0 if utilisation occurred before FY 2015, and coded 1 if after FY 2015. Subtle detail about the management of variables is presented immediately before the presentation of each econometric technique in the results subsection.

The most appropriate techniques in this setting were Poisson regression for IP utilisation, Negative binomial regression for OP utilisation and Two part model (TPM) for both IP OOP and OP OOP. As expounded in Chapter 4, the TPM was basically a concoction of techniques that captured (1) probability of making payment and (2) the amount paid for records with a payment (at any Baht). Before acquiring the most fitted technique(s), the researcher exemplified an application of some key conventional techniques and briefly explains why the selected techniques were more suitable in this setting. The demonstration of a variety of econometric techniques here is to justify why the analysis was performed in such a manner rather than a comparison of results between different techniques.

In order to address the endogeneity effect, subgroup analysis was performed by focusing on only migrant patients. This step can be considered sensitivity analysis as well since the researcher assumed that the endogeneity effect existed. In this regard, the 'Instrumental variable' technique was applied, and is displayed after the full-sample analysis.

Then, the researcher also conducted another round of subgroup analysis, but excluded delivery conditions. This was done to assess the change of multivariate analysis results after excluding delivery-related records, because delivery conditions were common causes of visits in migrant patients in the descriptive analysis. Note that the results for non-delivery subgroup analysis are displayed in Appendix 14 instead of the main text since they did not show a remarkable difference from the results from full-sample analysis.

It should be noted that it is possible that an insured migrant was coded 'HICS' in the first visit and 'uninsured' in the second visit (where, for example, his/her insurance card had expired). Besides, the uninsured group comprised both Thai and non-Thai patients. Literally, Thai nationals cannot be coded as 'uninsured' as they are insured by either of the three main public insurance schemes (the UCS, the SSS, and the CSMBS). However, in practice a Thai patient may be willing to pay out-of-pocket for that visit. This can happen when a Thai patient asks for extra services (such as private ward) which is not directly related to his/her illness and a physician agrees to provide such services only if the patient accepts to pay out-of-pocket. The inconsistency in insurance coding as mentioned above may create misclassification bias, and this inevitably affects the estimate's accuracy. To avoid such a problem, any individuals that changed the insurance status (around 6% of the entire records) were dropped from the analysis (for example, changing from UCS to uninsured, or changing from HICS to uninsured, and vice versa). Besides, records of Thai nationals that were coded as uninsured were excluded. Of course, this approach reduced the power of the analysis by decreasing the number of observations, but such an approach enabled the researcher to avoid a problem of misclassification bias by sacrificing only a small amount of data.

7.3 Results

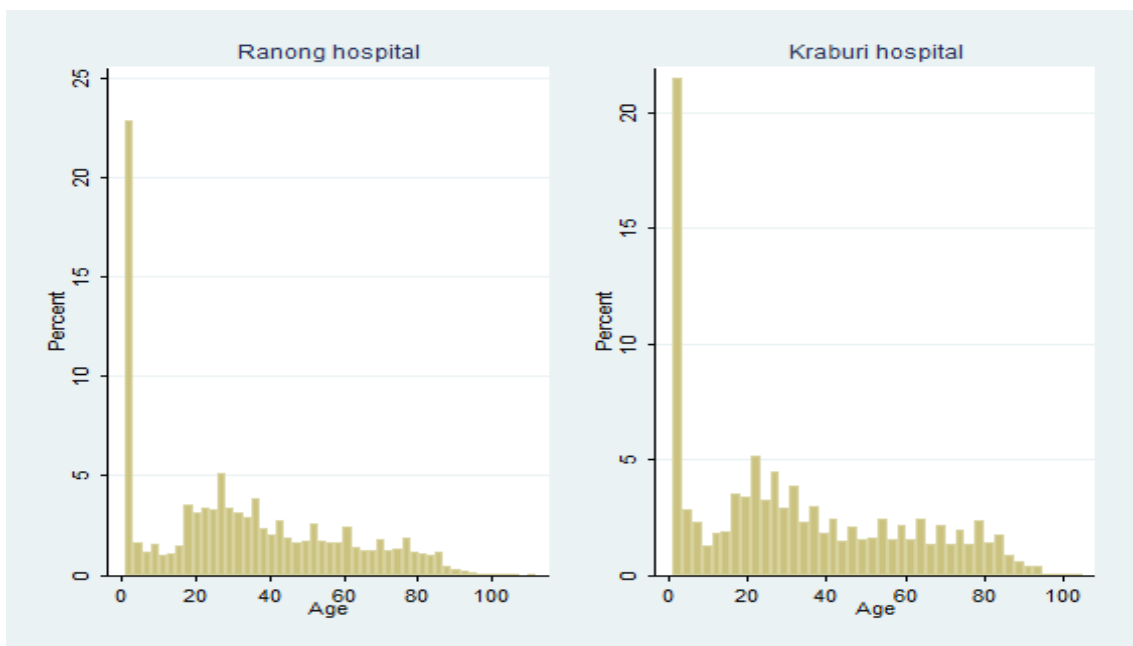
This subsection is categorised into four parts: (1) inpatient utilisation, (2) outpatient utilisation, (3) inpatient out-of-pocket payment, and (4) outpatient out-of-pocket payment.

I. Inpatient utilisation

Overview of the data

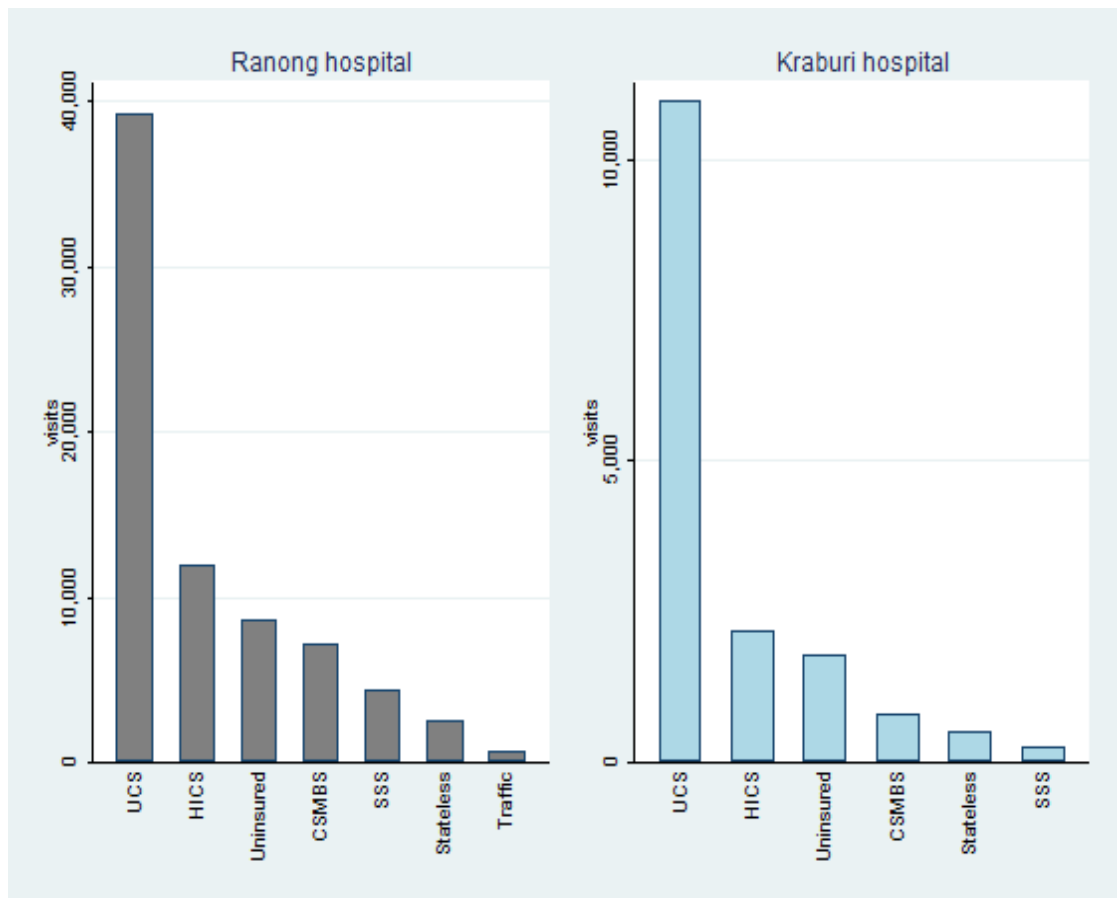
A total of 111,725 records between FY 2011 and FY 2015 were retrieved. About 83% of records were drawn from Ranong hospital (92,925 records from Ranong hospital). The raw dataset contained a large volume of newborn admissions (ICD10 of principal diagnosis coded as Z380), constituting about 20% of the entire data size, this can be seen in Figure 27 below, which shows a large proportion of patients with age less than 1.

Figure 27 Percentage of IP utilisation volume by age



Since, in both hospitals, the top three most common insurance schemes are (1) the UCS, (2) the uninsured, and (3) the HICS (see Figure 28), the analysis from this point onwards focuses on these three entitlements.

Figure 28 IP utilisation volume by insurance schemes

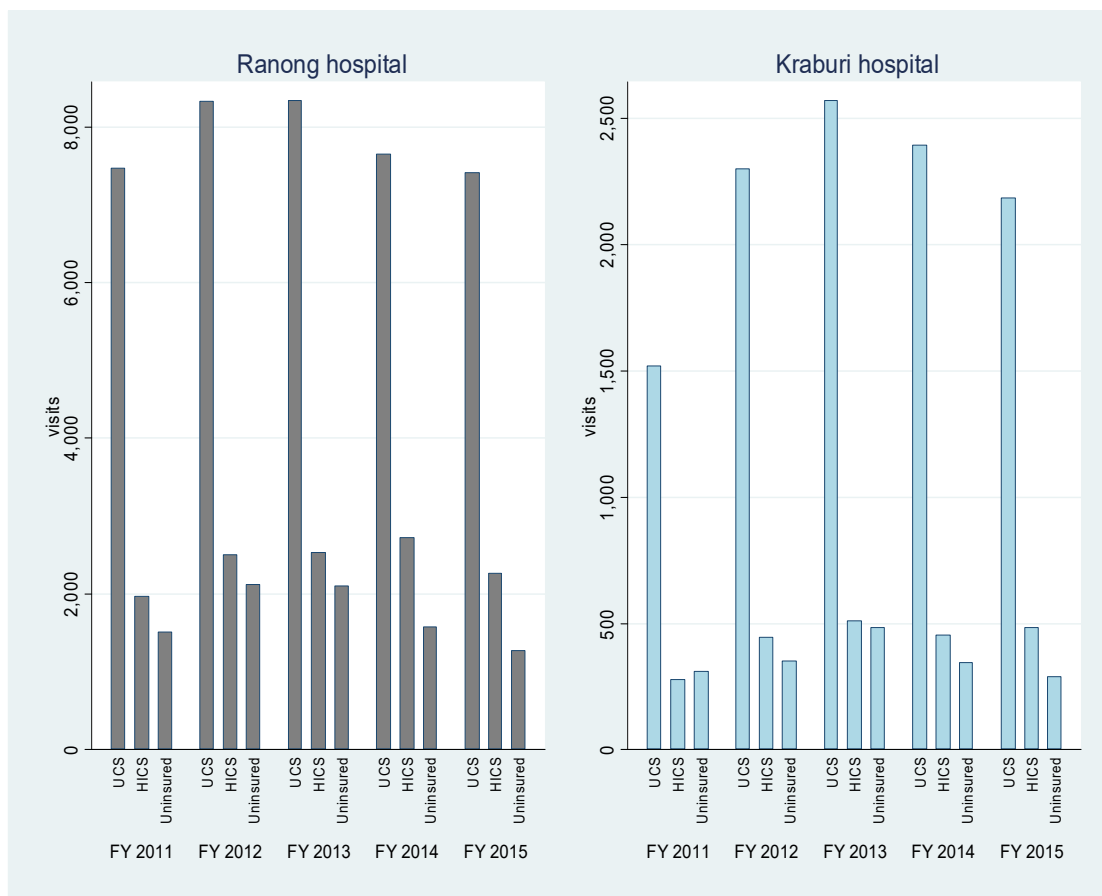


Note:

1. The term 'Stateless', appearing in the graph, refers to stateless population, which is insured by the HI-PCP (details in Chapter 5).
2. The term 'Traffic' refers to traffic insurance for road accidents.

Amongst the top three, the UCS was the most common entitlement in all years. Overall, admissions of UCS patients constituted around two thirds of all admissions (~67%), followed by the HICS (~19%), and the uninsured (~14%), see Figure 29.

Figure 29 IP utilisation volume by the top three most common insurance schemes by years



Overall utilisation rate

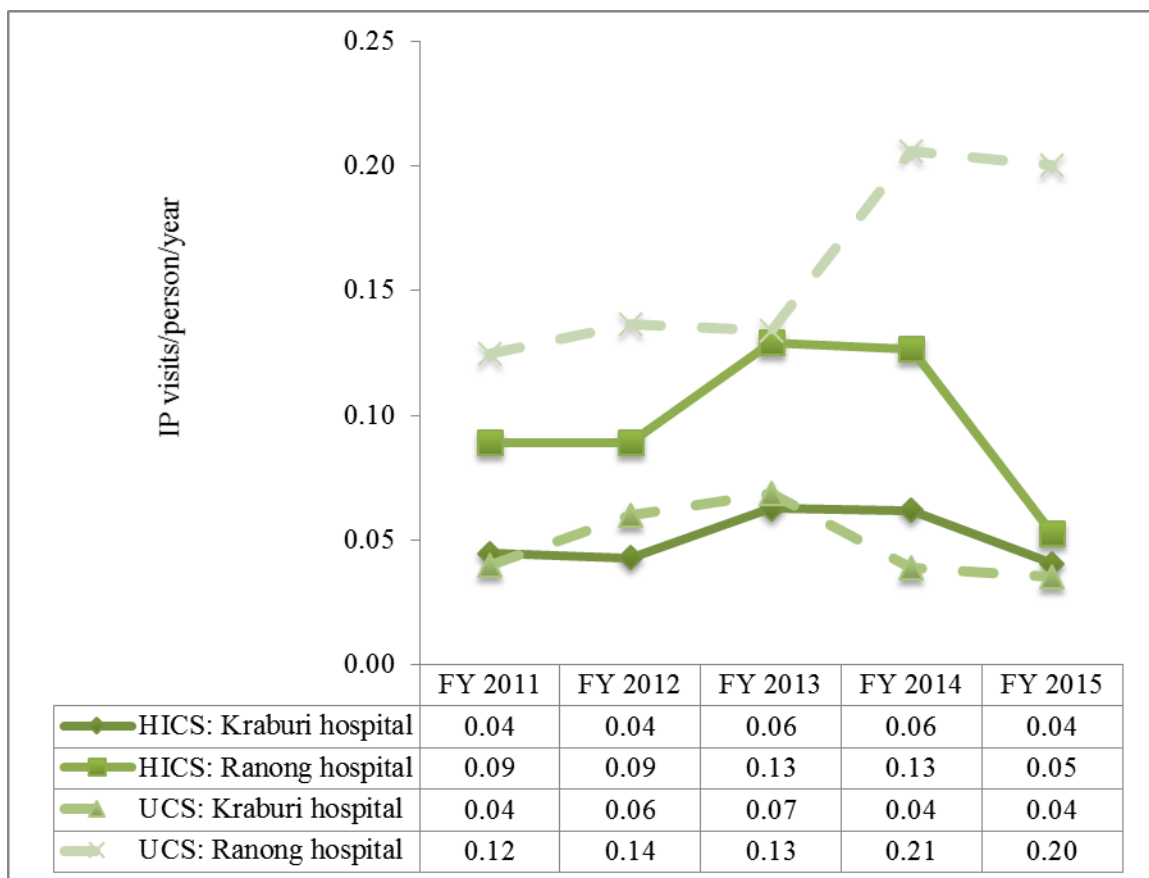
A crude analysis of utilisation rate of UCS beneficiaries and card holders is as follows. The numerator was volume of use by each beneficiary type in a given fiscal year while the denominator was the number of registered beneficiaries in each hospital, see Appendix 12 for more calculation detail. Of note is that because there was no information about the entire unregistered migrant residents in Thailand, the utilisation rate of uninsured migrants could not be calculated.

Overall, the utilisation rate of the provincial hospital was twice as large as that of the district hospital in both beneficiary types. The utilisation rate of registered migrants was lower than of UCS beneficiaries, particularly at Ranong hospital. In Kraburi hospital,

the IP utilisation rates of both insurance types were almost on par, except in 2013 and 2014 (a period before the OSS era when the HICS policy was relatively open [see Chapter 5]), when the utilisation rate of migrants became slightly larger than the UCS.

It is noteworthy that despite frequent changes in the HICS during the last few years, there was little positive effect on the utilisation of migrant card holders. On the other hand, in FY 2015, during the OSS era, the utilisation of the HICS beneficiaries at provincial hospital declined about 50% compared to the year before. This phenomenon might be because of a surge in the number of registered migrants (which meant a sharp increase in the denominator) in response to the OSS, see Figure 30.

Figure 30 IP utilisation rate between the HICS and the UCS beneficiaries by years



Descriptive statistics and univariate analysis

Personal characteristics of the patients across insurance schemes

Findings from descriptive statistics and univariate analysis between individual personal attributes and insurance status are presented in Table 20 (N = 74,722 admissions, excluding newborn admissions and restricting the analysis only to the three most common insurance schemes). ANOVA test and Chi-square statistics were applied.

It was found that females outnumbered males in all beneficiary types. After excluding normal labour admissions, the proportional difference between sexes in all beneficiary types markedly declined but the number of admissions by females was still larger than males. HICS admissions were concentrated in the working age groups with a small portion of patients aged under 7 (~6%). In contrast, over one fifth of the admissions of the uninsured were from children under 7 years. The UCS group had the largest proportion of admissions of the over 60s, compared to other beneficiary types (~26%). The majority of patients were admitted to the facility close to their residence and almost 90% of card holders were employed. HICS patients accounted for 15% and 20% off all admissions at district hospitals and provincial hospitals respectively.

Table 20 Comparing total admissions by personal attributes and insurance schemes

Variable	Uninsured N = 10,382	HICS N = 14,165	UCS N = 50,175	Test (P-value)
Age—mean (SD)	26.2 (18.7)	30.9 (13.7)	39.2 (26.5)	ANOVA (<0.001)
Age group—n (%)				
• ≤ 7 y	2,327 (22.4)	841 (5.9)	8,302 (16.6)	Chi-square (<0.001)
• 8-15 y	578 (5.6)	109 (0.8)	3,468 (6.9)	
• 16-30 y	3,700 (35.6)	6,830 (48.2)	9,651 (19.2)	
• 31-60 y	3,215 (31.0)	5,963 (42.1)	15,597 (31.1)	
• > 60 y	560 (5.4)	422 (3.0)	13,156 (26.2)	
Female—n (%)	5,935 (57.7)	9,766 (68.9)	26,596 (53.0)	Chi-square (<0.001)
Female (non-delivery) —n (%)	4,478 (51.7)	6,612 (60.1)	24,466 (50.9)	Chi-square (<0.001)
Proximity to a facility—n (%)	6,376 (63.4)	11,051 (83.6)	35,648 (71.1)	Chi-square (<0.001)
Employed—n (%)	5,428 (57.6)	12,124 (90.0)	21,987 (55.3)	Chi-square (<0.001)

Variable	Uninsured N = 10,382	HICS N = 14,165	UCS N = 50,175	Test (P-value)
Facility level—n (% in row)				Chi-square (<0.001)
• District hospital	1,782 (11.9)	2,172 (14.6)	10,974 (73.5)	
• Provincial hospital	8,600 (14.4)	11,993 (20.1)	39,201 (65.5)	

Note: Missing data were small in number and were excluded from the analysis above.

Disease status

The top five most common principal diagnoses, for the card holders and the uninsured, were mostly related to normal delivery. This finding was contrast to the UCS, where the top five list seemed to be more diverse, including delivery-related conditions, infectious and chronic diseases. The diseases/diagnoses listed here are coded by ICD10, see Table 21.

Table 21 Top five most common principal diagnoses by insurance schemes

Insurance	Diagnosis by ICD10	Admissions—n (%)
Uninsured	1. O800: Normal vertex delivery	1,010 (9.8)
	2. O758: Other specified complications of labour/delivery	376 (3.7)
	3. O820: Delivery by elective caesarean section	282 (2.8)
	4. A09: Dengue fever	252 (2.5)
	5. O342: Maternal care due to previous caesarean section	219 (2.1)
HICS	1. O800: Normal vertex delivery	2,736 (19.5)
	2. O758: Other specified complications of labour/delivery	574 (4.1)
	3. O339: Maternal care of cephalo-pelvic disproportion	493 (3.5)
	4. O342: Maternal care due to previous caesarean section	316 (2.3)
	5. O700: First degree perineal tear during pregnancy	246 (1.8)
UCS	1. O800: Normal vertex delivery	1,777 (3.8)
	2. A09: Diarrhoea and gastroenteritis	1,335 (2.7)
	3. J209: Acute bronchitis	1,323 (2.7)
	4. J441: COPD with acute exacerbation	1,301 (2.6)
	5. A90: Dengue fever	1,251 (2.5)

To establish disease severity, length of stay and adjusted relative weight (adjRW) were analysed by ANOVA test and Chi-square statistics. The adjRW is a disease severity indicator for inpatient care; the larger the weight is, the more severe that admission appears to be. It appeared that the level of disease severity in the UCS patients was

slightly greater than for HICS and uninsured patients but with statistical significance (as evidenced by longer length of stay and larger ratio of patients with catastrophic illness with P-value <0.001), see Table 22.

Table 22 Comparing disease severity between insurance schemes

Disease severity by:	Uninsured N = 10,382	HICS N = 14,165	UCS N = 50,175	Test (P-value)
Mean adjRW (SD)	0.9 (1.2)	0.8 (1.1)	0.9 (1.3)	ANOVA (<0.001)
Mean length of stay—days (SD)	3.3 (5.3)	3.2 (7.0)	4.1 (9.7)	ANOVA (<0.001)
No of admissions with catastrophic illness—n (%)	1,411 (15.4)	1,722 (13.7)	10,392 (23.6)	Chi-square (<0.001)

As the information on length of stay and adjRW is already embedded in the DRG, in this step, a new binary variable, 'catastrophic illness', was created. An admission with DRG^{xvi} of either XXX2, or XXX3, or XXX4, was coded 1, while an admission with DRG of XXX1 was coded 0. The multivariate analysis in the next step uses DRG as a proxy for disease severity.

Difference of utilisation volume between insurance schemes and between pre-OSS and post-OSS

For the analysis in this step and in the multivariate analysis in the next subsection, the dataset was converted from per visit to per person-year (by linking multiple visits via a patient's HN). Comparing the number of yearly admissions across beneficiary types, UCS patients seemed to experience the greatest number of services; followed by the HICS and the uninsured respectively (1.3 v 1.1 v 1.0 admissions/person/year). The differences across groups showed statistical significance using both the ANOVA test and the Kruskal-Wallis test, see Table 23.

^{xvi} DRG is composed of five digits. The last digit, ranging from 1 to 5, reflects the degree of severity for that admission (1 = mild, 2 = moderate, 3 = severe, 4 = catastrophic). In this study, the researcher considered the last digit of 2-4 as 'catastrophic illness' since in practice it was difficult to distinguish between 'moderate', 'severe', and 'catastrophic' severity levels.

Table 23 Comparing mean and median numbers of yearly admissions by insurance schemes in all years

Insurance	Mean (SD)	Median (IQR)	Min	Max	ANOVA P-value	Kruskal- Wallis P-value
Uninsured	1.0 (0.2)	1 (0)	1	6	<0.001	<0.001
HICS	1.1 (0.4)	1 (0)	1	11		
UCS	1.3 (0.8)	1 (0)	1	20		
Total	1.2 (0.7)	1 (0)	1	20		

Comparing the volume of yearly admissions within each patient group, the change in yearly admissions between pre- and post-OSS periods was infinitesimal, and this finding was supported by the insignificant P-value in both Student's t test and Wilcoxon rank-sum test, see Table 24.

Table 24 Comparing mean and median numbers of yearly admissions in each insurance group between pre-OSS and post-OSS

Insurance	Mean (SD)		Median (IQR)		P-value	
	Pre-OSS	Post-OSS	Pre-OSS	Post-OSS	Student's t	Rank-sum
Uninsured	1.0 (0.2)	1.0 (0.2)	1 (0)	1 (0)	0.157	0.056
HICS	1.1 (0.4)	1.1 (0.4)	1 (0)	1 (0)	0.787	0.594
UCS	1.3 (0.8)	1.3 (0.9)	1 (0)	1 (0)	0.146	0.922
Total	1.2 (0.7)	1.2 (0.8)	1 (0)	1 (0)	0.066	0.491

Multivariate analysis

Multivariate analysis was performed. The dependent variable was number of admissions per person per year. The main independent variable of interest was beneficiary status. Other covariates were age group (0-7 years, 8-15 years, 16-30 years, 31-60 years, and over 60 years), sex (male/female), level of facility (provincial hospital/district hospital), history of catastrophic illness (ever had catastrophic illness/never had catastrophic

illness), time (pre-OSS/post-OSS) and facility-domicile proximity (proximity/non-proximity). The OLS was applied.

Robust standard error was used to adjust for time varying effect over an individual. The OLS confirmed the findings from univariate analysis, that is, the HICS had a positive effect on volume of use, compared to the uninsured by +0.05 admissions/person/year; but this effect was still smaller than the UCS (+0.15 admissions/person/year, compared to the uninsured).

'Ever had catastrophic illness' was the largest effect modifier on volume of use (+0.40 admissions/person/year). The older groups tended to have more admissions than the younger groups. Proximity to health facility increased the volume of services used with statistical significance. However, the overall admission volume seemed to decline after the advent of the OSS, see Table 25.

Table 25 Multivariate analysis of IP utilisation volume by the OLS

Variable (R ² = 0.087)	Coef.	Std. Err.	P-value	[95% Conf. Interval]
Insurance (v uninsured)				
• HICS	0.050	0.006	<0.001	0.038 0.062
• UCS	0.154	0.005	<0.001	0.143 0.164
Age group (v ≤7 yr)				
• 8-15	-0.083	0.010	<0.001	-0.102 -0.064
• 16-30	-0.032	0.008	<0.001	-0.048 -0.016
• 31-60	0.034	0.010	0.001	0.015 0.054
• >60	0.169	0.017	<0.001	0.136 0.202
Female (v male)	-0.005	0.008	0.518	-0.021 0.011
Proximity (v non-proximity)	0.120	0.008	<0.001	0.105 0.135
Ever had catastrophic illness (v never)	0.402	0.014	<0.001	0.374 0.430
Post-OSS (v pre-OSS)	-0.033	0.007	<0.001	-0.047 -0.018
Provincial hospital (v district hospital)	-0.003	0.011	0.816	-0.024 0.019
Constant	0.917	0.015	<0.001	0.888 0.945

The researcher checked a possibility of using alternative techniques, such as the RE model and the FE model. It was found that the RE model produced similar results to the

OLS. This is because the between entity error (σ_u) approached zero as the length of time was short while the number of panels was proportionally large (too many N in a short time length), and the majority of patients were admitted only once. This situation attested that the conventional OLS, with robust standard error, sufficed. The FE model is not appropriate in this case since it cannot capture the effects of time-invariant covariates, for example, sex and domicile.

With reference to Chapter 5, some interviewees complained that sick migrants 'overly' enjoyed services. That means it is imperative to assess whether the HICS really accounted for such a claim. Thus, an interaction term between beneficiary status and catastrophic illness was added to assess this claim.

In addition, an interaction term between beneficiary status and OSS was put into the equation to examine if the recent registration measure really affected the service utilisation of migrants.

After adding the interaction terms, the effect of 'ever had catastrophic illness' on volume of use was reduced from +0.40 to +0.06 admissions/person/year. This was because the interaction term between the HICS and catastrophic illness took part of the credit from the catastrophic illness variable. Being insured by the HICS and having history of catastrophic illness contributed to an additional effect of the number of visits by +0.23 admissions/person/year, but this interaction effect was still only half of the size of the interaction between the UCS and catastrophic illness (+0.43 admissions/person/year).

Increasing age and residing close to a facility were significant factors that appeared to boost the number of admissions. The OSS by itself significantly reduced the number of IP admissions in the uninsured group, despite a trivial effect size. This might be explained by a more stringent approach towards unregistered migrants by the junta. Note that the interaction term between the OSS and the HICS patients did not yield statistical significance, see Table 26.

Table 26 Multivariate analysis of IP utilisation volume by the OLS with interaction terms

Variable ($R^2 = 0.094$)	Coef.	Std. Err.	P-value	[95% Conf.	Interval]
Insurance (v uninsured)					
• HICS	0.014	0.005	0.010	0.003	0.025
• UCS	0.088	0.005	<0.001	0.077	0.098
Ever had catastrophic illness (v never)	0.057	0.012	<0.001	0.033	0.081
Insurance##Catastrophic illness					
• HICS##Ever had catastrophic illness	0.225	0.031	<0.001	0.165	0.284
• UCS##Ever had catastrophic illness	0.429	0.023	<0.001	0.385	0.473
Age group (v ≤ 7 yr)					
• 8-15	-0.081	0.010	<0.001	-0.100	-0.062
• 16-30	-0.039	0.008	<0.001	-0.054	-0.023
• 31-60	0.030	0.010	0.003	0.010	0.049
• >60	0.151	0.017	<0.001	0.118	0.184
Female (v male)	-0.008	0.008	0.351	-0.024	0.008
Proximity (v non-proximity)	0.120	0.008	<0.001	0.105	0.135
Post-OSS (v pre-OSS)	-0.020	0.007	0.005	-0.034	-0.006
Insurance##OSS					
• HICS##Post-OSS	-0.000	0.012	0.994	-0.023	0.022
• UCS##Post-OSS	-0.019	0.013	0.141	-0.044	0.006
Provincial hospital (v district hospital)	-0.004	0.011	0.732	-0.025	0.017
Constant	0.974	0.014	<0.001	0.947	1.001

Note: Likelihood ratio (LR) test displayed statistical significance (P-value <0.001), implying that an addition of interaction terms into the equation was valid. Also, the interaction terms increased the explanatory power of the equation (as R^2 was enlarged to 0.094).

Other interaction terms, namely the interaction between insurance and age group and the insurance and facility level, were already checked to justify their inclusion in the equation. The findings revealed that the LR test did not show statistical significance after the interaction terms were added, implying that these additional interaction terms did not significantly improve the goodness of fit of the equation. As a result, the result tables with insurance##age-group and insurance##facility-level interaction terms are not displayed in the main text, but readers are still able to assess them in Appendix 13.

One of the technical concerns over the OLS is a heteroskedasticity problem. Breusch-Pagan/Cook-Weisberg test revealed that heteroskedasticity existed in the above OLS

with P-value <0.001. Therefore, to avoid heteroskedasticity, the Poisson regression was used instead. In essence, the Poisson regression better fits the given dataset since the outcome variable is a count number. The results are displayed in terms of incidence rate ratio (IRR).

Table 27 shows that, based on the Poisson regression, the HICS had an additive effect on volume of use about +1.7% compared to being uninsured. This finding is very close to the OLS in Table 26, which suggested that the HICS tended to increase yearly admissions of an insured migrant by +1.4% (the figure, +1.4% was calculated by dividing the additive effect of the HICS of 0.014 yearly admissions by the constant term of 0.974). If the HICS effect was combined with history of catastrophic illness, the volume of use might increase by 19.3% as exhibited in the interaction term (but still lower than the interaction effect between the UCS and catastrophic illness), resulting in an overall rise in utilisation volume of 21.3% (19.3%*1.7%).

The Chi-square goodness of fit test yielded P-value close to 1.000, implying that the Poisson regression fits reasonably well with the data.

Table 27 Multivariate analysis of IP utilisation volume by the Poisson regression with interaction terms

Variable	IRR	Std. Err.	P-value	[95% Conf.	Interval]
Insurance (v uninsured)					
• HICS	1.017	0.005	0.001	1.007	1.026
• UCS	1.087	0.005	<0.001	1.077	1.096
Ever had catastrophic illness (v never)	1.057	0.012	<0.001	1.034	1.080
Insurance##Catastrophic illness					
• HICS##Ever had catastrophic illness	1.193	0.028	<0.001	1.140	1.249
• UCS##Ever had catastrophic illness	1.336	0.021	<0.001	1.295	1.379
Age group (v ≤7 yr)					
• 8-15	0.930	0.008	<0.001	0.914	0.945
• 16-30	0.965	0.006	<0.001	0.952	0.977
• 31-60	1.026	0.008	0.002	1.009	1.042
• >60	1.118	0.014	<0.001	1.092	1.145
Female (v male)	0.993	0.007	0.327	0.981	1.007
Proximity (v non-proximity)	1.106	0.007	<0.001	1.092	1.119

Variable	IRR	Std. Err.	P-value	[95% Conf. Interval]
Post-OSS (v pre-OSS) Insurance##OSS	0.982	0.007	0.006	0.969 0.995
• HICS##Post-OSS	1.001	0.011	0.961	0.980 1.022
• UCS##Post-OSS	0.988	0.011	0.268	0.968 1.009
Provincial hospital (v district hospital)	0.997	0.009	0.711	0.980 1.014

Note: Constant term was omitted because the result was shown in terms of IRR.

Subgroup analysis—Addressing the endogeneity problem

One of the important concerns in econometrics is whether an endogeneity effect persists. Without an appropriate awareness of endogenous variable(s), it was very likely that a biased estimate(s) would be produced.

Technically, an endogenous variable is an independent variable correlated with the error term. A concrete example is when there is a causality loop between the independent and dependent variables (ie X causes Y and Y causes X). Thus, the IV was proposed to address this bias. The rationale of the IV was rather than regressing the outcome variable directly on the endogenous variable, the calculation is executed in two steps: first, regressing the endogenous variable on 'instrument(s)', and second, regressing the outcome variable on the predicted endogenous variable. This technique helped circumnavigate the endogeneity problem as it could be explained that X affected Y only through intermediate variable(s), namely, the instrument(s) (Cerulli, 2011). For this study, it was possible that, intuitively, by focusing on the HICS and the uninsured, insurance status could create an endogeneity problem. This was because even unregistered migrants were able to buy the insurance (though in practice, as stated in Chapter 6, there was confusion over this policy message amongst service providers and users). In such a situation, the insurance could be postulated as an endogenous variable since a patient with frequent visits was more likely to seek the insurance to accommodate his/her needs than those with fewer visits. A challenge in tackling the IV was seeking a 'good instrument', which satisfied the following conditions: (1) the instrument should be causally unrelated to the error term of the equation with outcome variable, but (2) the instrument should be correlated with the independent variable.

To tackle this problem, the researcher considered that employment status might serve as a good instrument because if a migrant was employed by a Thai employer, he/she should be issued with a work permit by the MOL, and thus would be eligible to buy the insurance card. The researcher therefore applied Probit-2SLS, one of the techniques in the IV family, using the employment variable as the instrument to tackle this point. It should be noted that in this step, UCS patients were excluded, since eligibility for UCS insurance is tied to Thai nationality, not employment status. The Probit-2SLS showed that the effects of the HICS and history of catastrophic illness on utilisation volume were more intense. The HICS increased utilisation volume by +0.13 admissions/person/year (or about 13.5% from the baseline [constant term]), and a history of catastrophic illness possibly increased utilisation number by +17.9 admissions/person/year. All other covariates produced quite similar results to the Poisson regression, except for the hospital level variable, where the coefficient became insignificant. The OSS variable produced a slightly negative effect on utilisation volume, indicating that FY 2015 saw a slight decrease in admissions per individual, see Table 28.

Table 28 Subgroup analysis of IP utilisation volume by Probit-2SLS, comparing the HICS and the uninsured

Variable	Coef.	Std. Err.	P-value	[95% Conf. Interval]
HICS (v uninsured)	0.133	0.025	<0.001	0.084 0.182
Age group (v <7 yr)				
• 8-15	0.001	0.012	0.917	-0.023 0.025
• 16-30	-0.032	0.011	0.003	-0.053 -0.011
• 31-60	0.006	0.011	0.606	-0.016 0.028
• >60	0.137	0.030	<0.001	0.078 0.197
Female (v male)	-0.004	0.006	0.566	-0.016 0.009
Proximity (v non-proximity)	0.027	0.008	<0.001	0.012 0.042
Ever had catastrophic illness (v never)	0.179	0.014	<0.001	0.152 0.207
Post-OSS (v pre-OSS)	-0.026	0.007	<0.001	-0.039 -0.012
Provincial hospital (v district hospital)	-0.015	0.008	0.050	-0.030 0.000
Constant	0.985	0.009	<0.001	0.967 1.003

Note: The Hausman test for endogeneity produced F-statistics of 6.517 with P-value of 0.011.

The researcher also tested the correlation of the instrument with the endogenous variable by regressing the insurance variable on the employment variable and other covariates via the Probit regression. The finding revealed a statistical significance with P-value <0.001 . This finding warranted the assumption that the card had an endogeneity effect, and the employment variable was probably a strong instrument. Besides, the F-statistic for testing a null hypothesis of whether the instrument(s) is(are) weak showed the result of more than 10 with P-value of below 0.001; this supported a strong correlation between the instrument and the endogenous variable as suggested by Stock et al (2002). It is worth noting that an interaction term was not included, as it was not allowed in the Probit-2SLS in STATA XII software by standard `ivtreatreg` command.

As displayed in the descriptive statistics, delivery-related diagnoses were the most common conditions in all beneficiary types, and it would be interesting to see if the multivariate results changed if delivery-related diagnoses were excluded. The researcher thus performed subgroup analysis that excluded delivery conditions, and found that the subsample results did not change much from the full sample analysis, see Appendix 13 for more detail.

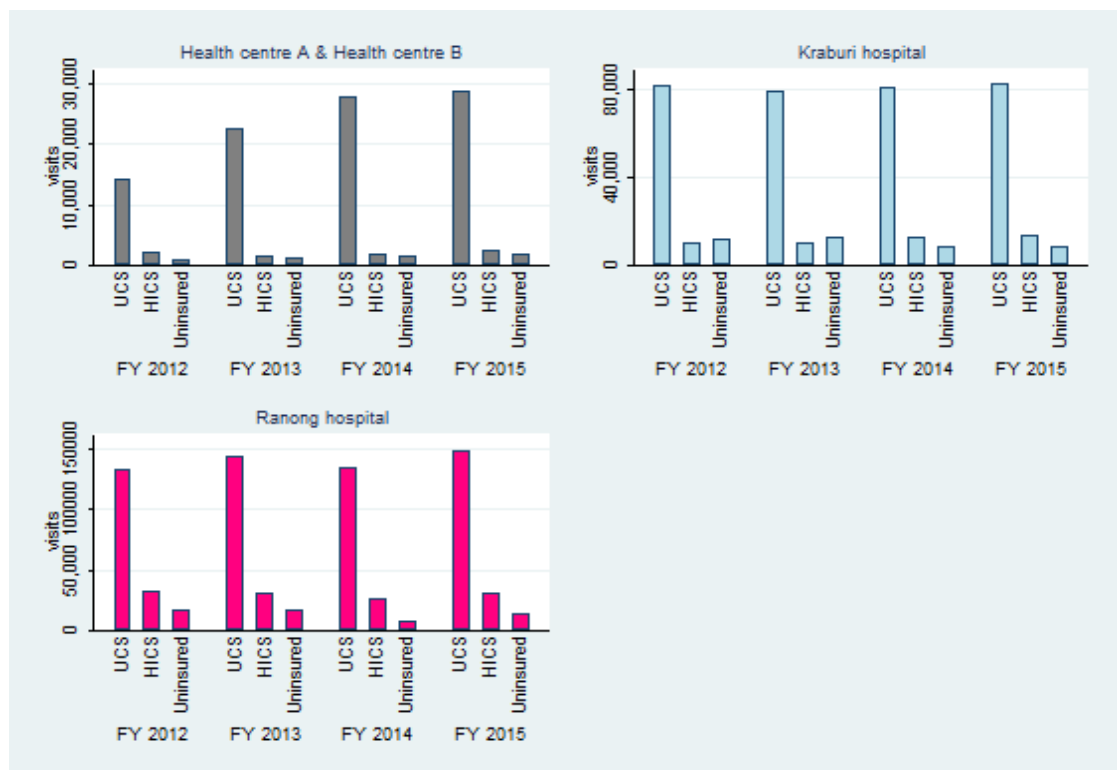
In summary, the HICS had a significant additive effect on the sum of visits per year, by about 1.7% compared to the uninsured by the Poisson regression *ceteris paribus*. Yet this effect was still smaller than the effect of the UCS (+8.7%) on IP utilisation. The effect of the HICS became stronger after combining with the effect of a history of catastrophic illness (+19.3%), but it was still smaller than the combined effect in the UCS (+33.6%). After accounting for a potential bias from the endogeneity effect of the card, it appeared that the effect of the card *per se* was more intense (+0.13 yearly admissions per individual).

II. Outpatient utilisation

Overview of the data

The OP utilisation was analysed in a similar fashion to the IP utilisation. However, the data sources included not only Ranong provincial hospital and Kraburi district hospital, but also two health centres in two migrant populated subdistricts, one in each district (Health centre A and Health centre B). The data were drawn from a 4-fiscal-year period (FY 2012 to FY 2015), not 5 fiscal years like in IP analysis because of incompleteness in FY 2011 data. In total, there were 1,251,797 records in 4 fiscal years. About 78% and 14% of patients were insured with the UCS and the HICS respectively. Approximately 8% of patients were uninsured. The number of visits by the HICS patients and the uninsured migrants seemed to be stable across years in all facilities, while the UCS patients' OP visits grew constantly, especially at the health centre level, see Figure 31.

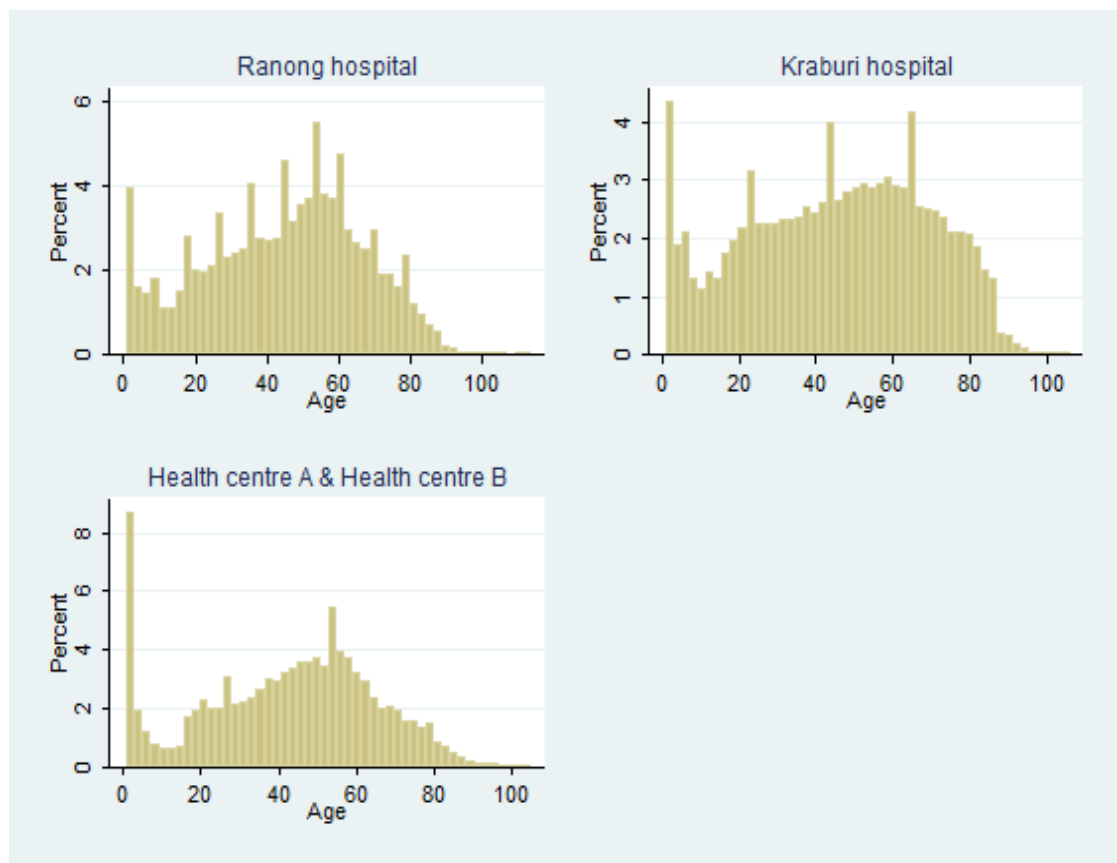
Figure 31 OP utilisation volume by the top three most common insurance schemes across years



It should be noted that OP records with certain principal diagnoses, namely, Z532 (no attendance upon appointment, or procedure not carried out for unspecified reasons), Z027 (issuing medical certificate), and Z00 (general medical exam), were excluded to avoid measurement bias as these are conditions where a patient did not physically present at a facility.

The age distribution of OP cases in all facilities appeared to be more uniform than for IP cases. This might be because, normally, there is no child delivery in an OP visit. Yet it was obvious that the peak frequencies of visits were in two age groups: very early childhood and late adulthood. The concentration of visits by children aged below 1 might be due to the fact that the routine OP service normally included essential vaccination (and as expounded in Chapter 6, the PPHO also launched a policy of free vaccination for all patients regardless of the citizenship status), see Figure 32.

Figure 32 Percentage of OP utilisation volume by age



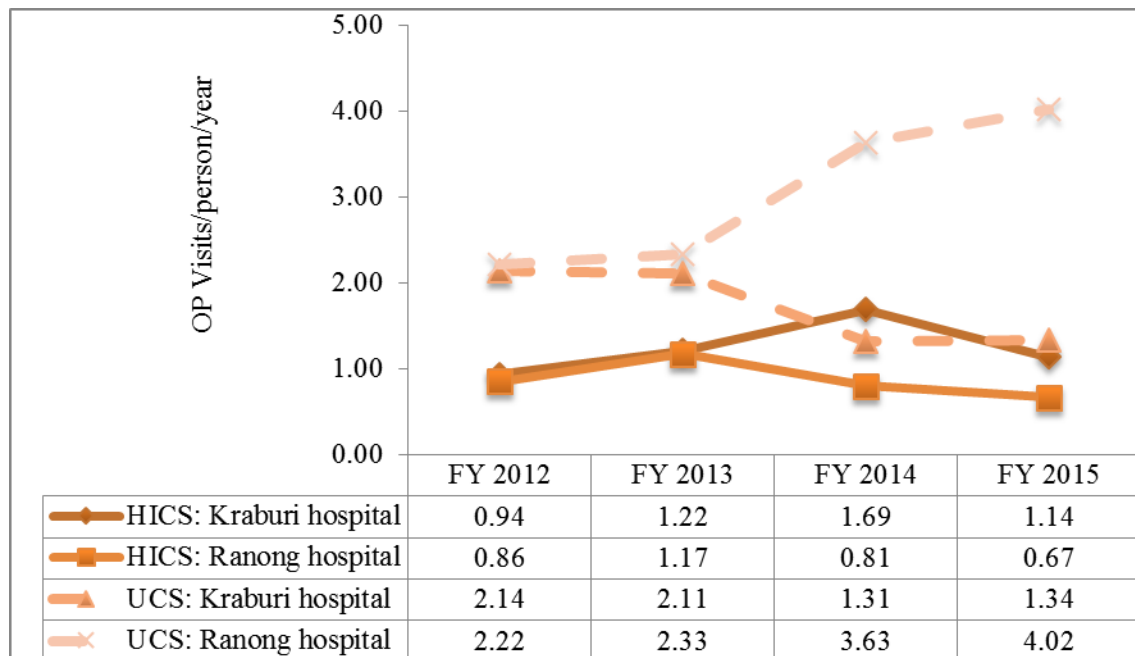
Overall utilisation rate

The OP utilisation rate of insured migrants was markedly lower than for UCS patients. The difference was most apparent in the latest year in Ranong hospital where the UCS utilisation rate was about six fold larger than that of insured migrants.

For Kraburi hospital, OP utilisation of insured migrants was approximately half that of UCS patients between FY 2012 and FY 2013. Yet the utilisation gap became smaller in the following years, and the utilisation of migrants was even slightly larger than the UCS in FY 2014. This might be due to a relatively open HICS policy during that period (after the 2013 Cabinet Resolution was launched).

Of note is that the overall utilisation rate of migrants at Kraburi hospital was always higher than at Ranong hospital throughout the study years, see Figure 33.

Figure 33 OP utilisation rate between the HICS and the UCS beneficiaries by years



Note: The analysis cannot delve into the utilisation rate at health centre level because of a lack of information about the accumulated number of registered migrants at subdistrict level.

Descriptive statistics and univariate analysis

Personal characteristics of the patients across insurance schemes

Of the 1,251,797 records, 172,463 visits (~14%) were the OP visits by HICS patients. Mean age of the uninsured was lowest amongst all beneficiary types. The majority of patients had residence in the same district as the facility. Females outnumbered males in all beneficiary types, particularly the HICS and the UCS, even after excluding obstetric conditions. The uninsured were more mobile than others, as evidenced by a smaller ratio of patients showing domicile-facility proximity. Moreover, over 86% of the HICS patients were employed.

The ratio of visits by HICS patients to all insurance types was largest at the provincial hospital (~16%), followed by district hospital (~11%) and health centres (~7%), see Table 29.

Table 29 Comparing sum of OP visits by personal attributes and insurance schemes

Variable	Uninsured N = 99,119	HICS N = 172,463	UCS N = 908,215	Test (P-value)
Age—mean (SD)	28.1 (17.9)	37.1 (17.4)	45.1 (23.9)	ANOVA (<0.001)
Age group—n (%)				
• ≤ 7 y	17,560 (17.7)	8,640 (5.0)	99,480 (10.1)	
• 8-15 y	4,867 (4.9)	2,967 (1.7)	62,978 (6.4)	Chi-square (<0.001)
• 16-30 y	35,155 (35.5)	54,459 (31.6)	116,252 (11.9)	
• 31-60 y	36,865 (37.2)	89,975 (52.2)	405,526 (41.4)	
• > 60 y	4,668 (4.7)	16,421 (9.5)	295,974 (30.2)	
Female—n (%)	51,882 (52.4)	104,343 (60.5)	561,184 (57.6)	Chi-square (<0.001)
Female (non-obstetric)—n (%)	48,596 (50.7)	97,281 (58.8)	557,065 (57.3)	Chi-square (<0.001)
Proximity to a facility—n (%)	57,020 (61.5)	132,567 (80.6)	791,155 (82.8)	Chi-square (<0.001)
Employed—n (%)	74,703 (75.4)	148,075 (85.9)	657,158 (67.0)	Chi-square (<0.001)
Facility level—n (row %)				
• Health centres	5,465 (5.1)	7,913 (7.4)	93,973 (87.5)	Chi-square (<0.001)
• District hospital	40,856 (9.9)	45,693 (11.1)	324,362 (78.9)	
• Provincial hospital	52,798 (7.2)	118,857 (16.2)	561,880 (76.6)	

Note: Missing data were excluded from the analysis.

Disease status

The disease patterns in each beneficiary type were quite alike. Z group was the most common diagnosis in all beneficiaries, particularly in the uninsured. Note that Z group refers to any diagnosis with ICD10 starting with 'Z', which comprises a large number of minor illnesses and disease prevention activities. Examples of conditions in Z group are wound dressing, medical counselling, vaccination, family planning and appointments for laboratory tests.

Hypertension was the second most frequent diagnosis amongst migrant insurance card holders and UCS beneficiaries. The proportional difference between Z group and other diseases was conspicuous in the migrant card holders and the uninsured, while such a difference was smaller in UCS patients, see Table 30.^{xvii}

Table 30 Top five most common principal diagnoses by insurance schemes

Insurance	Diagnosis by ICD10	Admissions—n (%)
Uninsured	1. Z group	58,901 (59.4)
	2. O479: False labour, unspecified	1,712 (1.7)
	3. I10: Primary hypertension	1,170 (1.2)
	4. R509: Fever, unspecified	1,117 (1.1)
	5. K30: Dyspepsia	1,060 (1.1)
HICS	1. Z group	56,412 (32.7)
	2. I10: Primary hypertension	9,032 (5.2)
	3. K30: Dyspepsia	4,746 (2.8)
	4. E119: Non-insulin dependent diabetes mellitus (DM)	4,610 (2.7)
	5. O479: False labour, unspecified	3,634 (2.1)
UCS	1. Z group	267,653 (27.2)
	2. I10: Primary hypertension	85,672 (8.7)
	3. E119: Non-insulin dependent DM	37,307 (3.8)
	4. E785: Hyperlipidaemia	23,668 (2.4)
	5. K30: Dyspepsia	17,124 (1.8)

^{xvii} Note that it is not possible to use DRG or adjRW as a proxy for disease severity for OP since these indicators are applied for IP only

Difference of utilisation volume between insurance schemes and between pre-OSS and post-OSS

In a broad view, the number of services enjoyed by the UCS was about 1.5 to 2 times greater than the HICS and the uninsured respectively (4.8 v 3.1 v 1.8 visits/person/year respectively).

This difference had statistical significance by both ANOVA test and Kruskal-Wallis test with P-value of less than 0.001 for both tests, see Table 31.

Table 31 Comparing mean and median numbers of OP visits by insurance schemes in all years

Insurance	Mean (SD)	Median (IQR)	Min	Max	ANOV A P-value	Kruskal-Wallis P-value
Uninsured	1.8 (1.9)	1 (1)	1	92	<0.001	<0.001
HICS	3.1 (4.2)	2 (3)	1	176		
UCS	4.8 (8.5)	2 (4)	1	364		
Total	4.2 (7.6)	2 (3)	1	364		

Note: Having checked the raw data, the researcher found that the record with the total visit number of 364 was a UCS patient visiting the facility for daily physical rehabilitation.

Of note is that the standard deviation of OP visit numbers was much greater than its mean. Such a pattern is known as over-dispersion, suggesting that the data are heavily skewed (and this data characteristic has important implications in selecting a proper regression technique for the multivariate analysis in the next step).

The difference of OP visits between pre- and post-OSS within each patient group was quite small, despite having statistical significance by most tests. For instance, the mean difference between pre- and post-OSS utilisation in the uninsured and the HICS insurees was only 0.1 visits/person/year.

A potential explanation for the presentation of statistical significance by the tests below might be because the dataset contained a huge number of records, see Table 32.

Table 32 Comparing mean and median numbers of OP visits in each insurance scheme between pre-OSS and post-OSS

Insurance	Mean (SD)		Median (IQR)		P-value	
	Pre-OSS	Post-OSS	Pre-OSS	Post-OSS	Student's t	Rank-sum
Uninsured	1.8 (1.8)	1.9 (2.1)	1 (1)	1 (1)	<0.001	<0.001
HICS	3.1 (4.3)	3.0 (3.9)	2 (3)	2 (2)	0.005	0.306
UCS	4.8 (8.1)	4.8 (9.5)	3 (4)	2 (4)	0.262	<0.001
Total	4.2 (7.3)	4.3 (8.6)	2 (3)	2 (3)	<0.001	0.001

Multivariate analysis

The multivariate analysis for OP utilisation was exercised in the same way as IP admission analysis. All variables were arranged in the same fashion, except for three aspects. Firstly, the variable, 'ever had catastrophic illness' was replaced by the variable, 'ever had ACSC'. ACSC refers to 'ambulatory care sensitive conditions', comprising a list of various OP diseases that need continuing care (such as chronic obstructive pulmonary diseases, and ischemic heart diseases)^{xviii}. This variable was used because, in the OP recording system, there is no information on DRG or adjRW.

Secondly, an extra variable, called, 'Z group', was added to the equation. The reason for adding this variable is derived from the observation that the Z group was the main cause of visits in all beneficiaries. It normally covers a wide range of minor diseases and health promoting activities, including vaccination and physical rehabilitation. Adding a Z group variable in the analysis also helped mitigate a risk of bias from counting non-illness related visits.

^{xviii} ACSC consists of the following ICD10 diagnoses: I20, I24, J45, J46, J100, J110, J12, J13, J14, J15, J16, J18, J20, J21, J22, J41, J42, J43, J44, J45, J46, J47, E86, K522, K528, K529, A69, K02, K03, K04, K05, K06, K08, K098, K099, K12, K13, E10, E11, E12, E13, E14, H66, H67, J00, J01, J02, J03, J06, J31, I00, I01, I02, I10, I11, A33, A34, A35, A36, A37, A50, A53, A80, A95, B05, B06, B16, B18, B26, B50, B51, B52, B53, B54, B77, G00, I00, I01, I02, M01, N10, N11, N12, N136, and N39.

Thirdly, the hospital level variable was changed from binary variable (district hospital/provincial hospital) to factor variable (health centre, district hospital, and provincial hospital) since the OP analysis also included data from health centres.

To make the presentation more concise, only the final techniques are presented. In summary, the calculation methods are not detailed from the very beginning like in the IP analysis. Table 33 demonstrates that the HICS seemed to increase OP use by 11.1% compared to the uninsured, and being insured with the UCS tended to increase visits 1.4 fold (+35.2%) compared to the uninsured.

Having a history of Z group conditions and ACSC diseases was likely to increase the number of services by about 42.0% and 66.7% respectively. The interaction terms between HICS and Z group, and HICS and ACSC also had statistically significant positive effects on volume of use. Provincial hospitals tended to attract more visits than health centres by 51%. FY 2015 (post-OSS period) saw a significant increase in OP utilisation in the uninsured by around 16%, but for the HICS, this effect was almost cancelled out, as reflected by the IRR of below 1 in the HICS##Post-OSS interaction term.

A likely explanation for a declining trend in OP visit frequencies among HICS beneficiaries was that registration during the OSS period was more stringent than pre-OSS era; that is, only a (seemingly) healthy migrant was eligible to be insured, leading to a smaller volume of visits.

Table 33 Multivariate analysis of OP utilisation volume by the Poisson regression with interaction terms

Variable	IRR	Std. Err.	P-value	[95% Conf. Interval]
Insurance (v uninsured)				
• HICS	1.111	0.021	<0.001	1.071 1.152
• UCS	1.352	0.018	<0.001	1.318 1.387
Ever had ACSC (v never)	1.667	0.038	<0.001	1.595 1.742
Insurance##ACSC				
• HICS##Ever had ACSC	1.100	0.037	0.005	1.029 1.175

Variable	IRR	Std. Err.	P-value	[95% Conf.	Interval]
• UCS##Ever had ACSC	1.268	0.031	<0.001	1.208	1.330
Ever had Z group (v never)	1.420	0.020	<0.001	1.381	1.460
Insurance##Z group					
• HICS##Ever had Z group	1.880	0.049	<0.001	1.786	1.979
• UCS##Ever had Z group	1.606	0.027	<0.001	1.555	1.659
Age group (v ≤7 yr)					
• 8-15	0.950	0.009	<0.001	0.933	0.968
• 16-30	1.042	0.010	<0.001	1.023	1.062
• 31-60	1.555	0.017	<0.001	1.523	1.589
• >60	2.253	0.030	<0.001	2.194	2.313
Female (v male)	1.006	0.010	0.555	0.986	1.026
Proximity (v non-proximity)	1.235	0.016	<0.001	1.205	1.267
Post-OSS (v pre-OSS)	1.160	0.022	<0.001	1.118	1.204
Insurance##OSS					
• HICS##Post-OSS	0.862	0.021	<0.001	0.822	0.903
• UCS##Post-OSS	0.847	0.017	<0.001	0.814	0.881
Facility level (v health centres)					
• District hospital	1.600	0.020	<0.001	1.562	1.639
• Provincial hospital	1.511	0.018	<0.001	1.476	1.547

It should be noted that the goodness of fit test saw a statistical significance ($P < 0.001$), implying that the Poisson regression might not fit well with the data. A potential explanation for this account was that the variance of the outcome variable was much larger than its means. This situation was regarded as over-dispersed count data (unlike the IP data where variance of outcome variable was close to or just slightly larger than mean). Thus, the Negative binomial regression was proposed instead.

Table 34 displays results of the Negative binomial regression. Overall, the results from the Negative binomial regression were very close to the Poisson regression. The effects of HICS and the UCS alone showed about a +9.9% and +33.6% increase in service use as compared to the uninsured. The interaction between HICS and Z group yielded a large positive effect of +90.8%. Though the interaction between HICS and ACSC yielded significant positive effects, they were still smaller than the UCS##ACSC interaction (+11.8% v +28.5%).

Table 34 Multivariate analysis of OP utilisation volume by the Negative binomial regression with interaction terms

Variable	IRR	Std. Err.	P-value	[95% Conf. Interval]
Insurance (v uninsured)				
• HICS	1.099	0.016	<0.001	1.068 1.130
• UCS	1.336	0.014	<0.001	1.309 1.364
Ever had ACSC (v never)	1.569	0.031	<0.001	1.510 1.630
Insurance##ACSC				
• HICS##Ever had ACSC	1.118	0.031	<0.001	1.060 1.179
• UCS##Ever had ACSC	1.285	0.027	<0.001	1.234 1.339
Ever had Z group (v never)	1.389	0.018	<0.001	1.355 1.423
Insurance##Z group				
• HICS##Ever had Z group	1.908	0.039	<0.001	1.832 1.987
• UCS##Ever had Z group	1.606	0.024	<0.001	1.560 1.653
Age group (v ≤7 yr)				
• 8-15	0.953	0.008	<0.001	0.936 0.969
• 16-30	1.017	0.009	0.043	1.001 1.034
• 31-60	1.471	0.013	<0.001	1.445 1.497
• >60	2.164	0.026	<0.001	2.114 2.216
Female (v male)	1.011	0.007	0.140	0.996 1.026
Proximity (v non-proximity)	1.200	0.012	<0.001	1.177 1.223
Post-OSS (v pre-OSS)	1.165	0.021	<0.001	1.126 1.206
Insurance##OSS				
• HICS##Post-OSS	0.864	0.019	<0.001	0.828 0.902
• UCS##Post-OSS	0.841	0.016	<0.001	0.811 0.872
Facility level (v health centres)				
• District hospital	1.528	0.015	<0.001	1.498 1.558
• Provincial hospital	1.455	0.014	<0.001	1.428 1.483
Alpha	0.438	0.005	-	0.428 0.448

Note: From a technical angle, the Negative binomial regression always produced 'alpha' as a parameter for assessing whether the dataset fits well with the Poisson regression. However, to make the presentation more concise, the researcher did not show alpha in all Negative binomial regression tables. In this case, alpha was equal to 0.438 with statistical significance (95% CI of alpha = [0.428, 0.448]). Should alpha be different from zero, it is likely that over dispersion exists in the dataset and the Negative binomial regression might be more appropriate than the Poisson regression.

Subgroup analysis—Addressing the endogeneity problem

The Probit-2SLS showed that possession of a migrant insurance card had an additive effect on volume of use by about 1.7 visits/person/year, comparable to +93.5% many more visits than the uninsured (mean OP visits amongst the uninsured was 1.8 visits/person/year).

Increasing age, having a history of Z group and ACSC, proximity to the health facilities, and above-health-centre facility level were important factors that were positively correlated with visit frequencies.

This finding appeared to show the same pattern found in the IP subgroup analysis, where the HICS effect was enlarged after taking into account the endogeneity problem, see Table 35.

Table 35 Subgroup analysis of OP utilisation volume by Probit-2SLS, comparing between the HICS and the uninsured

Variable	Coef.	Std. Err.	P-value	[95% Conf.	Interval]
HICS (v uninsured)	1.690	0.137	<0.001	1.421	1.959
Age group (v ≤ 7 yr)					
• 8-15	0.195	0.046	<0.001	0.105	0.285
• 16-30	-0.455	0.054	<0.001	-0.562	-0.349
• 31-60	0.001	0.059	0.987	-0.115	0.117
• >60	2.097	0.129	<0.001	1.845	2.349
Female (v male)	-0.034	0.028	0.214	-0.088	0.020
Proximity (v non-proximity)	0.318	0.054	<0.001	0.213	0.423
Ever had Z group (v never)	2.047	0.049	<0.001	1.950	2.144
Ever had ACSC (v never)	1.646	0.052	<0.001	1.544	1.747
Post-OSS (v pre-OSS)	0.038	0.046	0.405	-0.051	0.127
Facility level (v health centres)					
• District hospital	0.353	0.071	<0.001	0.215	0.492
• Provincial hospital	0.360	0.047	<0.001	0.267	0.453
Constant	-0.111	0.080	0.166	-0.268	0.046

Note: The Hausman test yielded the P-value of 0.005, implying that the endogenous problem persisted in the data, and this warranted the use of the IV.

To sum up, the migrant insurance card was likely to increase the number of OP visits by about 9.9% (compared to the uninsured, according to the Negative binomial regression). After taking into account the endogeneity effect of the card, it appeared that the card tended to enlarge the volume of OP visits by 1.7 visits/person/year, almost double the volume of use by the uninsured. The interaction terms between the HICS and disease status also had a large additive effect on OP visits, but this influence was still much smaller than the effect of the UCS and disease interaction terms.

III. Inpatient out-of-pocket payment

Overview of the data

Before analysing OOP, the dataset was converted back to its original format (per visit records). Due to the incompleteness of Ranong hospital's OOP data, only the IP OOP of Kraburi hospital was analysed. The length of the dataset was 5 fiscal years (FY 2011 to FY 2015).

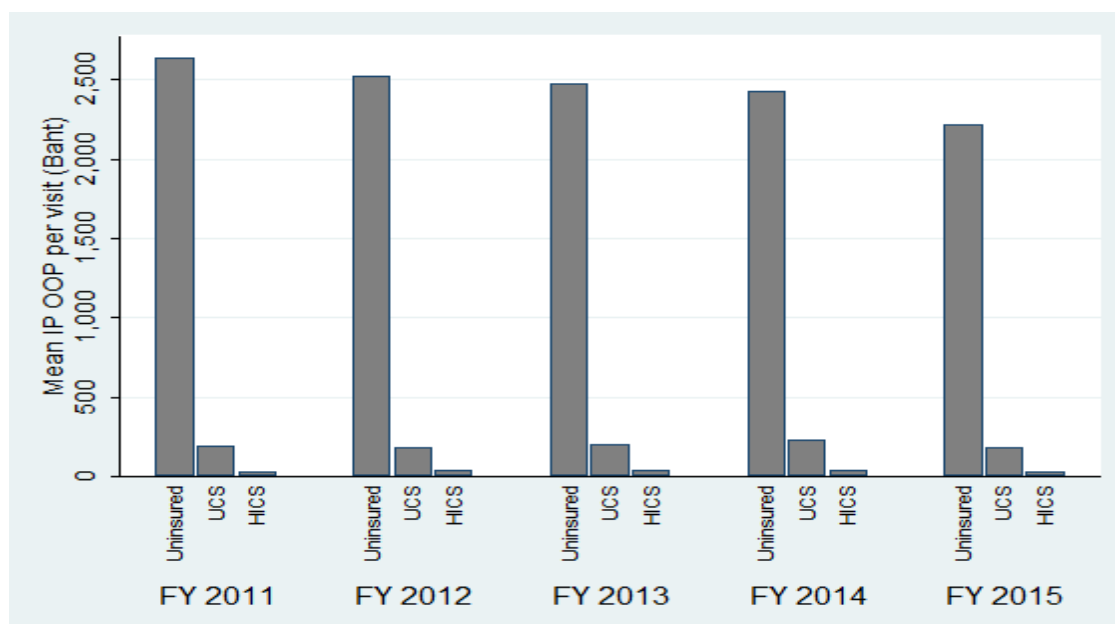
Descriptive statistics revealed that the OOP data were heavily right skewed. Mean OOP of uninsured patients was the highest amongst the three beneficiary types, contributing 2,461 Baht (US\$ 75) per visit. The median OOP of the migrant insurance card holder was 30 Baht (US\$ 1). This is understandable since most health facilities in Ranong province charged migrant patients a 30-Baht fee for each visit. Over half of UCS beneficiaries did not pay for the services used, as evidenced by the OOP of the UCS having 0-Baht median, see Table 36.

Table 36 Summary of descriptive statistics of IP OOP per admission by insurance schemes

Beneficiary	N—visits	Mean in Baht (SD)	Median in Baht (IQR)	Min-Max
Uninsured	1,723	2,460.5 (1,556.3)	23,88 (1,968)	0-17,100
HICS	2,122	34.2 (101.8)	30 (0)	0-3,230
UCS	10,973	195.9 (558.1)	0 (30)	0-9,600

There was a trivial decrease in mean OOP per visit (about 180 Baht decrease) in the uninsured in the five-year period. The OOP pattern in the UCS and the HICS beneficiaries remained constant over time, see Figure 34.

Figure 34 Mean IP OOP per admission by insurance schemes across years



Consistent with the variable management in the utilisation analysis, in this section, the main dependent variable was OOP per visit in Baht unit. The main predictor variable was insurance status (HICS/uninsured). Other covariates were sex (male/female), age group (0-7 yr, 8-15 yr, 16-30 yr, 31-60 yr, and > 60 yr), time (post-2013/pre-2013), catastrophic disease (having catastrophic illness on that visit, not having), and domicile of beneficiary (proximity, non-proximity).

Nonetheless, there were a few important points that should be taken into account, and some of these points were slightly different from the IP utilisation analysis in the previous section. Firstly, the time variable in this analysis meant a cut-off point at FY 2013. As a consequence, the OSS variable was superseded by a new variable called post-2013 (coded 1 if a visit was in FY 2014 and 2015 and 0 if before FY 2014). The rationale for this change was based on the information in Chapter 5 that a major change

in the HICS benefit package occurred in 2013. Hence, the post-2013 variable was likely to give a more meaningful explanation than the OSS variable since, intuitively, the OSS did not render a change in the benefit package of the scheme.

Secondly, the analysis from this point onwards is limited to insured migrants and uninsured migrant patients. The rationale for dropping the UCS group was described in the methods subsection above. That is, in principle, the UCS covers universal treatments without co-payment for all Thai nationals. Though in the dataset, there were records showing that some UCS patients made payment at the point of care, such payments were in essence an extra charge for non-treatment services, such as private rooms.

Univariate analysis

The Student's t test revealed that, for each visit, an insured migrant paid approximately 2,426 Baht (US\$ 74) less than an uninsured migrant (with statistical significance). Females paid slightly less than males. Having catastrophic illness denoted a higher charge incurred by a user compared to other illnesses. Proximity to the facility was another significant factor that reduced the charge for each visit. After 2013, OOP fell by around 281 Baht (US\$ 9) (955 Baht from 1,236 Baht).

All of these differences had statistical significance from both Student's t test and ANOVA test. Since the expenditure data are heavily skewed (as evidenced by a large standard deviation compared to the mean), the P-values from non-parametric tests, namely, Wilcoxon rank-sum test and Kruskal-Wallis test are presented in parallel, see Table 37.

Table 37 Comparing IP OOP by personal attributes and insurance schemes

Variable	Mean OOP	SD of OOP	P-value (Student's t or ANOVA)	P value (Wilcoxon rank-sum or Kruskal-Wallis)
Insurance				
• Uninsured	2,460.5	1,556.3	<0.001	<0.001
• HICS	34.2	101.8		
Sex				
• Male	1,299.7	1,770.4	<0.001	<0.001

Variable	Mean OOP	SD of OOP	P-value (Student's t or ANOVA)	P value (Wilcoxon rank-sum or Kruskal-Wallis)
• Female	1,049.8	1,510.9		
Illness				
• Non-catastrophic	1,101.8	1,545.2	0.001	0.133
• Catastrophic	1,415.2	2,112.6		
Domicile				
• Non-proximity	1,689.2	1,742.1	0.023	0.013
• Proximity	1,316.6	1,638.4		
Time				
• Pre-2013	1,235.5	1,642.7	<0.001	<0.001
• Post-2013	954.8	1,509.6		
Age group (years)				
• 0-7	1,803.5 (62.3)	1,559.6		
• 8-15	2,194.5 (130.0)	1,325.4		
• 16-30	963.2 (35.0)	1,522.6	<0.001	<0.001
• 31-60	905.2 (46.7)	1,592.7		
• >60	1,547 (258.8)	2,053.8		

Multivariate analysis

In this step, the TPM with robust standard error was applied. It should be noted that since 30-Baht was a symbolic charge applied to all services, not a true charge for services used, the expected OOP here (dependent variable) was any amount paid beyond 30 Baht.

The TPM is composed of 2 parts: (1) probability of payment (beyond 30 Baht), analysed by Logit regression, and (2) amount paid for any visit where the payment exceeded 30 Baht, analysed by GLM with log link. Results from both are combined to determine the final estimate.

The results of the TPM are shown in Table 38. The HICS reduced both (1) likelihood of payment and (2) amount of payment once payment occurred. This is evidenced by a negative coefficient in both parts. The -7.6 coefficient implied that the odds of card holders of making payment were about 0.0005 times (an exponent of -7.6) as large as the odds for the uninsured. The -3.0 coefficient in the second part implied that, once payment occurred, the card holder paid about 5% of the payment made by the uninsured (5% came from an exponent of -3.0).

After combining both parts, the HICS significantly reduced OOP by around 2,471 Baht (US\$ 75) per IP visit. In addition, OOP tended to decline by approximately 136 Baht after the year 2013.

Other key variables that significantly contributed to an increase in OOP were history of catastrophic illness and advanced age. Note that the interaction terms disappeared after combining both parts as the mixture of two parts is based on the marginal effect. In the marginal effect analysis, the interaction term effect is already absorbed by the main variables used to construct the interaction term.

Table 38 Multivariate analysis of IP OOP by the TPM

	Variable	Coef.	Std. Err.	P-value	[95% Conf.	Interval]
Part 1	Insurance (v uninsured)	-7.649	0.399	<0.001	-8.431	-6.866
	Catastrophic illness (v not having)	-1.076	0.378	0.004	-1.817	-0.334
	Insurance##Catastrophic illness	1.496	0.835	0.073	-0.140	3.133
	Post-2013 (v pre-2013)	-0.792	0.292	0.007	-1.364	-0.221
	Insurance##Post-2013	0.539	0.505	0.286	-0.451	1.530
	Female (v male)	0.782	0.344	0.023	0.109	1.456
	Age group (v ≤ 7 yr)					
	• 8-15	-0.539	0.643	0.402	-1.798	0.721
	• 16-30	-0.850	0.368	0.021	-1.572	-0.128
	• 31-60	-1.105	0.427	0.010	-1.941	-0.268
	• >60	-2.612	0.542	<0.001	-3.675	-1.549
	Proximity (v non-proximity)	-0.672	0.557	0.228	-1.765	0.420
	Constant	4.736	0.640	<0.001	3.481	5.990
Part 2	Insurance (v uninsured)	-3.047	0.545	<0.001	-4.115	-1.980
	Catastrophic illness (v not having)	0.345	0.070	<0.001	0.209	0.482
	Insurance##Catastrophic illness	-1.241	0.548	0.024	-2.315	-0.167
	Post-2013 (v pre-2013)	-0.075	0.036	0.039	-0.146	-0.004
	Insurance##Post-2013	0.880	0.932	0.345	-0.947	2.707
	Female (v male)	0.016	0.043	0.711	-0.069	0.101
	Age group (v ≤ 7 yr)					
	• 8-15	0.121	0.062	0.050	0.000	0.242
	• 16-30	0.336	0.044	<0.001	0.249	0.422
	• 31-60	0.223	0.054	<0.001	0.117	0.329
	• >60	0.275	0.189	0.145	-0.095	0.644
	Proximity (v non-proximity)	-0.016	0.082	0.845	-0.177	0.145
	Constant	7.632	0.092	<0.001	7.452	7.813

	Variable	Coef.	Std. Err.	P-value	[95% Conf. Interval]
Both parts	Insurance (v uninsured)	-2470.710	45.185	<0.001	-2559.271 -2382.150
	Catastrophic illness (v not having)	425.963	126.616	0.001	177.800 674.126
	Post-2013 (v pre-2013)	-136.234	48.277	0.005	-230.855 -41.613
	Female (v male)	60.860	58.909	0.302	-54.600 176.320
	Age group (v ≤ 7 yr)				
	• 8-15	124.222	77.126	0.107	-26.941 275.385
	• 16-30	400.856	57.477	<0.001	288.203 513.508
	• 31-60	224.493	70.437	0.001	86.439 362.546
	• >60	94.868	244.645	0.698	-384.628 574.364
	Proximity (v non-proximity)	-55.321	110.728	0.617	-272.344 161.702

IV. Outpatient out-of-pocket payment

Overview of the data

The analysis of OP OOP was conducted in the same way as IP OOP. The dataset contains individual OP records from 2 subdistrict health centres, Kraburi hospital and Ranong hospital, starting from FY 2012 (FY 2011 data were dropped due to incompleteness).

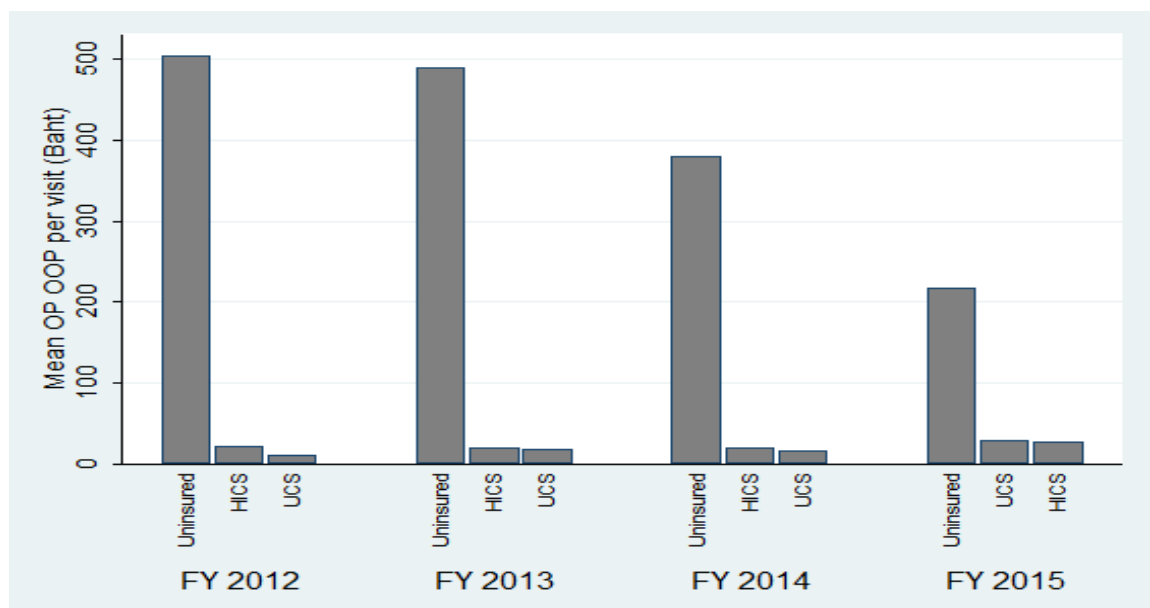
Uninsured patients had mean OP OOP of 420 Baht (US\$ 13) with a median of 100 Baht (US\$ 3). The median OOP of a UCS patient was zero whereas the median OOP of a HICS patient was 22 Baht (US\$ 0.7), which is quite close to the 30-Baht fee incurred for each visit. This observation corresponded with the interviews in Chapter 6, which suggested that most healthcare providers perceived that the 30-Baht fee policy was repealed only in the UCS, but not in the HICS, see Table 39.

Table 39 Summary of descriptive statistics of OP OOP per visit by insurance schemes

Beneficiary	N—visits	Mean in Baht (SD)	Median in Baht (IQR)	Min-Max
Uninsured	59,648	420.2 (805.9)	100 (383)	0-24,130
HICS	96,695	22.2 (147.4)	30 (0)	0-16,000
UCS	962,240	18.6 (110.1)	0 (30)	0-5,619

While mean OOP of the HICS and the UCS patients remained stable, mean OOP of the uninsured continually declined. A possible explanation for this phenomenon was the introduction of an internal policy in Ranong province in 2011 that allowed uninsured patients to enjoy certain OP services without charge while the PPHO would subsidise this expenditure based on the fee schedule; see Figure 35.

Figure 35 Mean OP OOP per visit by insurance schemes across years



Univariate analysis

From this point onward the analysis focuses on insurance card holders and uninsured migrants. Note that some independent variables were minimally changed from the IP OOP analysis. Since OP records do not have DRG coding, it is difficult to define the 'catastrophic illness' variable in each OP visit, so the 'ACSC' variable was used instead. Another variable added in the analysis was 'Z group' (like in the analysis for OP utilisation). To simplify this change, a new indicator variable, called, 'principal diagnosis' was proposed. The variable was coded 1 for non-specific OP diagnosis, 2 for Z group diagnosis, and 3 for ACSC diagnosis. Also, the hospital variable was changed

from binary variable (0 for district hospital and 1 for provincial hospital) to indicator variable (coded 1 for health centre, 2 for district hospital, and 3 for provincial hospital).

Table 40 shows that the uninsured seemed to have much higher OOP than insured migrants, by around 398 Baht (US\$ 12) (420 Baht compared to 22 Baht). After 2013, OOP tended to decline by half. Z group diagnosis, having a visit at district hospital, and non-proximity to health facility appeared to be correlated with increasing OOP; but these points needed further investigation in the multivariate analysis.

Table 40 Comparing OP OOP by personal attributes and insurance schemes

Variable	Mean OOP	SD of OOP	P-value (Student's t or ANOVA)	P value (Wilcoxon rank- sum or Kruskal- Wallis)
Insurance				
• Uninsured	420.2	805.9	<0.001	<0.001
• HICS	22.2	147.4		
Sex				
• Male	222.4	593.8	<0.001	<0.001
• Female	135.9	502.7		
Illness				
• Non-specific	144.4	520.3	<0.001	<0.001
• Z group	256.1	620.0		
• ACSC	93.7	427.5		
Facility level				
• Health centres	64.4	130.2	<0.001	<0.001
• District hospital	677.6	1,069.6		
• Provincial hospital	69.8	251.9		
Domicile				
• Non-proximity	671.0	1,055.2	<0.001	<0.001
• Proximity	69.9	270.1		
Time				
• Pre-2013	222.0	633.4	<0.001	<0.001
• Post-2013	106.9	383.7		
Age group (years)				
• 0-7	158.5	435.2		
• 8-15	220.5	473.5		
• 16-30	220.0	615.8	<0.001	<0.001
• 31-60	152.9	537.7		
• >60	108.8	471.1		

Multivariate analysis

Taking into account all covariates by the TPM, it appeared that insurance variable was the most important factor that significantly reduced OOP by about 293 Baht (US\$ 9). Other covariates, despite having statistical significance due to a large data size, had a relatively trivial impact on OOP. For example, a visit with Z group was likely to have an approximately 18 Baht (US\$ 0.5) lower OOP than a visit with other diagnoses. This proves that the internal policy of the PPHO that allowed all patients (both legal and illegal migrants) to enjoy free health promoting services (which were part of the Z group) at public health facilities was in effect in reality. A visit to a district hospital seemed to incur higher OOP than other facilities. A likely explanation for this observation might be that the residents in Kraburi district had better economic status than in Muang district, implying a higher ability to pay for patients at Kraburi hospital, see Table 41.

Table 41 Multivariate analysis of OP OOP by the TPM

	Variable	Coef.	Std. Err.	P-value	[95% Conf. Interval]
	Insurance (v uninsured)	-5.037	0.061	<0.001	-5.157 -4.917
	Disease level (v non-specific diseases)				
	• Z group	-0.823	0.036	<0.001	-0.894 -0.752
	• ACSC	0.652	0.051	<0.001	0.552 0.753
	Insurance##Disease level				
	• HICS##Z group	0.863	0.087	<0.001	0.691 1.034
	• HICS##ACSC	-0.012	0.115	0.916	-0.239 0.214
	Female (v male)	-0.405	0.037	<0.001	-0.478 -0.333
	Post-2013 (v pre-2013)	-0.497	0.043	<0.001	-0.581 -0.414
Part 1	HICS##Post-2013	1.141	0.085	<0.001	0.974 1.308
	Age group (v ≤7 yr)				
	• 8-15	0.921	0.074	<0.001	0.775 1.067
	• 16-30	0.442	0.048	<0.001	0.348 0.537
	• 31-60	0.682	0.054	<0.001	0.575 0.788
	• >60	0.484	0.099	<0.001	0.289 0.679
	Proximity (v non-proximity)	-0.602	0.055	<0.001	-0.710 -0.493
	Facility-level (v health centres)				
	• District hospital	-0.344	0.113	0.002	-0.566 -0.122
	• Provincial hospital	-2.048	0.121	<0.001	-2.286 -1.811
	Constant	2.681	0.108	<0.001	2.469 2.893

	Variable	Coef.	Std. Err.	P-value	[95% Conf. Interval]
Part 2	Insurance (v uninsured)	-0.677	0.186	<0.001	-1.041 -0.313
	Disease level (v non-specific diseases)				
	• Z group	0.029	0.025	0.241	-0.020 0.078
	• ACSC	-0.292	0.039	<0.001	-0.370 -0.215
	Insurance##Disease level				
	• HICS##Z group	0.423	0.116	<0.001	0.196 0.650
	• HICS##ACSC	0.573	0.137	<0.001	0.304 0.842
	Female (v male)	-0.091	0.025	<0.001	-0.140 -0.042
	Post-2013 (v pre-2013)	-0.192	0.031	<0.001	-0.253 -0.131
	HICS##Post-2013	0.174	0.130	0.180	-0.080 0.428
	Age group (v ≤7 yr)				
	• 8-15	0.179	0.046	<0.001	0.088 0.270
	• 16-30	0.576	0.032	<0.001	0.512 0.639
	• 31-60	0.627	0.035	<0.001	0.558 0.696
	• >60	0.804	0.090	<0.001	0.627 0.981
	Proximity (v non-proximity)	-0.450	0.049	<0.001	-0.546 -0.354
	Facility-level (v health centres)				
	• District hospital	1.667	0.050	<0.001	1.570 1.764
	• Provincial hospital	0.841	0.058	<0.001	0.727 0.955
	Constant	4.995	0.050	<0.001	4.897 5.094
Both parts	Insurance (v uninsured)	-293.489	6.026	<0.001	-305.300 -281.677
	Disease level (v non-specific diseases)				
	• Z group	-18.274	4.168	<0.001	-26.444 -10.105
	• ACSC	-22.301	5.838	<0.001	-33.743 -10.859
	Female (v male)	-30.104	4.191	<0.001	-38.317 -21.891
	Post-2013 (v pre-2013)	-37.670	4.330	<0.001	-46.156 -29.184
	Age group (v ≤7 yr)				
	• 8-15	42.301	5.818	<0.001	30.897 53.704
	• 16-30	86.353	3.994	<0.001	78.525 94.181
	• 31-60	105.692	5.352	<0.001	95.202 116.182
	• >60	132.951	19.697	<0.001	94.345 171.557
	Proximity (v non-proximity)	-95.033	8.555	<0.001	-111.801 -78.265
	Facility-level (v health centres)				
	• District hospital	236.955	9.064	<0.001	219.191 254.720
• Provincial hospital	14.938	4.110	<0.001	6.883 22.992	

In summary, the HICS helped reduce IP OOP and OP OOP by 2,471 Baht (US\$ 75) and 293 Baht (US\$ 9) respectively, and OOP appeared to decrease over time, particularly after the change in the HICS benefit package in 2013.

7.4 Discussion

This chapter has shed light on the outcome of the HICS in terms of utilisation and OOP of the service users at public facilities in Ranong province. The results from earlier chapters also helped explain the quantitative findings in this chapter, such as why the median payment of HICS patients at point of care was about 30 Baht, or certain disease variables did not have much impact on OOP even in the uninsured (because of the internal policy of the PPHO that removed user fees for certain services). Overall, there were two important findings from the above analysis, as follows.

I. Low utilisation rate of insured migrants compared to Thais

The first key finding was the utilisation rates of the HICS and the uninsured were much lower than for the UCS, particularly for OP care and for the services provided at the provincial hospital. There are some possible explanations for this phenomenon. Firstly, IP diseases are normally more severe than OP diseases and migrant patients tended to present only when they were severely ill. This discovery was consistent with an earlier domestic study by Srithamrongsawat et al (2009), suggesting that the HICS utilisation rate was about threefold smaller than that of the UCS in OP services but this difference was only 1.5-to-2 times smaller in IP services. Some international literature also supports this observation (de Graaff and Francke, 2009, Shanmugasundaram and O'Connor, 2009). In one respect, this reflects that the utilisation rate of migrant patients has not been much improved in the last decade, despite a large number of migrant policies launched by previous governments.

Secondly, the difference in utilisation rates between UCS and HICS patients was more pronounced in Muang district, while in Kraburi district this difference was less obvious. This might be because migrants in Kraburi district tended to have better support from peers and employers than those in Muang district to help them access health services (and this was confirmed by Chapter 6). Besides, Kraburi migrants appeared to have more favourable economic status relative to Muang migrants. This implies a better ability to pay for services as well as other expenses, including travelling cost.

Another likely explanation for the higher utilisation rate in Kraburi migrants is that most migrants in Kraburi district were agricultural workers whereas most migrants in Muang district were fishery workers (see more detail in the background section of this chapter and the life story of some migrant interviewees in Appendix 11). Most fishery workers spent most of their time offshore, rendering difficulty in accessing services.

However, these were just some impressions from the fieldwork and it was difficult to assess the validity of these explanations in depth since the study lacked data of migrants who did not show up at health facilities.

Lastly, the lower utilisation rate of migrants might be due to the 'healthy migrant effect', which suggests that migrants are likely to have better health status than their native counterparts (Thomson et al., 2013, Fennelly, 2007, Hesketh et al., 2008). However, the researcher argues that this assumption might not be a strong explanation in this setting because both insured and uninsured migrants still used services less than UCS insured people, despite controlling for age and disease status.

II. Disease status—The strongest determinant of frequency of visits

The second key finding was that disease status played an important role in determining the number of visits and this factor significantly interacted with the insurance variable. Initially, this point was not the researcher's main research question, but after the findings came out, the researcher found that there were some points worth discussing, as follows.

Firstly, though the finding which suggested that patients with severe diseases tended to have more visits than those with milder diseases was intuitive, there appeared an interesting point. That is, disease effect was even larger than insurance status *per se*. This discovery more or less contradicted the perception of healthcare providers that insured migrants were exploiting the system. If the insurance really makes migrants make unnecessary use of services, a large coefficient of the insurance variable should appear. This is because the coefficient of the insurance variable reflects the effect of the

insurance *per se* on utilisation volume in the absence of severe illness and because the effect of severe illness is already captured by the catastrophic illness variable. Secondly, the interaction terms between disease status and insurance status contributed to a positive impact on service frequencies, and such an impact was larger than the insurance effect alone. This tacitly suggested that the effect of the card became more pronounced amongst the sick persons. Thirdly, interestingly, the coefficient of the interaction term between disease status and the UCS, and the UCS coefficient alone, were markedly greater than the coefficients appearing in the HICS. This denotes that if there are patients taking advantage of the health system, this account appears not only in migrants but also in the Thai UCS beneficiaries, and even to a greater degree in the latter.

Thus the concerns expressed by interviewees in Chapter 6 (that migrants were overly taking advantage of the Thai healthcare system) might be due to a biased perception that migrants were the major cause of increasing burdens on a facility. However, the above arguments are just suggestive evidence. Unless data on non-users are acquired, it is difficult to assess this point more thoroughly.

The positive coefficient of the HICS variable suggested that the HICS at least met its objective in boosting the number of visits from a vulnerable population (albeit to a small extent). Besides, from a public health perspective, the HICS did not aim to generate profit from the beneficiaries (as with voluntary insurance) but it appeared that some interviewees had applied the voluntary insurance concept into the HICS (such as an internal policy of some facilities that prohibited unhealthy migrants from buying the insurance).

From a methodological point of view, the advantages of this study over earlier research migrant health in Thailand are as follows. Firstly, this research used facility-based individual data, which enabled the researcher to access the information of uninsured patients. Secondly, facility-based data had a large number of records. In the econometric sense, a large data size means a more consistent estimate is likely to be produced. Lastly, this study incorporated individual-level covariates into the analysis, which helped reduce the risk of information biases substantially.

Nonetheless, it still encountered some limitations. The primary concern is the lack of generalisability of the findings. This is because the data were retrieved from facilities, not from households. As a result, information on those who had never attended the facilities was not obtained. Secondly, the researcher could not track information on the same individual across facilities because of the problem of access to the 13-digit ID. Understandably, hospital staff refused to share the 13-digit ID of all individuals with the researcher for fear of violating patient confidentiality. The researcher addressed this problem by using hospital number instead of the 13-digit ID, and adding the domicile variable to address the effect of residential location. Thirdly, there is an issue of data cleanliness. The researcher noticed several errors in data recording, which is understandable since the facility need not submit HICS and uninsured utilisation records to the central authorities for reimbursement. All of these concerns are discussed in greater detail in Chapter 8.

7.5 Conclusion

The main benefits of the HICS policy can be summarised as follows. Firstly, the HICS tended to boost utilisation of health services for its insurees. Secondly, it helped alleviate the financial burden on insurees at point of care. HICS beneficiaries were likely to have 1.7% more visits than the uninsured for IP treatment, and 9.9% more visits for OP treatment, after adjusting for the effect of potential confounders. Payment defrayed by the insured migrants at point of care was about 2,471 Baht (US\$ 75) and 293 Baht (US\$ 9) less than that incurred by the uninsured for each IP and OP visit respectively. Broadly, the OP and IP utilisation rates of both insured and uninsured migrants were still lower than for UCS insurees, particularly for services provided at the provincial hospital. Disease status was a strong influence that positively determined the volume of visits. The interaction between catastrophic illness history and insurance status also had positive influence on utilisation number, and this effect was even larger than the insurance effect alone. This phenomenon suggests that the effect of the HICS is more apparent in severely-ill patients.

Section 4: Discussion and conclusion

The following section is the final part of this thesis, consisting of two chapters: Chapter 8 and Chapter 9. The first three objectives were addressed in Chapter 5 (to explore the evolution of migrant health policies in Thailand), 6 (to investigate the responses of all relevant stakeholders towards the current migrant insurance policy), and 7 (to analyse the outcome of the current migrant insurance policy in terms of utilisation and out-of-pocket payment) respectively. Before coming up with the last objective (Chapter 9), the key findings from the previous chapters (Chapter 5-7) are discussed to extract higher constructs/concepts (Chapter 8).

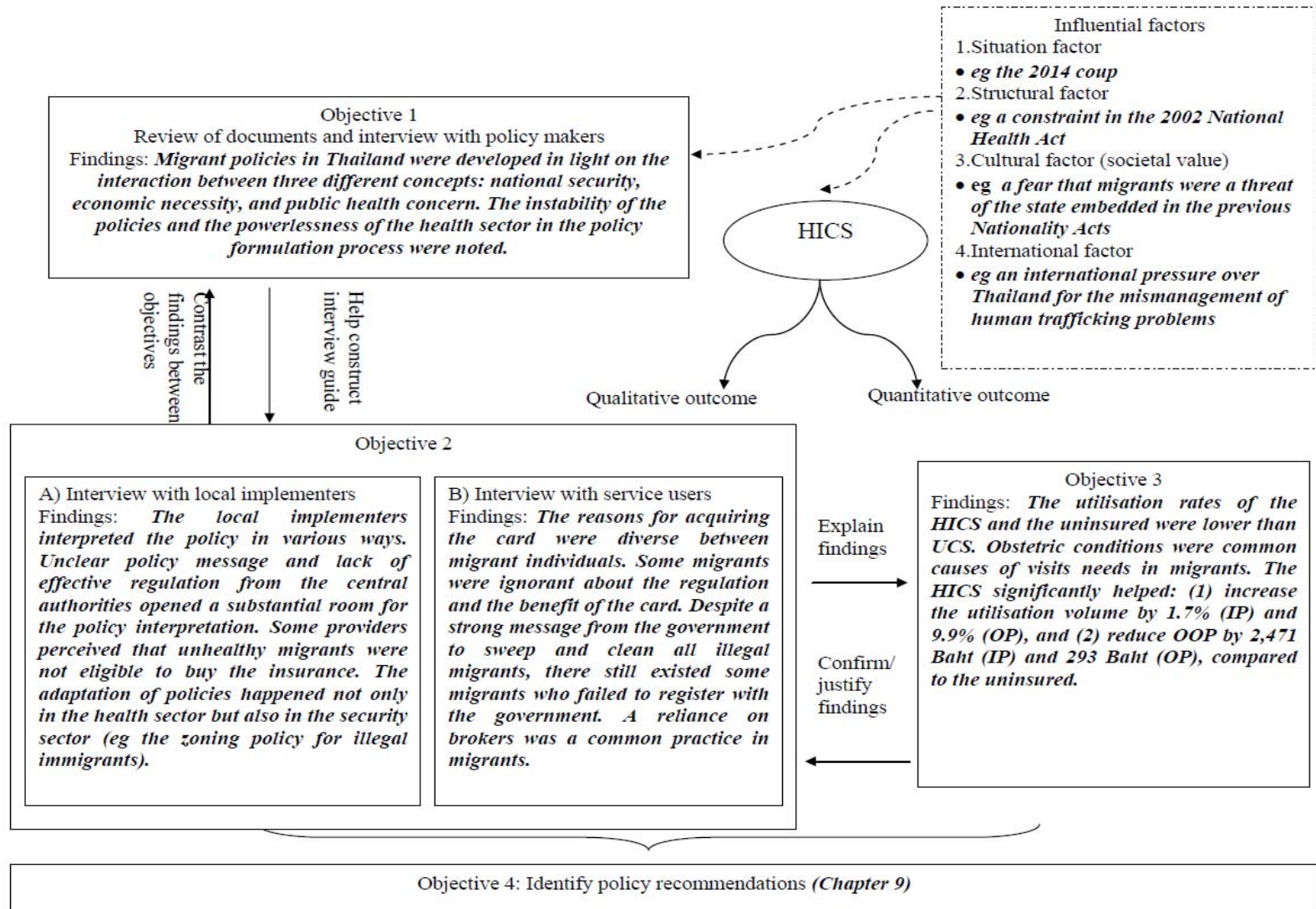
Chapter 8: Discussion of the thesis' findings and methods

This chapter is divided into five main topics: (1) summary of the findings and link with research framework, (2) discussion of the overarching themes, (3) enhancement of theoretical framework for understanding the enrolment of migrants in public health insurance and the insurance effects on use of services, (4) methodological discussion, and (5) conclusion. The key findings/themes appeared in earlier chapters, and were analysed together by thematic analysis. As suggested by Graneheim and Lundman (2004), thematic analysis is a method for extracting the crosscutting contents/themes or higher constructs from the original findings.

8.1 Summary of the findings and link with research framework

The key findings of all objectives were mapped to the earlier research framework presented in Chapter 4, see Figure 36. In Chapter 5 (objective 1), it appeared that the HICS was formulated amidst the dynamics and the interaction between three key political angles, namely, national security, economic necessity, and public health concerns. In Chapter 6 (objective 2), it was found that local implementers and service users adapted their routines towards the HICS policy in various ways, and often re-interpreted the policy in a way that maximised their benefit and most fitted with the local context. All these challenges were coupled with an unclear policy message, ineffective intersectoral cooperation, and the involvement of private intermediaries in the registration process for migrants. In Chapter 7 (objective 3), analysis of the facility-based data revealed that the overall utilisation rate of migrants was still less than the Thai UCS beneficiaries; and the HICS had a small but statistically significant positive impact on utilisation volume, though it significantly helped reduce OOP for insured migrants, relative to the uninsured.

Figure 36 Mapping the research findings with the research framework



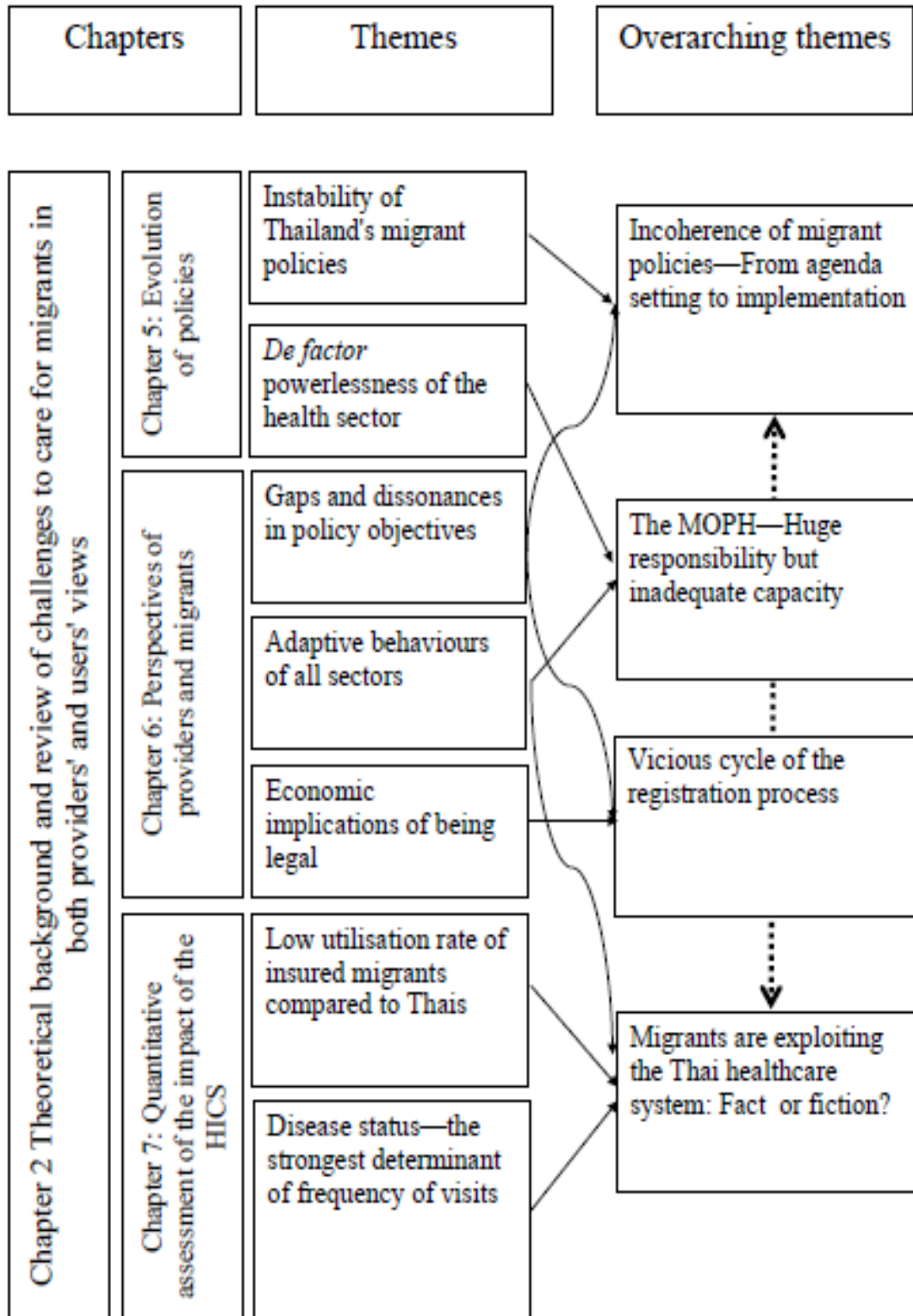
In the earlier part of the thesis, the researcher drew important themes/concepts from the fieldwork and presented them in the discussion part of each chapter. In Chapter 5, there emerged two critical themes: (1) Instability of Thailand's migrant policies, and (2) *De facto* powerlessness of the health sector.

In Chapter 6, three important themes, namely, (1) Adaptive behaviour of all sectors, (2) Gaps and dissonance in policy objectives, and (3) Economic implications of being legal, were identified; and in Chapter 7, there were two key messages: (1) Lower utilisation rate of insured migrants relative to Thai UCS beneficiaries, and (2) Disease status, not insurance status, as the most influential factor determining the volume of visits.

To this end, thematic analysis was applied. The crosscutting themes appearing in the results chapters then served as condensed meaning units/contents. Similar codes across results chapters were grouped together to construct the overarching concepts/themes which encompassed all results chapters (in other words, the analysis built on those in all the results chapters). Parts of the results from the literature review chapter and additional references which were related to these themes were discussed as well.

As depicted in Figure 37, four overarching concepts/themes were identified, namely, (1) 'Incoherence of migrant policies—from agenda setting to implementation', (2) 'The MOPH—huge responsibility but inadequate capacity', (3) 'Vicious cycle of registration process', and (4) 'Migrants are exploiting the Thai healthcare system—Fact or fiction?'. It is worth noting that these themes were not mutually exclusive, as in fact, they all interrelated. A detailed description of each theme and its linkage between each other is presented in the following subsections.

Figure 37 Overarching themes synthesised from all chapters



8.2 Discussion of the overarching themes

I. Incoherence of migrant policies—From agenda setting to implementation (overarching theme 1)

It was clear that the implementation of migrant policies in Thailand has faced many operational difficulties. The root cause of the problem stemmed firstly from unclear policy messages and poor coordination between ministries, and secondly from the different authorities' ground concepts and policy directions towards non-Thai populations, which were sensitive to the political atmosphere at a particular time.

Though this thesis focused on policy implementation, some of the results were related to the upstream process of the policy. The discussion in this topic thus expanded to the beginning steps of the policy process, namely, policy formulation and agenda setting, and it appeared that the chaotic management happened at all stages in policy process.

Agenda setting

A very basic problem in agenda setting is a confusion in 'wording', used to define who is Thai and who is not. As explained in Chapter 5, the word, 'alien' (*tang dao* in Thai) was formally used in the laws to refer to a 'non-Thai national' (Thai Immigration Bureau, 2004). By this definition, an 'alien' could be either a national of any country but Thailand, or a person who had not been registered as a national of any country. Yet, in reality, the legal terms were always confused with the lay language. In lay Thai, *tang dao* usually meant a group of migrant workers and dependants from LMICs, while people from developed countries were often called *tang chad*, or 'foreigners' in English. Interestingly, many authorities, including the MOPH, did not show much effort in unpacking this confusion. Similarly, a number of official documents seemed not to be heedful of the words used.

Moreover, when communicating with the local facilities, the MOPH almost always employed the word, 'migrant' in English, in lieu of *tang dao* in Thai. One of the most

confusing examples occurred in 2014, where the MOPH issued a letter to PPHOs in the northeastern region of Thailand, instructing the PPHOs not to sell the health card to 'Caucasian migrants' who visited a facility with the aim of buying the card. The term, '*farang*' (which is a lay Thai term, meaning 'Caucasian migrants'), was used in the MOPH's official letter. The text appearing in the letter contradicted the earlier announcement of the MOPH in 2013, which informed the wider public that now the insurance card was available to all '*tang dao*' populations (or aliens or all non-Thais). To further confuse this issue, the English title of the card used the term 'foreigner' (Bureau of Health Administration, 2015, Bureau of Policy and Strategy, 2012, Health Insurance Group, 2013).

One might argue that the problem above was just an inconsistency of language. However, some academics contended that it was the beginning of many problems. One of the interviewees (PM06) encouraged all authorities to utilise the term 'alien' in their routine practice. She highlighted that though the term 'alien' might sound unfriendly, it better reflected the nationality status problem of a person. Rattanamaee (2009) flagged that many words used to define the citizenship status of a person did not always reflect the 'truth' of the person's background. For example, there were a number of people who were believed to have Thai nationality but for some reason failed to be recognised by the officials as Thai nationals, whom Rattanamaee (2009) called 'artificial aliens'.

This point reflected an ongoing debate in the international literature as well. Koutonin (2015) highlighted that there were still discriminatory words used to refer to an immigrant. He exemplified that the word, 'immigrant', was often set aside for 'inferior' races such as Asian and African immigrants, whereas the word 'expatriate' was often reserved for Caucasian people.

This problem became more complex if focusing on a person crossing a border without a valid travel document. The IOM (2011) suggested that the term, 'irregular migrant', should be used to refer to a person crossing the border without permission, and highlighted that the term, 'illegal migrant', should be reserved for cases of smuggled migrants and trafficked persons. Vargas (2012) pointed out that the term 'illegal migrant'

was dehumanising and legally inaccurate, since living in a destination country without proper documents was a civil offense, not a criminal (illegal) act. Recent literature, especially from the US and Central America, often uses the term 'undocumented migrants' instead, as presented in many articles in Chapter 2, such as Goldabe and Okuyemi (2012), Heyman et al (2009), Walter et al (2002).

Returning to the Thai setting, it seemed that there had not been a consensus amongst authorities on 'whom we are talking to'. Each authority had its own focus and an integration of work between authorities was lacking. The lack of coordination engendered a number of problems, starting from the very basic question of how many non-Thai populations were residing in the country. This question was always a touchy issue in the Thai politics. The logics and means for collecting population data were diverse across authorities, and this in turn hindered the progress of further research on migrant policies and effective policy planning.

The MOI's function mostly concerned migrants and people with citizenship problems who have (either permanent or temporary) residence in the country through the issuance of the residence permit (so-called, Tor Ror) and the 13-digit ID. The MOL limited its role to work permit issuance. The only prerequisites for applying for a work permit were a legitimate residence permit, name and address of the employer, and medical certificate proving of the absence of certain communicable diseases.

Interestingly, having health insurance was not a precondition for obtaining a work permit, but having a work permit was one of the important conditions in buying the insurance card (though in practice, one might argue that the system of purchasing the insurance card was open to everybody regardless of work permit status, this was subject to the decision of individual hospitals' administrative staff).

Another problem in the agenda setting in migrant policies was the expected role of the MOPH. It raises the question of in which way the MOPH should function to better protect health and well-being of all populations in Thailand, beyond acting just as the insurance card seller.

It is arguable that there is nothing wrong with the MOPH as insurance-seller, since the most vital role of the MOPH is just providing services to a patient. However, the researcher argues that if the MOPH aims to cover 'all populations on the Thai soil', as appeared in its strategy (Bureau of Policy and Strategy, 2012), such a goal cannot be reached while the MOPH overlooks the inability of the current information system to track records of its potential beneficiaries. The information system for migrants had some points that were of more important concern than similar issues for Thai nationals, as detailed below.

For Thai citizens, a person was by law insured by the UCS from birth, unless he/she was covered by one of the other two public insurance schemes (ie the SSS and the CSMBS). This implied that being insured by the UCS is independent from employment status. The NHSO could know whom the NHSO must cover by tracking the 13-digit ID of a person from the MOI data. Furthermore, the important aspect of the 13-digit ID for a Thai national was that it served as a time-independent unique identifier of a person. This practice meant that the UCS knew who its target beneficiaries were at all times.

Unlike the NHSO, the MOPH had no information unit that linked the MOPH patient data with the MOI data. This was because, after the NHSO was established, the expected role of the MOPH was as the 'regulator' not the 'purchaser' of the healthcare system, and the MOPH did not prepare itself well enough for the insurance management task. This point was also associated with the inadequate capacity of the MOPH as expounded in overarching theme 2.

In addition, even if the MOPH had all the 13-digit individual data from the MOI, it might not be certain that the MOPH would know who was or was not its insuree, for four key reasons.

Firstly, the 13-digit code did not specify the nationality of a person; an official might only know from the 13-digit ID that a person is not a Thai national. To know the nationality of a person, an official must check the legitimate residence permit paper.

Secondly, the 13-digit ID for cross-border migrants was not necessarily constant over time. The 13-digit ID starting with '00' only meant that an illegal immigrant had already registered with the MOI and was awaiting the NV process. Upon the completion of the NV, the registered person would acquire a temporary passport, which applied a different coding system. Moreover, the passport ID was subject to change once the document expires and the new one is issued.

Thirdly, if the MOPH used another approach by linking with the MOL data (given perfect cooperation), it might be possible to target all migrants with a work permit (which might meet the policy intention of the current government) but dependants of migrants, including those of working age, might be left behind.

Lastly, assuming that the MOPH was able to identify, and to know the profile of, 'all' people in the country, it did not guarantee that all migrants would be insured as long as the HICS still exercised a premium-based system. This was because, to be insured, a migrant needed to show up at a health facility (or the designated location) and express his/her intention to buy the card to the hospital staff.

So far, there had been no serious discussion of the above points, and, most of the time, the MOPH was criticised for a lack of accurate information on migrant populations. Though in practice the local providers, particularly at the health centre level, had very useful information about the whereabouts and profiles of all inhabitants in their responsible areas (the data were stored in the family folder format; the researcher also used this information to approach the interviewees with precarious legal status), unfortunately, such information was not routinely submitted to, and not used by, the MOPH for the planning of migrant policies.

To sum up, starting from the policy agenda setting, it was still unclear who on Thai soil the Thai government aimed to cover. Each authority had its own agenda, which at times competed with each other (tension between state security, economic needs, and health protection). With the ambiguity in the policy objective, it was not surprising that a fuzziness in policy formulation and implementation always persisted.

Policy formulation

Since migrant policies at the national level had never been made clear, many policies formulated thereafter seemed not to be successful in tackling deep-rooted migrant problems. Almost all migrant policies mentioned in this study (for instance, the '00' card, the health insurance card, the NV registration, and even the OSS policy) were interim measures to address problems of illegal migration, but it seemed that the government utilised these measures without adequately addressing the competing interests between authorities.

The above point was evidenced by several rounds of registration periods in the last decade. The key problem lied in obsolete laws and regulations that could not keep pace with the change in human migration. For instance, so far it was not clear how the government should deal with illegal migrants who joined the NV process but finally failed to prove their nationality. In other words, those migrants were *de facto* stateless persons. Though the Thai government endorsed the National Strategy to Address Rights and Citizenship Problems of a Person in 2005, in practice the registration of stateless people was closed in 2009, and its focus was limited to those with permanent residence in Thailand (Ngamurulert et al., 2009). This gap implied that any new stateless persons appearing (after 2009) were excluded and therefore totally undocumented. Furthermore, the exact number of registered migrants who became undocumented after failing the NV was still in question (Napaumporn, 2012).

Another instance of outdated laws which were still in effect was the Working of Alien Act that prohibited migrants from being engaged in certain jobs (negative occupation list), including manual labour. Dejsakulrit (2014) suggested that the negative occupation list should be renounced, as it did not match the opening of the ASEAN Community where the labour market was expected to be more open, and in practice, this regulation was poorly enforced. Previous governments attempted to resolve the low-skilled labour shortage by endorsing the bilateral MOU in order to recruit legal low-skilled workers from neighbouring countries and by introducing the MOL Decree to allow these migrants to engage in certain jobs, namely, manual labour and household maids. This

approach was in essence the MOL's tactic to get around the negative occupation list as specified in the Act. However, such an approach experienced some difficulties. For instance, recruitment through the MOU was extremely expensive and cumbersome due to red tape and the intervention of private intermediaries. Additionally, it created conflict between the MOU and the MOPH in terms of hiring migrant health workers. While many health facilities wished to hire migrant workers as health assistants (and most of these migrants were ex-illegal immigrants), the MOL argued that hiring migrants as health workers was invalid because the MOL regarded health work as highly skilled. This meant that to recruit migrant health workers in a legally correct manner (according to the MOL interpretation), a public facility (as an employer) was required to follow recruitment processes in the same way as a private company hiring high-skilled foreign workers. Interestingly, in the fieldwork, none of the facilities in Ranong province recruited migrant health workers via such channels.

The challenges did not lie only in the policy content, but also in the policy formulation process. The history revealed that almost no migrant policies in Thailand were formulated through a 'rational model' where all migrant-related problems were discussed, and where all policy options were considered with ample evidence to support decision making (Walt, 1994). It was quite obvious the past and existing governments did not really aim to unpack the structural problems of the policies. Oftentimes, policies were quickly generated because of pressures from civil groups, and from international and domestic political conflicts. A very distinct instance was the instigation of the OSS policy as a response to the Tier 3 trafficking report and the exodus of Cambodian migrants right after the coup d'état.

A change of migrant policies as a response to external factors was not uncommon in international politics. The European refugee crisis since 2014 was another interesting example. In 2015, amongst other EU nations, Germany accepted a large number of new asylum applicants (more than 476,000). Peston (2015) suggested that the generosity of Germany was not solely derived from its intrinsic intention to aid refugees who fled the religious conflict. It was also a response to Germany's reverse-triangle demographics as the dependency ratio (percentage of those aged above 65 to those aged between 15 and

64) in Germany was projected to be 59% by 2060. Aside from economic reasons, Bershinsky (2015) reported that refugees and asylum seekers were accepted because Germany was keenly aware of its leadership role in the EU; thus international politics forced Germany to 'at least do something' to alleviate the refugee crisis.

The policy formulating process seemed to be more sensitive to the nationalist views and economic demands more than to the health sector (either in a positive or negative way). The emergence of the OSS was one example of this, as the OSS was basically initiated by the security sector, not the health sector. In addition, the nationalist idea was prevalent not only in Thailand, but throughout Southeast Asia. During the recent Rohingya maritime movement in the Andaman Sea, Thailand, Indonesia and Malaysia all denied Rohingya boats permission to land on their soil, creating a situation which the media called the 'human ping-pong' crisis (McKirby and Mohsin, 2015).

Sornbalang (2012) suggested that the nationalist mind-set in Thai society stemmed primarily from the longstanding social discourse (though media and school curriculum), claiming that migrants, particularly the Burmese, were the state's security threat. Though there were a number of amendments to immigration and nationality laws, such amendments had not adequately changed the nationalist mind-set. This point was supported by Leichter (1979) suggesting that cultural values of the society almost always affected how public policy was formulated and implemented.

Muntharbhorn (2013) pointed out that Section 7bis of the current Nationality Act should be amended to meet the international human rights standard, since this regulation clearly contradicted the principle of the 1989 Convention on the Rights of the Children, which Thailand was party to (see Section 7bis of the Nationality Act in Appendix 10). Currently, Section 7bis indicated that a child born in Thailand to undocumented/illegal immigrants, or immigrants who were not granted permanent residence in Thailand, would be regarded as an undocumented/illegal immigrant from birth.

Robertson (2010) also observed that while the demand for migrant labour was soaring, and there were many new regulations from the MOL to facilitate the recruitment of

migrant workers, promotion of the rights of workers was still neglected. This was evidenced by the Section 88 of the Labour Relations Act (1975) that limited the rights to set up and belong to a trade union to those with Thai nationality. Saisoonthorn (2015) mentioned that, regardless of the politics behind the launch of 365-Baht card for a child, the 365-Baht card policy was, in practice, the first time that humanitarian motives took priority over nationalist and economic perspectives.

Interestingly, whenever Thailand was blamed for its sluggishness in warding off trafficking, the Thai government always flagged the toppling down of trafficking syndicates and unscrupulous officialdom as a yardstick of its success. It rarely pointed to revising obsolete laws/regulations and promoting the health and well-being of the at-risk population, which included not only trafficked victims but also all undocumented/illegal migrants and dependants. In essence, as long as the humanitarian point of view was not given equal importance to national security and economic perspectives, it might not be justifiable for the government to say that the country had done its best in combating trafficking and humanitarian disasters (Office of the United Nations High Commissioner for Human Rights, 2011).

Policy implementation

As elaborated in Chapter 6, there are a number of implementation gaps in the HICS policy. However, the term 'gaps' might not be appropriate here, as the policy objectives and goals were too vague to identify the gaps. The implementation challenges presented in this study could be explained by both top-down and bottom-up approaches.

Using a top-down approach, Schofield (2001) concluded that the implementation failure of a policy originated from various factors, such as (1) unclear policy messages, (2) insufficient resources, (3) opposition within the policy community, and (4) unfavourable socioeconomic conditions. All of these points appeared in the fieldwork findings. For example, in the matter of unclear policy message, there was a problem with differences in interpretation of 'dependants', between the MOL and the MOPH. The MOL construed that migrants' dependants were children under the age of 15, who were not eligible to

acquire a work permit. In contrast, the MOPH imposed a cut-off age at 7. This tacitly created a gap for a migrant child aged between 8 and 15 since he/she was not eligible to apply for a work permit. Besides, suppose health staff were relaxed enough and allowed that migrant child to buy the insurance, his/her parent would need buy the card at the adult price.

Regarding insufficiency of resources, there were concerns over budget constraints for hiring bilingual staff. As a result, the PPHO of Ranong province asked for support from local NGOs to help mobilise resources for hiring interpreters at the health centres. However, there was a question about the sustainability of this programme because the support from NGOs was fading away.

The poor compliance of implementers was observed in contradictory practices of the PPHO and some of its affiliated health facilities. While the PPHO encouraged all facilities to sell the insurance card to as many migrants as possible, some health facilities contested the PPHO message by creating an extra rule, not to sell the card to unhealthy migrants.

Concerning unfavourable economic conditions, it is obvious that while the junta launched a strong policy message that all migrants in Thailand needed to register with the government, not all migrants took part in the registration process. This is evidenced by the three from the ten migrant interviewees in Chapter 6 who neither joined the OSS registration nor bought the insurance card. From their perspective, the most common obstacle to participation in the OSS was the cost of registration, particularly for those without adequate support from peers and employers.

From a different angle, studies from the bottom-up perspective shifted the attention to the contextual variables at the bottom. One of the most influential studies regarding the bottom-up analytical perspective was the Street-Level Bureaucracy theory (known as the SLB theory), by Lipsky (1980) (see Chapter 3 for more detail). Lipsky (1980) proposed that the street-level bureaucrats such as frontline social workers, teachers, and healthcare officers had some level of discretion which enabled them to reshape policy for their own

ends. This proposal is supported by some recent research, for example, the study by Walker and Gilson (2004), presenting the perceptions of primary care nurses towards the user-fee removal policy in South Africa. They reported that primary care nurses in South Africa were reluctant to grant free services to certain patient groups since they considered that many patients were abusing the free care system, and such perceptions were reinforced by the heavy workload and the unavailability of essential medicine at primary healthcare clinics. Lipsky (1980) also highlighted that there were some common routines/strategies that street-level bureaucrats often employed to maximise control over their work environment. These routines were at times contrary to the central policy. Common strategies identified in the SLB theory were (1) rationing services (worker bias), (2) controlling clients and reducing the consequence of uncertainty, (3) husbanding worker resources, and (4) managing the consequences of routine practice. These points were reinforced by the fieldwork findings, as presented in Table 42, which maps the actual findings against some elements of the SLB theory.

Table 42 Matching the fieldwork findings with the proposal in the SLB theory

Coping strategy	Expositions in the theory	Examples from the fieldwork
Rationing services (worker bias)	Street-level bureaucrats often respond to general orientations towards clients' worthiness. For instance, policemen made decisions on the basis of whether or not the suspects displayed respect to the police.	Healthcare providers perceived that only healthy migrant workers were eligible to buy the card even though the regulation of the MOPH still opened room to sell the card to non-worker migrants.
Controlling clients and reducing the consequence of uncertainty	Street-level bureaucrats usually require clients to appear for services, rather than had workers go to clients. This was not merely a matter of economic efficiency. Workers often faced physical and psychological threats when they left their silo. Interactions with clients were structured so that the officers could control their content, timing, and pace and this helped them avoid uncertainty in routines.	The insurance policy always required migrants and employers to show up at the facilities rather than proactively selling the card. Some healthcare interviewees expressed that they were reluctant to sell the card to migrants who failed to join the OSS for fear that such practice might undermine their work security if there was an allegation that they were acting against the junta's direction.
Husbanding worker resources	Street-level bureaucrats often claimed that they needed to conserve their resources as they were subject to meet unpredictable	The health provider interviewees claimed that barring sick migrants from buying the insurance card was a useful measure to

Coping strategy	Expositions in the theory	Examples from the fieldwork
	surge in demands. Too-heavy workload and too-burdensome responsibilities were common arguments that officers used to justify their act of protecting the resources.	protect/conservate the hospital's revenue. They also argued that this revenue was conserved to cover the arrears from providing care to uninsured migrants. Besides, the card revenue was unpredictable since there was a possibility that the registration policy might be changed in the future.
Managing the consequence of routine practice	Street-level bureaucrats tended to protect their routines by referring difficult cases to other people. This practice at times was done not because the problem cases defied workers' abilities, but because they interfered with the workers' routines.	The health staff interviewees, working in the hospital where there was a regulation blocking sick migrants from buying the insurance, mentioned that they might advise the problem cases (sick migrants) to buy the card at other facilities where the card-selling policy was more relaxed.

Another striking instance of this theme is that the central authorities, the MOPH for instance, appeared to be insensitive to the adaptation of policies in the field. This might be because, most of the time, the central policy was designed as a one-size-fits-all measure. Without sufficient awareness of the differences of migrant population characteristics between provinces, it was not surprising that almost all previous migrant policies encountered many hurdles in implementation, in turn leading to more adaptations and deviation from initial policy goals.

One might claim (as raised by one of the interviewees, PM01, in Chapter 5) that it was the intention of the MOPH to provide room for local providers to adapt the migrant insurance policy to fit the local context. This idea was supported by the fact that the HICS financing was designed differently from the UCS. The largest proportion of the card revenue was pooled at the individual hospital, while the UCS budget was mainly pooled at the NHSO, as the only pooling agency at the national level. However, it was arguable that the extent to which a local facility was permitted to adapt the policy was unclear. As presented in Chapter 6, some facilities regarded that barring seemingly sick migrants, whom doctors considered not fit for work (despite those migrants passing the health check for communicable diseases), from buying the card was acceptable, whereas

the officers at the central level opined that such adaptation in policy was against the MOPH intention.

When conflicts between local practice and central policy took place, a lack of effective monitoring and evaluation from the MOPH meant the only concrete means available to local officers to solve the problems was to issue a consult letter to the MOPH on a case-by-case basis. Though such practice was not totally wrong, it was not sensitive enough to tackle implementation problems in a timely manner. This raised an important concern over the sustainability of the policy, and one might expect more problems in the near future due to increased border permeability in the ASEAN Community and the resulting influx of diverse groups of migrants into Thailand.

II. The MOPH—Huge responsibility with inadequate capacity (overarching theme 2)

Thailand had extensive experience in expanding health insurance coverage in the last four decades. In the early 1970s, user fees were recognised as an important cause of household impoverishment. A policy waiving user fees, namely, the Low Income Card Scheme (LICS), was introduced in 1975, targeting poor households. In 1984 coverage was expanded to the informal sector through a community-based health insurance scheme, financed by voluntary household contributions. The schemes gradually evolved into the publicly subsidised voluntary health card scheme (VHCS) in 1994. This piecemeal extension reached over 70% of the population by 2001. In 2002 the government took an important step, unifying the LICS and the VHCS and broadening the coverage to the uninsured 30% of the population. The new scheme, known as the UCS, has been serving as the main public insurance scheme for Thai citizens since then.

The important change at that period was not only the launch of the UCS, but also the reform of the entire health system. The UCS applied the purchaser-provider split concept where the NHSO served as the main governing body of the UCS. In contrast, the role of the MOPH shifted from 'provider' to 'regulator'. This financing reform was designed to promote better efficiency, sustainability, and accountability. Amongst other

things, the UCS had demonstrated success in promoting better health outcomes, narrowing inequity gaps, and preventing incidence of catastrophic expenditure and household impoverishment throughout its 15-year history (Tangcharoensathien et al., 2015a).

Interestingly, in the case of insurance for migrants, it appeared as though the MOPH was turning back the clock to before the UCS era. The main features of the migrant insurance are quite similar to the LICS and the VHCS.

Firstly, it targeted the poor. Though the MOPH did not state this intention clearly in its announcement (and there had not been any system for means testing), this point was reflected by the interviews with policy makers in Chapter 5, expressing that the insurance card should not be sold to what they saw as better-off groups (such as European migrants in the Northeast of Thailand). Though this study did not have empirical evidence to prove whether or not the impression of policy makers on European foreigners (viewing them as the better-off group) was valid, there is some indicative literature suggesting that there exist some foreigners living rough in Thailand. Some were homeless and experiencing precarious immigration status (Finch and Merrill, 2013, Campbell, 2013).

Secondly, its nature was not truly compulsory. Though, some literature, such as Srithamrongsawat et al (2009) and Tharathep et el (2013) defined the HICS as 'compulsory', this thesis contended that the HICS was not totally compulsory. As a matter of fact, though registration for a residence permit for migrants was compulsory (in theory), buying insurance was not mandated for all migrants. One might claim that insurance became compulsory after the advent of the OSS, however, as described in Chapter 5 and Chapter 6, the OSS was just a place where the three relevant ministries (MOI, MOL, and MOPH) joined together to facilitate the registration process. So far, there had not been laws or regulations that indicated a penalty for an employer of a migrant if his/her migrant employee was uninsured.

The voluntary nature of the LICS and the VHCS entailed various implementation difficulties. Firstly, it was extremely difficult to define who was poor and who was not (Coronini-Cronberg et al., 2007). Secondly, in the Thai context, where the majority of the population (both Thais and non-Thais) were involved in the informal sector, it was not feasible to require contributions from all; and this was one of the key reasons, underlined by Prakongsai et al (2009), why the UCS applied general tax financing rather than payroll contributions. Finally, LICS insurees might (indirectly) be stigmatised, and this created significant barriers to care (Pannarunothai et al., 2000). These reasons were critical factors causing the Thai government to terminate the LICS and the VHCS in 2002.

One might argue that the HICS is at least a practical means of achieving UHC for 'all people' on Thai soil. This point should be pondered with caution. Some international literature argued against using voluntary insurance as a path towards UHC. Alkenbrack et al (2013) exemplified a case study in Lao PDR, where the community-based voluntary insurance scheme was launched to target poor households, then found that the insurance suffered from poor risk-pooling. After 12 years of operation, the scheme could cover only 2% of the 50% target population. At the global level, Pettigrew and Mathauer (2016) underscored that many countries paid inadequate attention to the potential risks of voluntary insurance as a route towards UHC. They explained that out of 74 countries included in the analysis of movement between voluntary health insurance expenditure (VHI%), OOP expenditure (OOP%), and general government health expenditure (GGHE%) during 1995-2012, seventeen countries saw a rise in VHI% plus an increase in OOP% and a decline in GGHE%. The study also concluded that voluntary insurance was not effective in filling gaps in publicly financed coverage.

Aside from the problematic design of the HICS, the limited capacity of the MOPH made things more complicated. Health sector reform needed to ensure that the implementing organisations were well prepared. The term, 'capacity', in this regard, has both internal and external elements. The internal aspect comprises adequate number of skilled health staff, well-founded infrastructure, and good information systems. This includes strategies to incentivise health workers to perform their work properly, such as adequate

salaries, and a clear *modus operandi*. The external aspect refers to the broader environment that supports the function of the implementing units. This point encompasses political commitment and enabling laws/policies that help the organisation break through rigid bureaucracy (Mills et al., 2001).

After 2002, the MOPH function was reformed. Most functions related to health insurance management were shifted to the NHSO, including budget control. In 2004 the HICS was formally launched. In principle, it should have been managed under the NHSO, but because of the narrow interpretation of the 2002 National Health Act by the Office of the Council of State, the power of the NHSO was restricted to Thai nationals. Hence, the MOPH took over responsibility for the HICS instead. Nevertheless, the MOPH did not prepare itself well for this task. It did not have a specific unit with adequate capacity to manage the insurance effectively. As a result, the HICS was assigned to the Health Insurance Group (HIG), a small unit under the Office of the Permanent Secretary.

As elaborated in Chapter 5, the HIG director had no real discretionary power. All important changes in the HICS had to be approved by the Deputy Permanent Secretary, who was subject to change according to political instability. The HIG's investment in human resources and technology for migrant insurance faced many difficulties. Hiring additional staff could not be done easily since the quota of civil servant posts was limited. So far, the HIG had about ten staff members but their responsibility was huge as they needed to take care of over 1.5 million beneficiaries. The electronic claiming system of the HIG was outsourced to a private company due to the HIG's limited technical capacity. The delay in reimbursement often created conflicts between the HIG and local facilities, as reflected in the consultative meeting between the MOPH and the PPHOs in 2005, where many local facilities complained about the severe delays of HICS reimbursement (Bureau of Health Administration, 2015).

Thus it might not be too harsh to criticise the HIG and the MOPH over the lack of efficiency, accountability, and responsiveness in managing the scheme. The latest annual report of the HICS was made in 2011, and no subsequent reports had been

launched to the public. Besides, there was no concrete system/channel that enabled the providers and the service users to voice their concerns to the MOPH in a timely manner.

Vorakee (2003) underlined that the aforementioned problems appeared in almost all authorities in the Thai bureaucracy, not just the MOPH. Almost all previous governments raised the issue of bureaucratic reform as a national agenda. Nonetheless, serious reform had not been carried out because of two main reasons, namely, (1) a lack of political will and instability of Thai politics, and (2) a strong resistance to change of the bureaucracy itself as the reform implied the decline of bureaucratic power through delegation, democratisation, paradigm shift, and downsizing.

This situation was reversed in the NHSO. The NHSO's design did not follow the bureaucratic paradigm. In contrast, it was regarded as 'New Public Management' (NPM) where private sector principles, rather than rigid hierarchical bureaucracy, were used in a state agency to promote efficiency and accountability (Evans et al., 2012). In fact, the thrust towards NPM was not something new in the MOPH bureaucracy, but before the establishment of the NHSO, the NPM approach was used by the MOPH facilities only in some micro-functions, such as contracting a private company to perform the Computed Tomographic (CT) scanning or allowing a certain degree of independence to hospitals in setting user fees within a range given by the central government (Bennett et al., 1998). However, fundamental change in the MOPH bureaucracy was still limited.

With the NPM concept, the NHSO seemed to be more responsive to users' needs compared to the MOPH. By law, the Board of the NHSO consisted of stakeholders from various sectors, ranging from policy-level officers, providers, and patients representatives, making it less vulnerable to political intervention (at least in theory). Missions and indicators were clear at the outset and the authority's performance has been regularly assessed to maintain service standards and quality. NHSO financial and performance reports were open to the public every year. Annual surveys showed that the satisfaction of both providers and service users gradually increased over time (National Health Security Office, 2014).

Of course, no organisation is flawless and since an exploration of NHSO performance is beyond the scope of this study, the discussion here does not intend to state that had the NHSO managed the insurance for migrants, it might have outperformed the MOPH. The bottom line for this point is that, as long as the MOPH is bound with the obsolete bureaucracy and suffers from its limited capacity, it is very likely that the incoherence in migrant policies pointed out earlier will persist, and this will in turn create more difficulties for the MOPH.

It is arguable that the MOPH is the only option for managing the migrant insurance scheme since the involvement of the NHSO is not legally possible. However, Saisoonthorn (2015) contended that the 2002 National Health Act was not set in stone. Though the Office of the Council of State judged that the NHSO's power was confined to Thai nationals, it was always possible to petition for a new verdict, given mutual agreement and strong political will from both the MOPH and the NHSO. This proposal had not been seriously pondered in the policy discourse and the conflict between the two parties became more entrenched in recent years, not only on the HICS management issue, but also regarding the UCS (Tnews, 2012).

III. Vicious cycle of the registration process (overarching theme 3)

As shown in the literature review, to tackle the problems of undocumented/illegal migrants, the first and foremost policy applied in many countries is registering a person to identify his/her country of origin and residence status. However, in practice, this process was not trouble-free. With more than a decade of its registration policy in Thailand, the actual figure of undocumented/illegal migrants was still unknown, and this in turn led to frequent re-openings of the registration periods. Obviously, a key contributing factor to the failures of registration was a lack of coordination between authorities as discussed earlier, but this was not the only reason. Drawing from the results of Chapter 5 and 6, and the literature review, other possible explanations for the registration failure are as follows.

Firstly, the registration policy started with an unrealistic assumption, expecting that migrants mostly entered the country to find jobs with Thai employers. This was not a wrong assumption but it was unrealistic. The story of migrant interviewees in Chapter 6 suggests that migrants came into the country for various purposes; some seeking well-paid jobs, some accompanying friends and relatives, and some just hoping for better life chances. In some households, there were migrants who had been living in Thailand for over a decade, and some of them had children (or even grandchildren) born in Thailand. This observation reflected the fact that some migrants had a strong link with, and even settled their life in, Thailand, and this link might be stronger than their connection with the country of origin.

Secondly, since the majority of immigrants in Thailand are engaged in the informal sector and some are even self-employed, the precondition for buying the card that he/she must be employed by a Thai employer might create more adverse consequences than benefits. One of the critical problems was the intervention in the registration process of crooked brokers and counterfeit employers. Such a situation made registration costs soar and opened room for corrupt officials, which might indirectly force migrants to avoid the system.

Thirdly, the registration policy was just a starting point for migrants who were in the 'nationality status vacuum', since the NV process always takes time. As of March 2016, of the 1.5 million migrants registered with the OSS between 2014 and 2015, about 600,000 had not completed the NV process, and there was no explicit measure from the government that aimed to indemnify the time and financial loss incurred by these migrants and their employers (Prachatai, 2016). As a matter of fact, the registration process could not be done solely by a single country, but needed extensive cooperation between states. In Myanmar, amongst other things, conflicts between ethnic groups and the central government and a lack of transportation to hard-to-reach areas meant that the Myanmar civil registry was far from complete (Daget and Fau, 2011). This situation implied that there were a number of migrants who did not have their name in either the Thai civil registry or the Myanmar civil registry.

Though the Thai government attempted to break the vicious cycle by encouraging employers to hire migrant employees only through the bilateral MOU, this recruitment channel has not been successful in reducing the influx of illegal migrants. As reported by the ILO (2015), problems of red tape and corruption in legal recruitment appeared not only in Thailand but also in Myanmar.

Fourthly, the researcher considers that registration of undocumented/illegal migrants is a catch-22 situation. Most of the time the registration process was performed by state security authorities, such as police department and the MOI officials, and a number of migrants therefore avoided participating in the process. A similar situation was found in Germany, where undocumented/illegal migrants were reluctant to apply for the medical card in the welfare office because they were afraid of their profile being reported to the immigration office, which could lead to deportation (Gray and van Ginneken, 2012).

Interestingly, some countries, the UK for instance, broke this vicious cycle (at least in principle) by separating the registration for health benefit from registration for the sake of citizenship status. This meant that rather than tying the health registration process to hard-power officials (such as police and/or immigration office), the UK government allowed undocumented/illegal migrants to register with a GP under the NHS (Gray and van Ginneken, 2012). The rules were simple. GPs had discretion to register whomever they deem appropriate, excepting some reasonable grounds (such as the patient was not living in the GPs' catchment area). They could not refuse to register a patient on the basis of health status, race, gender, sexual orientation, or social class. Yet, in practice, there existed some variations between GPs. Due to poor guidance from Primary Care Trusts, many GPs demanded proof of immigration status from a patient prior to the registration (Migrants' rights network, 2011).

Fifthly, from the migrant perspective, it was not clear what benefit they would gain from registration. Evidence from Chapter 6 showed that some migrants and employers, despite acknowledging the registration policy, neither joined the registration process nor bought the insurance card. In their view, forcing everybody to buy the insurance was unfair treatment to a healthy person, since he/she was less likely to enjoy health

services. One of the interviewees (MM3) raised an important point that their migrant peers who had already passed the NV and were working in the formal sector refused to join the SSS even though they were supposed to, since the payroll contribution of the SSS was troublesome. Besides, the SSS fringe benefits (such as paying some money upon return to the home country or pension allowance) did not match their needs.

Lastly, from the health systems perspective, it was not clear if the MOPH wished to have its health facilities register all populations (including migrants, stateless people, undocumented persons, etc) in the facilities' catchment area (like a GP Practice in the UK), or register only those who had already participated in the OSS. Referring to the earlier discussion point, this confusion might derive from the equivocal policy message. Nonetheless, there might not be a significant difference between both choices (registering all people or registering only migrant workers) since the financial burden was still borne by migrants any way (as at the time of writing, there was no explicit law/regulation specifying who, between migrant and employer, had to take care of the cost of registration). In practice, an employer often paid for the insurance and other essential documents (ie work permit and residence permit) for his/her migrant employees but later deducted this expense from their employees' salary. This practice definitely created a financial burden on a migrant employee, and reinforced the adverse selection problem (see migrants' case stories in Chapter 6).

The situation of the HICS and the MOPH was in contrast to the 'Education for All' policy of the MOE. As expounded in Chapter 5, the MOE had a policy to register all non-Thai children in the G-series system, begun in 2005. The G-series system was totally independent from security policies, and the MOE schools were able to request budget from the government according to the number of registered children. In principle, no cost was incurred by children or their parents for education. Dowding (2015) reported that, despite several challenges, the MOE's G-series policy was successful in guaranteeing rights to education for all children. The number of migrant children enjoying basic education programme of MOE schools increased continuously since the introduction of the policy (Dowding, 2015).

IV. Migrants are exploiting the Thai healthcare system—Fact or fiction? (overarching theme 4)

'Taking Thai hospitals back to Thai people' was the headline in the news, recently released in Thailand (Thai Tribune, 2016). The news claimed that Thai public hospitals were being occupied by migrant patients, leading to huge negative impacts on the system, such as longer waiting time and an enormous financial burden on the facilities. The interview findings in Chapter 6 also supported this account. About one third of the health worker interviewees expressed their concern over the financial burden of the facilities from providing care to migrant patients.

The idea that migrants exploited the health systems of receiving countries was prevalent not just in Thailand, but also in many developed countries, and it has been more pronounced during the refugee crisis in Europe in recent years. The new NHS regulation in 2015 stipulated that migrants outside the European Economic Area (EEA) were liable to be charged at 150% of the NHS national tariff for any care received unless they were covered by personal health insurance (Department of Health, 2015b). The regulation was part of the efforts to recoup a £500 million estimated cost shouldered by the NHS. Such example more or less indicated a general negative public perception of migrants.

However, it is important to separate people's perceptions from evidence. Results from Chapter 7 clearly suggested that (both crude and adjusted) utilisation rates of insured migrant patients were relatively lower than of UCS insurees, particularly at the provincial-level facility and in OP visits.

Even after adjusting for all potential confounders, the positive effect of the HICS on utilisation was still smaller than the influence of the UCS. It might be justified to state that the insurance made migrants enjoy health services more frequently than the uninsured, but it might be unfair to blame migrants alone for the exploitation of the system, since in reality the utilisation rate of Thai UCS patients was far greater than that of migrant patients. This discovery alluded to the fact that migrants did not always create adverse consequences for the health system, as commonly perceived.

Supporting evidence was found in the US. Stimpson et al (2010) suggested that, based on an examination of health care spending between 1999 and 2006 for immigrant noncitizens (which already included some undocumented/illegal immigrants), the cost of providing care to these immigrants was lower than that of providing care to the US natives. In addition, Stimpson et al (2010) argued that these immigrants did not contribute disproportionately to high health care costs in public programmes such as Medicaid, but they were found to be more likely than the US natives to have a health care visit classified as uncompensated care.

In addition, the quantitative analysis revealed that disease status was the most important influence determining the amount of services used by both Thai and migrant patients. Patients with severe diseases were more likely to show up at the facilities than mildly-sick ones. This discovery was not surprising, and in countries where the public sector played a dominant role in functioning the health system, having vulnerable populations benefit from health services might be perceived as a favourable policy outcome rather than a worry.

Besides, a striking finding came out from the analysis, that is, the interaction between disease severity and migrant insurance was still smaller than the interaction effect in the UCS. This implied that even focusing on the severely-ill patients, UCS patients still had higher utilisation rates than insured migrants, let alone the uninsured. This finding might alarm policy makers and the wider public, concerned that there were migrants with severe diseases being left behind (for instance, the two uninsured interviewees in Chapter 6 who were severely ill, one with HIV/AIDS and the other with COPD). The policy that barred migrants who failed the health check from joining the insurance scheme might create more public health threats, especially since the diseases specified in the negative list (Tier 3) in the HICS regulation were mostly related to public health concerns, such as active tuberculosis, filariasis, and psychotic diseases. So far, there had not been a clear measure to tackle this matter. As reported in Chapter 5, the government was now using the Global Fund budget to provide treatment for uninsured migrants, but only for certain diseases, namely HIV/AIDS, TB and malaria, and with limited quota of eligible beneficiaries. This raised a concern over the sustainability of the programme, as

the Global Fund support would be terminated by late 2016 and it was very likely that Thailand was not eligible to apply for the new round of funding since the priority was granted to the LMICs (Patcharanarumol et al., 2013). Interestingly, some developed countries, such as Germany and France, have established special public insurance funds for treating patients with communicable diseases for the sake of public health security (see Chapter 2) (Gray and van Ginneken, 2012).

In terms of financing, the HICS was a lucrative source of funds for some hospitals. Evidence from the financial sheet of a hospital (shown in Chapter 6) revealed that after deducting the cost of unpaid debts from treating uninsured patients, the hospital still earned about 12 million Baht (US\$ 370,000) surplus from selling the card. This finding was supported by Srithamrongsawat et al (2009), which assessed the cost recovery of service provision for migrant workers in 47 hospitals in Thailand. The study found that, after deducting the expense of treating insured migrants and the exemption for the uninsured, hospitals that still gained a surplus from selling the insurance card were those with more than 10,000 registered migrant workers and those located in urban areas, while those with less than 10,000 registered beneficiaries and those in rural areas were at risk of running a deficit. This issue is related to the earlier discussion point that the wider public at times misperceived that migrants were exploiting the Thai health care system. However, the reality was that a hospital could earn revenue from insured migrants through the card premium, and even in the case of uninsured migrants, the patients still paid out-of-pocket for the services (according to ability to pay). Thus a presumption that migrants were always free-riders might not be totally justified.

In summary, the above evidence countered the common perception that migrants were excessively exploiting public services. Hanefeld (2013) argued that the new NHS 150% charge on overseas patients by with an aim to recoup costs was made with partial or no evidence. In fact, the UK was a net exporter of medical travellers. Inbound medical tourists treated as private patients within NHS facilities were particularly a lucrative source of income for the NHS. The 50% surcharge might disincentivise patients needing care rather provide additional remuneration for the NHS. Gritt et al (2012) underscored that restricting migrants from health services on grounds that aimed to protect health

system finance could lead to more expensive treatment as migrant patients might return to the facilities at a more advanced stage of disease. They also asserted that the belief that free provision of care was a strong motive for undocumented migration was based on weak evidence. Gushulak and MacPherson (2011) highlighted that there were various factors that induced people to migrate, such as natural disaster, economic concerns, and political persecution but health matters were not amongst the important motives. Besides, the journey to more affluent countries was often long, risky and very expensive; conditions that were not suitable for ill people. This notion was supported by the interview findings in Chapter 6 where the motives to migrate to Thailand of all migrant interviewees were mainly related to economic prospects and family reasons rather than health concerns.

8.3 Enhancement of theoretical framework for understanding the enrolment of migrants in public health insurance and the insurance effects on use of services

While subsection 8.2 elaborated on the content of each overarching theme, this section seeks to shed light on how these themes were linked together. To this end, the researcher has sought to enhance a theoretical framework which reflects key messages from this study. It is hoped that this enhanced theoretical framework may be of use for future research on migrant health. The framework extends and links together some traditional theories, such as the SLB theory by Lipsky (1980) and the theory about factors affecting the policy process by Leichter (1979), see Figure 38 at the end of this subsection.

The main idea of the framework is, though the terms 'enrolment' in the insurance and 'use' of services are intuitively an aspect of service users (migrants), it is imperative to consider aspects of other stakeholders, such as how local providers and employers adapt themselves to the policy (or in the other way round how the stakeholders adapt the policy to match their routines). This is because the adaptation of the policy by relevant

stakeholders may not necessarily align with the policy original intentions, and this may affect the possibility of obtaining the insurance and the use of services amongst (both insured and uninsured) migrants. Thus, the framework briefly divides the role and function of stakeholders involved in the insurance scheme in three groups: (1) policy makers, (2) local implementers, and (3) service users, with details as follows.

Policy makers

Regarding the policy maker group, the framework suggests that the insurance for migrants is just one part of the whole sphere of migrant policies. This implies that it goes beyond health issue as it is deeply engaged with several government authorities, especially the economic and national security sectors. Thus the openness of the policy at a particular time depends on two main factors: (1) power play between authorities, and (2) external pressures surrounding the policy formulation process.

The national security and the economic sectors usually have the greatest influence in policy decision making relating to migrants over the health sector. This is reflected in the diagram by big arrows pointing towards the health sector in contrast to smaller arrows pointing back to the national security and economic sectors. In other words, it appears that state security and economic concerns are always framed as 'high politics' whereas the health sector seems to be 'low politics' (Youde, 2016).

The interaction between authorities is dynamic and much affected by external pressures/influences. These pressures can be either domestic or international (and in practice, in the globalisation era, it can be difficult to distinguish between 'domestic' and 'international' as reflected by the dashed line connecting the two ovals). Some influences may (at least indirectly) make the insurance policy more 'open' (as reflected by a plus sign) while some may make it 'stricter' (as reflected by a minus sign). Examples of these pressures, which were detailed earlier in Chapter 5, are the threat of communism in Southeast Asia during the 1970s-1980s (minus: it led to a denial of the *jus soli* principle in the previous nationality law), the 2014 military coup (minus: it engendered a new regulation that allowed only migrant workers with Thai employers to buy insurance), the

complaint by border hospitals over the financial catastrophe caused by providing care for the stateless population (plus: it led to the introduction of public insurance for stateless people in 2010), and the downgrading of Thailand to the Tier 2 Watchlist in the TIP Report in 2013 (plus: it indirectly caused the government to introduce the card policy for a migrant child).

Local implementers

Local implementers (healthcare staff, security officers, work permit officers, etc) receive messages from central authorities. To insure undocumented/illegal migrants, local implementers need to start with identifying whether or not an undocumented/illegal migrant is eligible to be insured according to the host country's laws. This function is quite similar in most countries (see the literature review in Chapter 2). However, there may be some subtle differences between nations, for instance, in Italy an undocumented/illegal migrant is required to register with the municipality of residence to obtain a temporary residence permit, while in Thailand an applicant needs to have both a temporary residence permit and a work permit first, then to pass the health check before being eligible to buy the insurance. Local implementers will classify migrants into 'eligible' and 'non-eligible'. The eligible migrants can take up the insurance, while the non-eligible cannot. This idea is reflected by a plus sign alongside the bold arrow for the eligible and minus sign for the non-eligible.

However, in practice, policy makers cannot guarantee perfect compliance from the ground-level officers. Unclear policy messages, poor regulation and monitoring from the central authorities, and perceptions that the policy is unfit to the local context, are common causes that lead local officers to 'adapt' or 'bend' the policy from its primary intentions. The adaption can be 'positive' and/or 'negative'. The diagram demonstrates some adaptive behaviours of local implementers in the dashed arrows. Negative adaption may make the eligible become non-eligible (such as creating an internal rule prohibiting seemingly sick migrants from buying the insurance), while positive adaption may cause the non-eligible to be eligible for the insurance (such as campaigning for the insurance with migrants in Myanmar). Note that some adaptations do not have a direct

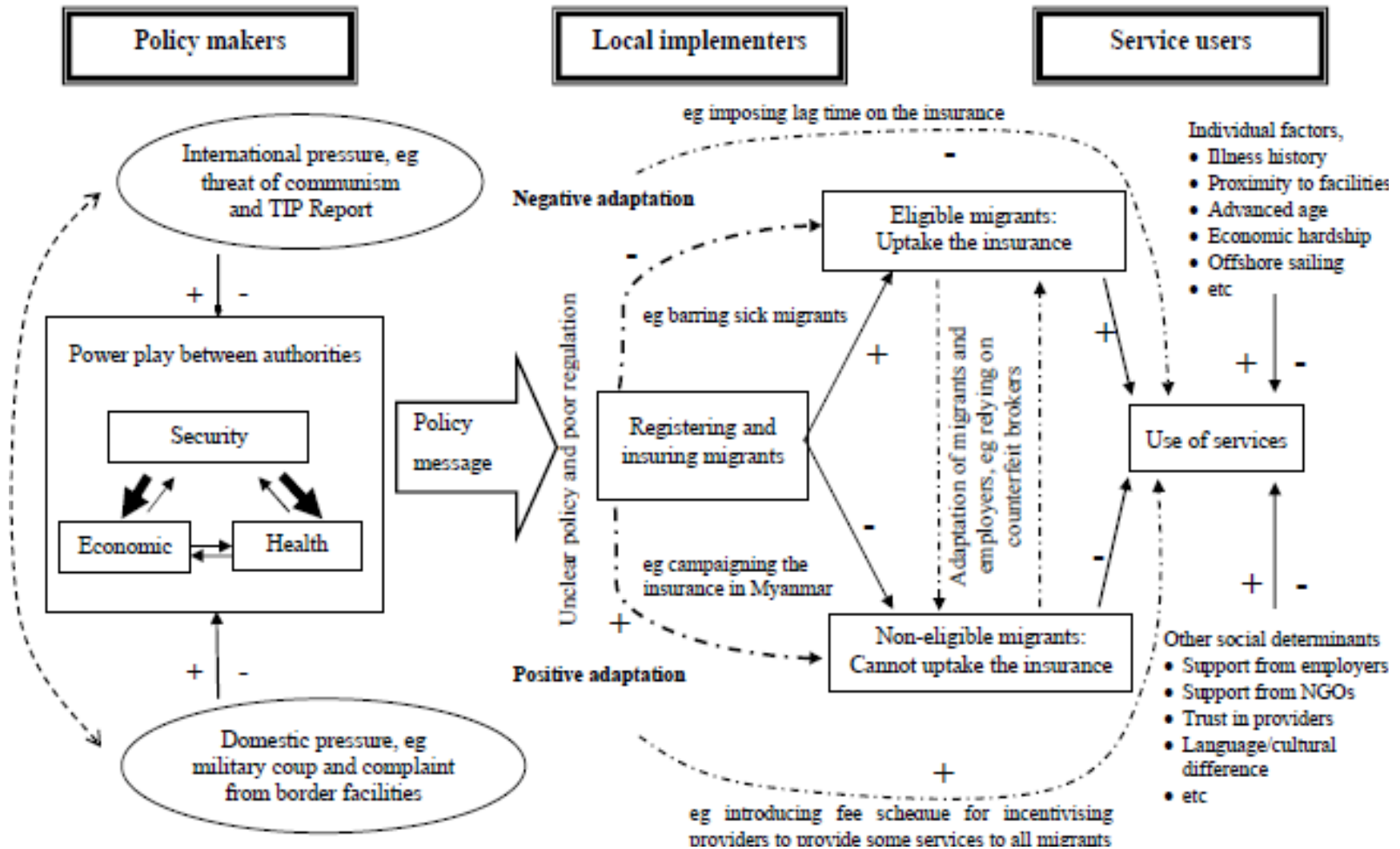
impact on taking the insurance in the first place but may jump to another step, that is, the use of services (for example, the within-province fee schedule policy to incentivise local health staff to provide some services free of charge to all migrants regardless of their citizenship status).

Service users

Service users include migrants and employers of migrants. Evidence from Chapter 7 confirmed that insured migrants tended to utilise services more often than the uninsured (despite to a lower degree compared to native citizens). This is depicted in the diagram by a plus sign next to the bold arrow pointing from eligible migrants to use of service. Nonetheless, one should be aware that the citizenship status of an immigrant is very fluid. Registered migrants can change their status to 'undocumented/illegal' for various reasons, such as failing to pass nationality verification or refusing to renew their passport once expired. By contrast, an undocumented/illegal migrant may change their status to 'documented/legal' by several means, for instance, resorting to a broker to act as though he/she is an employer of these migrants in order to fulfil the registration criteria. This point can be regarded as an adaption of policy by service users as well.

Apart from insurance status, there are several other factors that influence migrants' use of services. The researcher classified these factors into two groups: (1) individual attributes, and (2) social determinants. Chapter 7 suggested factors that tended to increase number of visits at health facilities, such as history of catastrophic illness and proximity between domicile and registered hospitals. In contrast, some attributes may serve as hindrance to service use, for example, financial constraints in a household, or involvement with occupations that spend most of the time offshore. For social determinants, the literature review in Chapter 2 and the qualitative findings in Chapter 6 clearly indicated that language/cultural barriers and unfamiliarity with the health care system in a host country tended to limit migrants' use of services. However, some determinants can be considered enabling factors, such as support from employers and migrant peers, and an involvement of NGOs to fill the service gap.

Figure 38 Conceptual framework concerning the enrolment in the insurance and use of services amongst undocumented/illegal migrants



8.4 Methodological discussion

I. Strengths of the methods

Multi-methods design

This thesis employed a multi-methods design, which can be regarded as a key methodological strength. In social science research, the multi-methods approach has been increasingly applied in recent literature exploring social phenomena. It is a useful tool for exploring the complex webs of factors that affect utilisation of health services. Teddie and Tashakkori (2003) stated that a multi-methods approach was superior to a single-method approach in three ways: (1) it enables answers to some research questions which cannot be answered by a single-method approach, (2) it enables researchers to provide better and stronger inference, and (3) it allows researchers to explore a great diversity of divergent views. With these advantages, the multi-methods approach fits well with this study's objectives, as the implementation of the HICS involves the health dimensions well as national security and economic angles.

In addition, the multi-methods approach enabled the researcher to answer both confirmatory and explanatory questions, and to explain the relationship between the studied variables. In this regard, quantitative and qualitative investigations were done in parallel to help validate the outcome of each study objective and to offset the methodological weaknesses of each research method.

Qualitative approach

In terms of qualitative methods, one of the methodological strengths of this thesis is the application of various data collection techniques, namely document review, systematic review, in-depth interview and informal discussion. The researcher adjusted the interview guides to match the roles and responsibilities of respondents, while preserving the main content of the interview guides.

Since migrant policies in Thailand are greatly dynamic, and at the time of data collection there was a huge change in policy as the junta overthrew the elected government, the researcher performed interviews more than once. The follow up interviews also benefited the researcher in several ways. Firstly, they enabled the researcher to assess any change in respondent perceptions. Secondly, the researcher could use the follow up interview as part of the data triangulation process by validating subsequent interview findings with the earlier ones. Thirdly, the more the interviews were carried out, the more the informants became familiar with the research team. An example was the interview with the migrant couple with HIV/AIDS in Chapter 6. While in the first interview the researcher found that the male interviewee was covered by the HICS, the subsequent interviews found that he was no longer insured by the HICS because the new hospital regulation barred unhealthy applicants from the insurance. This finding prompted the researcher to explore the coping mechanisms of this household, and then to discover that the local NGO had stepped in to alleviate the household's health expenditure.

Quantitative approach

Concerning quantitative methods, this thesis investigated the impact of the HICS on service users in comparison with the uninsured and with Thai UCS patients. In this sense, the insured migrants were considered treatment group and the uninsured migrants and the UCS patients were control. Having a comparison group is a prerequisite of a natural experiment study (Craig et al., 2012). Design elements that can strengthen causal inference include using pre/post measures to control for secular changes, such as interrupted time series design, or taking account of potential confounding and selection biases are also important (Meyer, 1995). Though the randomised controlled trial (RCT) is widely accepted as the least biased design for medical and public health research, oftentimes it is difficult to employ RCT in the real world (Khandker et al., 2010). Besides, in the context of a nationwide government policy like the HICS, it might be politically and ethically infeasible to evaluate the policy via an RCT study.

Another methodological strength is the use of individual-patient records over time. These records were collected at local health facilities, and this thesis might be one of the first studies in Thailand to analyse utilisation data deep into the health centre level.

Though some articles have explored migrant health issues in Thailand, such as Srithamrongsawat et al (2009) and Hasuwannakit (2012b), the analyses were limited to provincial-hospital level, and did not account for possible bias from individual attributes and time-varying covariates. To address the knowledge gaps in earlier research, this study thus included key potential confounders at the individual level (such as domicile, occupation, and hospital-level variables) plus time variable in the analysis.

Had the datasets been retrieved from other sources but the local facilities, information on the utilisation of the uninsured and some individual-level covariates might have not been obtained, since the MOPH and the NHSO normally dropped these variables from data submitted from local facilities. This was because these variables were not relevant to the reimbursement process. Also, the use of facility-based data made the researcher benefit from having a larger volume of data since, statistically speaking, the larger the sample size, the smaller the standard error.

II. Weaknesses and limitations

Despite a rigorous research methodology, this thesis still encountered some limitations and weaknesses. Though huge efforts were made to address the study limitations/weaknesses, it was difficult to address them completely. Therefore interpretation and application of the research findings in real-life settings should be made with caution. The following points are key limitations of which readers should be aware.

Overall findings

A prime concern was whether and to what extent the findings could be generalised to other settings or to other groups of non-Thai populations. In terms of spatial scope, this

study was regarded as case study research, where Ranong province was used as an example in investigating how migrant health policies actually functioned in the field. With only one province, it was difficult to claim that the province was a representative of other areas in Thailand. Besides, Ranong province has its very unique context. The province had a large diversity of populations (eg Thais, Burmese migrants, and displaced Thais) involved in agricultural and fishery businesses. Also, transportation to Myanmar was quite convenient due to a long border and numerous informal crossing points. This feature was in marked contrast to other provinces in Thailand. For example, in more urbanised areas like Bangkok and its vicinity, the most common migrant jobs included manual labour, construction workers, and employees in medium-to-large scale industries. In the southern region, the majority of migrants were Chinese and Muslim vendors from Malaysia. In the northern region, the majority of non-Thai populations were ethnic minorities and stateless people, and these populations were mixed up with refugees and migrant workers from Lao PDR and Myanmar.

In terms of population scope, this study attempted to investigate the operation of the HICS policy. As the policy literally targeted migrant workers and their dependants, it implied that the thesis boundary was confined to migrant workers and dependants. This was what the researcher initially expected. Yet, the more research was conducted, the more the researcher realised that the boundaries defining populations were not clear. According to the fieldwork findings, in some migrant households, there were migrants who had been living in Thailand for years, and some were even born in Thailand. This meant they had *de facto* already integrated themselves into Thai society like Thai nationals. Thus it might not be exactly correct to state that the findings presented here were only about migrant workers and dependants. The limitation in differentiating the population of interest was an important element that a reader should be aware of. However, despite being a study limitation, this issue might also be regarded as a strong point of this study because it reflected the complexity of migrant issues in Thailand, and helped a reader to understand the real social phenomena.

Nonetheless, these issues did not mean that the study completely lacked an ability to generalise the finding. Lewis and Ritchie (2003) suggested that generalisation of

research findings could be categorised into three levels: (1) theoretical generalisation, (2) inferential generalisation, and (3) representational generalisation. Theoretical generalisation aims to draw out theoretical propositions and principles that could be applied to a more general population. Inferential generalisation is an ability to generalise the research discovery to settings or contexts outside the study area. Representational generalisation aims to answer if, and to what extent, the results still hold true in the parent population from which sample is drawn.

For theoretical generalisation, though this study did not intend to develop a new theory from the ground in the first place, it had shed light on and extended the perspectives of some existing theories to some extent. For instance, it had broadened the value of Street-level Bureaucracy theory by viewing that the theory could be applied to all stakeholders participating in the entire policy process, not only local implementers. The researcher also proposed a conceptual framework regarding the uptake of the insurance and use of services in migrants (see Chapter 8), which might be regarded as new knowledge in health policy and system research arena, and one may use this as an analytical framework for future research on migrant health. All of these matters reflect theoretical generalisation to some degree.

Also, this study had inferential generalisation. For example, in terms of how the functioning of the HICS was much influenced by the local context, it might be justified to infer that the challenges in policy implementation might occur in nearby provinces where the geography and population profiles are similar to Ranong province, for instance, Prachuab-Kirikan, Chumporn, and Surat-Thani provinces.

Regarding representational generalisation, since the quantitative analysis explored the impact of insurance through facility-based data, and individual records were not randomly drawn from all migrants in the province, the quantitative findings could be generalised to migrants who have ever presented at a facility, but not all migrants in the field.

Objective 1: Interviews with policy makers and document review

As migrant policies in Thailand are vastly dynamic and the timeline for fieldwork was quite limited (between mid-2014 to mid-2016), the study could not capture all the latest changes in migrant policies. For example, recently, the Thai government attempted to expand the insurance coverage to Vietnamese migrants in order to facilitate free labour movement amongst the ASEAN Community (Prachatai, 2015). However, this came about after the researcher had returned from fieldwork, so it was difficult to explore this point in depth. In addition, though the researcher attempted to obtain information from all key policy perspectives (eg state security, economic planning and public health protection), the focus of this study was primarily within health. In addition, there were some societal angles which might have not been explored in this study (or might be touched upon, but just superficially). Such angles included ethnicity, religion, Thai—Burmese history and culture, linguistics, and the role of the media. To further explore these issues, different research approaches are needed (such as ethnographic study, political science approach, and media research).

Objective 2: Interviews with local implementers and service users

A critical limitation was that the information obtained was a reflection of the respondents' views, not their exact behaviours. Though the respondents informed the researchers about the adaptation in policies, it was difficult to track if the respondents really behaved in the ways they reported to the researcher. Due to time limitations, the researcher did not embed himself in the facilities to fully observe how the respondents actually performed their daily work. However, the researcher triangulated the interview findings by several means, such as asking for documents that could prove the interview findings or interviewing service users to check if the adaptation in policies was really carried out as reported by the providers (for instance, the researcher re-visited the HIV/AIDS migrant interviewee to check if he was allowed to buy the card after the providers stated that the new hospital's guideline prohibiting sick migrants from buying the card was launched, and also asked the providers to show the meeting minutes concerning the facility's internal policy).

Approaching migrant informants, particularly the unregistered ones, could not be done in a formal manner due to the precarious legal status of the interviewees. To tackle this difficulty and to mitigate the risk of selection bias, the researcher applied several tactics, such as browsing through the household profile of migrants in the health centres' catchment area, and asking for support from NGOs, when visiting migrants' households. However, the bias might still exist. This was because the interviewed migrants at least could be identified by the NGOs, thus they might not represent the 'most' vulnerable groups that could not seek support from any source.

Another key limitation was that the interviewees knew the status of the researcher as a professional. With outsider status, it was possible that the respondents tried to respond in the way that met the researcher's expectations. The researcher tackled this point by managing the interview in informal manner, such as carrying out the interview in places where the interviewees were familiar (eg at migrant households, or at nearby health centres), and exercising several rounds of interviews (where the first round of interviews began with informal chatting to build up rapport, then gradually probing into deeper detail in the following rounds), and using verbal consent rather than written consent where necessary. All of these practices were performed with the aim of building trust between the researcher and the interviewees, and to have the interviewees disclose their perspectives as honestly as possible.

In addition, language difference was of critical concern. Although a professional interpreter was recommended as the gold standard for most research involved with multi-national respondents (van Nes et al., 2010), in this setting, the researcher asked migrant health workers at the local health centres to serve as field translators instead. A key reason for employing non-professional translators was to avoid any feeling of discomfort on the part of the interviewees. Bischoff and Hudelson (2010) also suggested that even though a professional interpreter was helpful in overcoming language difficulties, he/she might not have a clear understanding of migrants' behaviours and beliefs. Hence, the size of the researcher's team was kept as small as possible. Moreover, in real practice, migrant peers and family members occasionally joined the interview and at times assumed the interpreting role. The researcher was aware that such

a situation was a double-edged sword since it might breach the confidentiality of the respondents, but on the other hand, it made migrants more comfortable taking part in the interview. Accordingly, before embarking on the interview, the researcher always asked the interviewee if he/she was comfortable with a setting where he/she was surrounded by peers and family members.

The researcher tackled a risk of information bias from employing non-professional interpreters by (1) listening to the tape record and checking it with the transcripts, and (2) sending part of the tape record and the transcripts to a professional interpreter to validate the transcript accuracy and to correct any erroneous translations. Although Thai-to-English translation was less problematic than Burmese-to-Thai translation, it did not imply that the translation is absolutely correct, as English is not the researcher's first language. Therefore, the original quotes in Thai are presented in Appendix 9 to enable (Thai-speaking) readers to assess the translation accuracy.

Objective 3: Quantitative analysis of the impact of the insurance

As mentioned earlier, the dataset used in objective 3 was retrieved from local health facilities. The data were individual IP and OP records routinely collected by local health staff in the given period. Though the use of facility-based data has several advantages, as mentioned earlier sections, it still has some drawbacks. One of the key disadvantages was the cleanliness of the data. As the size of the obtained data was over a million records and as it was a real-world dataset where the researcher could not control for quality, despite exhaustive data cleaning, it was possible that the coding error still persisted. An obvious instance was the records of some Burmese patients that were miscoded as UCS beneficiaries. These problematic records were excluded from the analysis; and fortunately the size of such records was not large (less than 6% of the entire dataset).

Careless coding usually occurred in migrant patients. A potential explanation for this phenomenon was the difference in the reimbursement process between insurance schemes. For the UCS patients, a hospital could be reimbursed the IP treatment based on

DRG directly from the NHSO. Hence the UCS records were quite complete and of good quality. For migrant patients, the insurance budget was mainly pooled at individual hospital for both OP and IP treatment. This system might lead to less careful coding of the HICS beneficiaries since the facility had no requirement to submit migrant utilisation data to the MOPH, let alone data for uninsured patients.

Another critical limitation was a lack of unique identifier for migrant patients across facilities. The hospital ID used as the unique identifier in this study could not be tracked across facilities because each facility had its own ID system. Though it was possible to track records across facilities through the 13-digit ID, there were some important concerns over this approach. In the first instance, acquiring the 13-digit ID for each record might breach confidentiality of an individual, and as a consequence the PPHO staff decided not to share the 13-digit ID with the researcher.

Secondly, suppose the 13-digit information was acquired, it might not be a good unique identifier for migrant patients. With reference to the background knowledge from the field, while the 13-digit ID for a Thai patient was fixed, a migrant's 13-digit ID could change over time. As discussed in Chapter 5, issuing a 13-digit ID for registered migrants was only an interim process while the NV process was in progress. Once the NV process was completed, a migrant would be issued with a temporary passport, and then the passport number was literally the unique identifier of that person instead of the 13-digit ID. Should an NV migrant overstay in the country beyond the expiry date specified in his/her passport, and if he/she re-entered the registration process again, that person would be re-issued with a new 13-digit ID. This was not an uncommon situation in the migrant population. As reflected in Chapter 6, all the migrant interviewees had spent about ten years in Thailand, despite that fact that the maximum duration of legitimate stay in Thailand upon completing the NV is four years. In reality, looking merely at the hospital records, it was difficult to determine if an individual had already passed the NV. Therefore this problem inevitably affected the analysis accuracy. It was also an indication of the failure of the government authorities to successfully manage migrants' biometric data.

Thirdly, it was likely that using the hospital number as the unique identifier might cause an underestimation of the utilisation rate per individual in the quantitative analysis. This was because the analysis could not link the records of an individual across facilities. However, the result might not be severely biased because the main purpose of objective 3 was to 'compare' the effect of different insurance types on the outcome variables, rather than estimating the absolute effect of the insurance. Suppose the estimate was downwardly biased, when comparing the estimate across individuals, such bias was likely to be differenced out because the bias took place not only in migrant patients, but also in Thai UCS beneficiaries. However, this assumption might be true only if there was no significant difference in the unobserved characteristics across beneficiaries. For Ranong province, this assumption was likely to be justified because of an internal policy that repealed the gate-keeping mechanism for both migrants and Thai UCS beneficiaries. Besides, to address this problem more thoroughly, the researcher added the domicile variable in the analysis. Therefore part of the effect of the change in facility choice of a patient was captured by the proximity between his/her domicile and the registered health facility.

Reflexivity

As part of this thesis employed a qualitative approach, it is imperative to acknowledge the personal accounts of the researcher in terms of role, social status, and prior knowledge that might affect the rigour of the analysis. This element is known as 'reflexivity'. In qualitative tradition, subjective impressions and personal values are an inevitable part of the research process. Thus reflexivity is a way that researchers critically analyse themselves about their subjective views on the research findings, without abandoning all claims to producing scientific accounts of the world (Green and Thorogood, 2014).

Reflexivity has played important role since the beginning of the research. For this study, at the proposal development phase, the researcher crafted the research questions based on an assumption in Western healthcare that service users wish, and ought to be, informed about the policies that affect their health needs, and policy makers expect

perfect compliance from the users. This is because of the researcher has an educational background in Western medicine and is familiar with the concept of facility-based care. The researcher thus more or less expected that the insurance would benefit its beneficiaries only if it could boost number of visits at health facilities.

During the data collection phase, though the researcher always informed the respondents that the interview was in essence part of his doctoral degree, and the interviewees were always assured that their shared opinions would not affect their work benefits and well-being in any way, it was difficult to conceal the professional and civil servant status of the researcher when contacting and asking for permission from the authorities for entering the fieldwork.

Such a circumstance inevitably shaped the way that the informants interacted with the researcher. For instance, local health staff might avoid showing negative opinions towards migrant patients (maintaining a benevolent image) for fear that the researcher might report this to senior level officers in the MOPH or to the wider public.

With respect to personal accounts, the researcher was aware of the effect of his prior knowledge and work experience on the interpretation of research findings. The researcher worked as a clinician in a border hospital in the northern region of Thailand for years, and he has been immensely involved with several research projects relating to promoting the health and well-being of non-Thai populations. As a result, his accounts are influenced by humanitarian and egalitarian beliefs rather than nationalist perspectives.

To avoid misinterpretation of the findings, the researcher submitted the preliminary results of the research (in Thai) to the interviewees to ask for feedback on accuracy. This practice also enabled the researcher to ask for permission from the interviewees before distributing the research findings to the wider public.

8.5 Conclusion

This thesis concluded that the existing migrant health insurance policy in Thailand encountered several challenges at all stages of the policy process. In the upstream process (agenda setting and policy formulation), there were political tensions between authorities. The policy content was poorly designed and does not capture all the important aspects of the migration process. Besides, there was a lack of participation from all stakeholders in the policy formulation phase. In the downstream process (policy implementation), the HICS was implemented in a haphazard fashion. Local implementers adapted the policy in various ways; some seemed to be positive in facilitating the healthcare access of migrants while others were less so. The situation was made more complex by a lack of capacity in the MOPH in monitoring and regulating the policy, and constraints in the Thai bureaucracy. Prior experience revealed that Thai governments have failed to address migrant health issues systematically. One of the very basic and incessant challenges was a failure in the registration policy, as evidenced by the fact that there existed a fair number of migrants opting out from the registration system. These challenges were coupled with a misperception amongst the wider public that migrants are unfairly taking advantage of the Thai healthcare system. However, this research found that migrants utilised services to a lesser extent than did the Thai UCS insurees. Though the HICS beneficiaries had higher visit frequencies than the uninsured migrants, the use rate of insured migrants were still lower than the UCS patients. Disease status was a strong influence in determining the number of visits, and its effect was even larger than the insurance effect alone. This suggested that the social discourse that insuring undocumented/illegal migrants might overload the Thai healthcare system might not be justified. Moreover, in Thailand there were a number of migrants who were neither insured, nor able to return to their home country, and a policy to protect health of this population has not been in place. This issue not only posed a critical challenge to the government since the current migrant policies have not yet met international humanitarian standards, but also indicated a public health threat to all populations in the country if uninsured migrants are left untreated.

Chapter 9: Contribution to knowledge, policy implications and research priorities

This chapter commences with the summary of research findings (subsection 1) and the contribution of knowledge to the field of health policy and systems research (subsection 2), and is completed by policy implications (subsection 3) and the recommendations for research priorities (subsection 4).

9.1 Conclusions of the study

Migrant health has received much attention in both domestic and international politics in recent years. From the economic perspective, migrants are key contributors to a host country. From the public health perspective, protecting the health of migrants implies a protection of health and welfare of the receiving countries' populations as a whole. Accordingly, the issue of migrant health and well-being becomes one of the important agendas in many high-level policy dialogues. However, the wider public's perception of migrants is not always positive. With a migration surge, today there exists a concern over if and to what extent migrants are taking advantage of a host country's welfare system, as well as more serious concerns over trafficking issues.

As presented in Chapter 2, much of the literature reveals that migrant health is greatly dynamic and interacts with many factors, not just individual health needs but also differences in healthcare systems, diverse social perceptions, and host countries' legal restrictions on migrant rights. Some literature suggested that, in general, migrants tended to have better health than the host population, leading to a lower utilisation rate in migrants than the host country's citizens. This phenomenon is known as the 'healthy migrant effect'. However, there is also evidence suggesting that the low utilisation rate amongst migrants was not mainly due to favourable health status but instead stemmed from the fact that migrants, particularly the undocumented/illegal ones, often faced a number of difficulties in accessing health services, including communication barriers, cultural differences, and precarious legal status.

The systematic review in Chapter 2 elaborated this point by suggesting that the challenges in providing care for migrants can be sorted into three layers, (1) interaction with migrant patients (such as language barriers and differences in perceptions/knowledge of healthcare systems), (2) constraints in a healthcare workplace (such as lack of human resources and interpreting services), and (3) contradiction between laws that restrict right to health of illegal/undocumented migrants and professional ethics/standards. Literature also suggested that the extent to which migrants enjoyed health services in public facilities varied according to the political direction and each country's health system context. Moreover, the provision of care in reality does not always conform to what is written in law, as there is always a substantial room for legal interpretation and the adaptation of policies by local providers to fit their own daily problems. The situation where local officials implemented a policy in a way that deviates from the initial policy goals is what Lipsky (1980) defined as 'Street-level Bureaucracy' (SLB) theory, a commonly used concept in much health system research, including this thesis.

Chapter 2 served as a basis for the identification of gaps of knowledge in Chapter 3. The challenges in providing care for migrants identified from international evidence, appeared in the Thai context as well. Moreover, the migrant health situation in Thailand seemed to be more complex for certain reasons as follows. Firstly, the vast majority of migrants in Thailand are illegal/undocumented immigrants from neighbouring countries (CLM nations). Secondly, the country always needs a large number of migrant workers as they are mostly involved with risky jobs that Thai workers tend to ignore. Lastly, the health sector is not the only player in migrant health policy; the security and economic authorities are also closely involved in this issue.

Of about 1.5 million migrant workers (including only those with a work permit) in Thailand, over one million entered the country without a valid passport or travel document. Notably, this figure does not include migrants and their dependants who failed to register themselves with the government. The previous and current governments attempted to address migrant health problems through various measures, including requiring all illegal/undocumented migrants to be registered with the

government within a given period, and instigating a health insurance scheme specifically for these migrants, namely, the HICS.

Though the HICS has been implemented for years, a systemic evaluation of the scheme is still lacking. This thesis therefore aimed to tackle this knowledge gap by exploring responses of various stakeholders to the HICS and by investigating the outcomes of the HICS in terms of utilisation volume and out-of-pocket payment (OOP) of the HICS insurees. To this end, a multi-methods approach was exercised.

The thesis consisted of four objectives. The first objective was to explore how the HICS and surrounding migrant policies were formulated (Chapter 5). Data were collected through document review and interviews with policy makers. The results showed that the evolution of migrant policies in Thailand was in essence a power play between state authorities. The HICS is just part of the complexity of migrant policies, where the MOPH seems to have less dominant power than other government authorities. The sphere of migrant policies in Thailand is dynamic and subject to change according to various unpredictable determinants, ranging from domestic variables like a change in government and pressures from media and civil society, and international factors, such as a tense relationship between Thailand and its neighbouring countries, and allegations of human trafficking in Thailand. Theoretically, the HICS should function in line with migrant policies of other authorities, especially the policy on issuance of a work permit (by the MOL) and the nationality verification policy (of the MOI). Yet, in the real world, there are a number of operational constraints due to bureaucratic inefficiency, poor law enforcement, and lack of coordination between ministries. In 2014 the junta instigated a new measure, namely, the One Stop Service, or the OSS, with the aim of filling the gaps between ministerial policies and of responding to the massive outflow of migrants after the coup. Though the OSS seemed to be successful in registering a large number of illegal/undocumented migrants, it is difficult to claim that all deep-rooted problems in migrant policies have been solved.

Chapter 6 sought to address study objective 2, that is, to elaborate the perceptions of healthcare staff, street-level bureaucrats, and migrant service users towards the HICS

policy in reality. Some local implementers adapted the policy in various ways to address challenges in the work routines, despite the fact that such adaptive practices might make the policy deviate from its initial intention. Some adaptations were 'positive' for migrants (such as the withdrawal of user fees for all patients, regardless of nationality status, for certain services with externality benefits) while some tended to be 'negative' (such as prohibiting unhealthy migrants from acquiring the insurance card with the aim of protecting a hospital's financial gain).

In addition, adaptations in policy happened at all levels, from policy makers at the MOPH, to executive staff at the PPHO, and to frontline health staff at local facilities, and took place not only in the MOPH, but also in other ministries (such as the creation of a 'zoning' policy by the MOI). Unclear policy messages and a lack of feedback mechanisms intensified the implementation complexity.

Though the government attempted to 'sweep and clean' undocumented/illegal migrants in Thailand, there still existed some undocumented/illegal migrants (the exact figure was unknown), who failed to join the OSS. The registration cost was a critical concern for migrant workers and their employers. Support from employers was an important factor that determined the participation in the registration process and the acquisition of all essential documents, such as work permit and insurance card. Reliance on brokers to help pass through the registration rigmarole was common practice amongst both migrant workers and Thai employers. NGOs also played an important role in providing support to migrants who slipped off the registration track, and in helping facilities to fill service gaps (such as mobilising resources to employ migrant health workers at health centres, in order to avoid difficulties in hiring illegal/undocumented migrants via normal bureaucratic channels).

With the above challenges, this does not mean that the HICS policy has no merits. The important benefits of the HICS on its beneficiaries, as examined in the third study objective (Chapter 7) are as follows. Firstly, the HICS helped increase access to care of its insurees. Secondly, it did reduce OOP at point of care. Catastrophic illness was the main factor that contributed to higher utilisation volume, and this effect was stronger

than the insurance effect alone. Besides, the coefficient of the interaction term between disease status and the HICS was quite large, but was still smaller than the UCS##disease interaction term's coefficient.

In conclusion, the difficulties surrounding migrant healthcare policies in Thailand can be explained by four overarching themes (Chapter 8). Firstly, there are conflicts and disharmony in migrant policies at all levels of the policy process, starting from the unclear directions/objectives at the agenda setting stage, to the implementation phase, where the street-level bureaucrats adapted the policies in diverse ways.

Secondly, despite having enormous responsibility, it seems that the MOPH, the sole governing body of the HICS, does not have adequate capacity for managing the insurance with efficiency, transparency and accountability. The key problem is that the MOPH is locked into an obsolete bureaucracy that prevents the authority from keeping pace with the dynamics of surrounding policies.

Thirdly, though a registration policy is a sensible attempt to resolve nationality/citizenship problems of the illegal immigrants, it created a catch-22 situation. That is, the use of hard-power authorities (such as police and the MOI officers) to enforce the registration indirectly made some undocumented/illegal migrants (in unknown numbers) evade registration. Also, the Thai government seemed to ignore the fact that the registration policy was just a temporary measure to help solve citizenship problems of those in limbo. There was a lack of supporting measures to clear up all potential problems throughout the migration process. Many important questions have been left unaddressed, for instance, so far it has been unclear how to deal with registered migrants who were denied nationality of any country in the world (in other words, these migrants became stateless persons), or how to encourage Thai employers to recruit migrants through a fully legalised channel (like the MOU policy) rather than awaiting another round of registration.

Fourthly, this study found that the HICS was an income generator for some facilities. Though the HICS created additional burden to a facility due to its positive effect on

utilisation volume for its beneficiaries, the overall utilisation rate of the HICS beneficiaries was still smaller than that of Thai UCS patients. Thus, the policy and social discourse claiming that insuring undocumented/illegal migrants overloaded the Thai healthcare system might not be justified. Besides, the most important factor that determined the number of visits was not insurance status, but it was in essence the disease condition, and the disease effect on utilisation volume was more apparent in Thai UCS patients than insured migrants. Such a discovery suggested that there might be migrants with catastrophic illness who were neither insured, nor able to return to their home country (and the result from qualitative chapters confirmed this observation). Unless policies to protect the health of this population are put in place, poor access to care for the uninsured will continue being a serious public health problem, not only to migrant communities but also to Thai society in general.

9.2 Contribution to knowledge

Prior to the description of policy recommendations, it is imperative to consider how this thesis contributed additional knowledge to the issue of migrant healthcare and to the area of health policy and systems research as a whole. Firstly, as presented in Chapter 2 and 3, most literature has explored migrant healthcare issues through a health lens, but very little literature has delved into the interaction between healthcare policy and surrounding political environments. This study contributed to filling this gap by encompassing economic and state security perspectives in the investigation.

Secondly, while most literature suggested there was/were always gap(s) between policy objectives and policy implementation, in this case little was known about how local implementers adapted their practice towards the policy, and why such adaptive behaviour took place. This thesis scrutinised this point quite thoroughly.

Thirdly, the study reinforced the value of existing theory, such as that of Street-Level Bureaucracy. The thesis also expanded the theory in some ways, for instance, by suggesting that adaptive behaviour towards the policy could happen anywhere in the

policy process, not just among frontline staff. Even service users, in this case, also found a way to 'survive' through the frequent changes in policies.

Fourthly, though in the last decade there has been considerable growth in the quantity of health policy and systems literature, most studies are performed in developed countries. Ghaffar et al (2016) underscored that health policy analysis in LMICs was still in an early phase of development. Also, this study, despite being limited to Thailand, might be beneficial to health systems researchers in other settings. This is because Thailand has a relatively advanced healthcare system like that of many developed countries, but the majority of its population is engaged in the informal sector, as in many developing nations.

Lastly, narrowing down to a Thai context, this study is one of the very first studies that explored the outcomes of the HICS after more than a decade of implementation.

From a methodological point of view, this thesis is an example for health policy and systems researchers of how to utilise several research methods to answer research questions in real-world settings. A variety of data collection techniques and analysis tools were used. The multi-methods approach enabled the researcher to address each method's limitations/weaknesses, and helped strengthen the scientific soundness of the findings.

9.3 Policy recommendations for improving healthcare access of migrants in Thailand

This section presents key policy recommendations that may help improve the management of migrant health policies in Thailand. The recommendations are divided into two strands: macro-policy and micro-policy. The macro-policy recommendations focus mainly on long term political commitments and actions which require mutual agreements between government sectors, while the micro-policy recommendations are more sector-specific. Note that all recommendations provided here are just a starting

point. To adopt these recommendations in reality, much more work needs to be done, and there should be further studies on feasibility, efficiency and equity of these measures.

I. Macro-policy recommendations

1. Commitment of the government to provide health security for everybody in Thailand

The government should send a strong political message that all residents in Thailand, regardless of immigration and citizenship status, must have health security. In fact, this recommendation is not something new to the government. In the global politics, Thailand is a party to many international laws/conventions that ratify the 'rights to health' of a person, regardless of his/her citizenship status, such as the 1948 UDHR, the 1966 ICCPR, and the 1966 ICESCR.

In the national politics, many public authorities have already recognised this; for instance, the NHSO strategy for 2012-206 stated that, 'All people in Thailand are assured under the Universal Health Coverage', and the MOPH Border Health Plan (2012-2016) also emphasised the word 'all people' in one of its strategies (National Health Security Office, 2014, Bureau of Policy and Strategy, 2012).

Yet in practice this concept is recognised only within the health sector, with little emphasis from non-health authorities and even the overarching government. The government should be aware that currently, the UHC is not just a matter of health, but it is now a global agenda. The UNGA Resolution (2012) acknowledged that the UHC is a key instrument to enhancing health, social cohesion and sustainable human and economic development.

Recently, the UNGA also approved the Post-2015 SDGs, where UHC is set as an important development goal (Goal 3.8). So far, the HICS is regarded as a concrete attempt to cover 'everybody' in Thailand as part of the way to achieving UHC (at least, in theory). However, unclear political messages as to whether the HICS is for

'everybody' or 'only registered migrant workers', has led to substantial room for interpretation and finally resulted in confusion in policy implementation.

Of course, saying that everyone on Thai soil is to be insured does not mean that all problems will be cleared up: there are still many challenges to work on. At least, it might indicate a strong political commitment to UHC. Hidden problems regarding migrant health would be recognised and discussed more openly.

From the political angle, this message would indirectly help the Thai government refute allegations of breaching human rights according to international laws.

From a health economics perspective, this thesis shows that having health insurance *per se* is not a factor that creates much additional burden (in terms of number of visits) on the Thai healthcare system. Leaving migrants uninsured might result in patients visiting a facility at a more advanced stage of disease, and such a situation might consume more healthcare resources than insuring everybody and promoting access to treatment at the first opportunity.

2. Formulation of clear legal grounds for the health sector to support its role/responsibility

To implement the above recommendation, there should be strong legal grounds for responsible authorities. One might learn from the success of the pathway towards the UHC in Thailand. The main three public insurance schemes, namely, the CSMBS, the SSS, and the UCS, are founded on a strong legal basis. The 2002 National Health Act ratified the foundation of the UCS in the same way as the 1980 Royal Decree for the CSMBS and the 1990 Social Security Act for the SSS. In contrast, the HICS is established through a 'ministerial announcement', which is a weak legal instrument and subject to change according to shifts in politics.

An additional challenge is that, although the OSS is like a new overarching policy that incorporates work of the MOI, the MOL, and the MOPH, there has not been fundamental change in the power and the responsibility of each authority.

In addition, the OSS itself was founded in special circumstances. Its legal status was physically under the Order of the junta (unlike an Act or Cabinet Resolution). This situation leads to a concern over what will happen in the coming election when the military government relinquishes its power and OSS functions are replaced by routine bureaucracy.

Therefore this thesis suggests that the political commitment to UHC will materialise if and only if there is a strong legal foundation (not just a statement appearing in the strategy/vision of an organisation) that affirms the rights to health for 'all' people. This will help raise the importance of the health authorities, placing them on a par with the national security and economic authorities in terms of policy making.

3. Ensuring proper treatment for migrants who fail to pass the health check

With reference to earlier recommendations, one concrete measure to support the enrolment of all migrants to UHC is delinking the acquisition of insurance from the disease screening outcome. So far, a migrant, who wishes to buy the insurance, will be eligible to be insured only if he/she passes the health check first, and above all if a doctor considers he/she is fit enough for work and is not affected by any disease(s) specified in the negative list (such as active tuberculosis, filariasis, elephantitis, and drug dependence). This regulation is illogical in protecting public health benefits for the whole population for the following reasons.

Firstly, current regulations requires a migrant with disease(s) indicated in the negative list to be deported without any supporting measures to ensure that he/she will receive proper treatment either in Thailand or in the country to which he/she is deported. The findings from Chapter 5 and 6 clearly suggest that, with a long Burmese-Thai border and numerous natural crossing points, it is almost impossible to completely block illegal immigration. Therefore, a better way to protect public health benefits is not deporting those with infected cases but treating them. The government should stipulate that the deportation must not take place unless proper treatment is ensured. In fact, previous governments indirectly admitted that the deportation of sick migrants is poorly enforced. That is why there always existed a number of uninsured migrants infected with public

health threat diseases, such as HIV/AIDS and TB, and governments tackled this problem by asking for funding from international donors. Such an approach however creates concerns over its sustainability.

Secondly, one might argue that the health check is designed to ensure the financial sustainability of the scheme by allowing only the 'healthy' to be insured. Yet, in reality, judging who is or is not 'fit enough' for work appears to be quite arbitrary, and therefore does not function as a way to 'protect' the health financing system. In addition, health screening should be done under certain prerequisites: (1) the burden of illness is high, (2) the screening and confirmatory tests are accurate, (3) early treatment (or prevention) must be more effective than late treatment, (4) the test(s) and the treatment(s) must be safe, and (5) the cost of the screening strategy must be commensurate with the potential benefit (Dans et al., 2011). However, the current health check for the HICS was not based on the above grounds. The screening of negative-list diseases for immigrants was established with reference to the Decree of the Office of the Council of State (1992), which was designed to block infected immigrants at point of entry into the country, rather than to check if a migrant (who had already crossed the border) is eligible to be insured.

Thirdly, the HICS is state-run insurance, not voluntary insurance, and applying voluntary insurance concepts to public insurance might contradict the initial policy intention to protect vulnerable groups. Thailand may learn from some developed countries, such as Germany and the UK, where the public sector plays a dominant role in managing insurance for undocumented/illegal migrants, also a health check result is not a prerequisite for obtaining the insurance (Grit et al., 2012). This is because the social motivation of the insurance is more critical than the financial benefit.

Nonetheless, this does not mean that the health check for immigrants should be completely abandoned. It is sensible to require the health screening as a condition for acquiring a work permit as this will mitigate a risk of having communicable diseases spread to migrants' (and also Thais') communities, but to prohibit sick migrants from being insured is not sensible at all. Migrants can benefit from the health check by

becoming more aware of their own personal health conditions and by being empowered to take preventative or curative actions. Therefore, health screening should be used in a way that helps migrants integrate into receiving communities and assists healthcare providers to take prompt action in caring for migrants, not to exclude persons with certain health conditions from being insured. The MOPH should work more closely with the MOI and the MOL to help migrants who do not pass the health check obtain insurance, or at least have proper treatment before being deported.

4. Establishment of an efficient, transparent, and low cost system for insuring all migrants

As discussed in Chapter 8, no matter how harshly the registration policy was enforced there still existed a large number of illegal/undocumented migrants outside the system. A major cause of this phenomenon was the cost of registration (perceived by migrants as too expensive). The OSS was a sensible attempt to facilitate the registration process, however, there was still a long way to go. The cost of registration should be made clear at the outset and the government should establish a system where migrants and employers can report the officials in charge if the intervention by private intermediaries pushes the cost of registration beyond the specified limit. Today is where a window of opportunity opens since the junta has absolute administrative power and hence a prompt decision can be made.

Besides, this recommendation might be part of the government's measures to tackle human trafficking, which is a priority issue in international politics. Another measure to recruit more migrants to the registration process is to improve collaboration between local healthcare providers and local MOI officers in surveying all migrant households in the catchment areas of health facilities. Undocumented/illegal migrants are more accessible to local healthcare officers than MOI staff or police. This recommendation does not create much additional burden on local health staff since they need to survey all residents in the facility's catchment area as part of their routine work to make patients' family folders. However, due to poor regulation from the MOPH, family folder information is hardly updated, and most healthcare providers do not make best use of it.

Note that, to make the survey constructive and really reach the vulnerable group as intended, the government should make it clear that information from the survey will be used for tackling health and citizenship problems of migrants rather than for penalty or deportation (which is actually beyond the role and responsibility of the MOPH). With a transparent, effective, and low cost registration process, it might be possible to terminate this vicious cycle, and at the same time, to undermine the counterfeit brokers and trafficking syndicate.

5. Ensuring adequate and sustainable infrastructure management of the HICS

It is clear that the HICS' governing body (the MOPH) encounters a number of constraints in managing the HICS due to its bureaucratic structure and limited capacity. To make the stewardship of the HICS more effective, the government should re-consider the very basic question, that is, if there are other authorities aside from the MOPH that are able to administer the HICS. Though this thesis did not aim to compare in depth the capacity and feasibility to manage the HICS between organisations, there exist some options that are worth discussing as follows.

- **Alternative 1: The NHSO as the HICS' governing body**—There are a number of advantages to this option. Firstly, the NHSO has established strong institutional capacity in terms of funding, technology, and skilled human resources. The UCS beneficiary data are linked with the MOI data via the 13-digit ID. This means that once the registration for residence permit takes place (registration for residence permit and issuance of 13-digit occur simultaneously), a migrant will be automatically insured. This approach also helps reduce registration red tape as a migrant can pay the registration fee and the insurance premium at the same time. This is in contrast to current practice, where the purchase of the insurance card and the payment of the MOI registration fee are managed separately.

Secondly, regarding health financing, the NHSO has a larger pooling size, resulting in a larger risk sharing and a stronger negotiating power in purchasing high-cost drugs or medical items. Also, with larger risk sharing, managing the HICS as recommended will help reduce instances where hospitals refuse to sell the insurance card to unhealthy

migrants. This is because the financial risk will be shared at the country level rather by individual hospitals.

Thirdly, managing migrant insurance under the NHSO will open opportunities to apply a tax-based financing system to the HICS. This approach is similar to some developed countries, such as the UK and Italy, where undocumented/illegal migrants, once registered, will be insured by the main public insurance scheme like native citizens, and this will help tackle the operational problems of the HICS re its *de facto* voluntary nature (for example, some migrants avoiding buying the insurance due to economic concerns). This option suggests that using a tax-based system instead of premium-based financing might be more appropriate in the Thai context. This alternative does not necessarily mean that undocumented/illegal migrants should be able to enjoy equal benefits to Thai nationals. However, there should be more studies to establish an appropriate benefit package. There are several international experiences to learn from (see Chapter 2). For example, in France the benefit package for undocumented/illegal migrants is related to length of stay in the country. Another example is the UK, where undocumented/migrants are liable to pay out-of-pocket for some advanced treatments, but this can be waived in the case of public health threat conditions, such as TB and certain infectious diseases.

Lastly, this approach is also in line with the government attempts to harmonise various public insurance schemes in terms of financing management and benefit packages.

However, there are some challenges, one of which is a demand for strong political commitment to overcome political tensions between the MOPH and the NHSO. Besides, there must be a strong political push to help the NHSO get through the legal deadlock which originated from the verdict of the Office of the Council of State. Another challenge is this option may require extra tax financing and a sound system that ensures an effective tax collection from migrants. However, one may argue that the extra tax financing may not be necessary since migrants have already contributed to the system via indirect tax similar to most Thai citizens.

- **Alternative 2: The MOPH as the HICS' governing body**—This option is the status quo management. The advantages of this option are: firstly, the MOPH has been regulating the migrant insurance scheme for over a decade, thus the authority has extensive experience in migrant insurance management, and secondly, the MOPH faces less legal constraint compared to the NHSO since the MOPH was already vouchsafed power to manage the HICS from the Cabinet Resolution (however, one may argue that the Cabinet is able to grant this HICS governing power to the NHSO as well if there is a strong political will).

Yet, there are some downsides. Firstly, the MOPH has far less institutional capacity than the NHSO in managing the HICS. To overcome this challenge, an extensive bureaucratic reform is required, not just for the MOPH but for all public authorities in Thailand (and it is doubtful that whether the reform would really happen and to what extent it would be successful).

Secondly, the financial management of the HICS is the responsibility of each individual facility. Even though the MOPH might change the HICS financial management by pooling the card revenue at the central level, the HICS' risk pooling is still far smaller than the UCS (~1.5 million HICS beneficiaries versus 47 million UCS beneficiaries).

Thirdly, this approach might be against the government direction that attempts to unify or harmonise different public insurance schemes in Thailand.

Fourthly, this option means that the MOPH will act as both purchaser and provider, and this contradicts the purchaser-provider split concept, which is widely accepted as means for ensuring accountability and efficiency of the health system.

- **Alternative 3: The SSO as the governing body**—The SSO is now managing the SSS, which is the social insurance for (both Thai and non-Thai) legal workers. There are some advantages to this option. Firstly, the SSS has a larger pooling size (approximately ~10 million); though not as large as the UCS, it is still far bigger than the HICS.

Secondly, this alternative is still consistent with the government's direction to harmonise the three different public insurance schemes.

Thirdly, the contracted facilities of the SSS encompass both public and private hospitals/clinics and the insurees can register themselves with any facilities near their workplace, which will accommodate the mobile behaviour of migrants as well.

Fourthly, the SSS has quite a well-founded capacity that can help manage migrant insurance more effectively.

The challenges of this approach are as follows. Firstly, the SSS still covers workers in the formal sector only. Though, literally, the Social Security Act requires all employers with at least 'one employee' to be insured, the SSO has records of only the formal entrepreneurs. Thus, unless the system to track records of the informal workers is in place, it is very likely a number of migrant workers will be left out.

Secondly, the SSS does not cover dependants of its insurees. Should the SSS take over the role/responsibility of the MOPH in insuring all migrant workers and their dependants, this might create a conflict amongst the Thai workers because, at present, the Thai workers' dependants are not covered by the SSS.

Thirdly, the SSS does not cover health promotion and prevention activities for its beneficiaries as these functions are entrusted to the UCS. Hence, should the SSS manage the insurance for migrants, this will lead to a difficult situation. That is, if the SSS used a similar approach to the Thai beneficiaries, health promotion activities for migrant insurees would not be in the benefit package, and the UCS would need to set aside part of its budget for health promotion activities for migrants (and this approach might create another problem given the existing legal interpretation re the NHSO's responsibility). In contrast, if the SSS extended its benefit package to include health promotion activities for migrant insurees, would this be seen as unfair treatment for Thai SSS insurees? This question is another instance of challenges that demand further work.

Lastly, the monthly contribution of the SSS is much higher than the existing premium of the HICS. The monthly contribution of the SSS, which an employer and an employee

must defray, is set at 5% of the employee's salary. Now the minimum daily wage of a worker in Thailand is set at 300 Baht (US\$ 9) by law. Suppose migrants receive the minimum daily wage, a rough calculation suggests that a migrant would need to make an annual contribution to the SSS of around 5,000 Baht (US\$ 152). This figure is much higher than the current card premium, and even at the current card price, some migrants still refuse to buy the insurance card, so let alone make the SSS contribution.

II. Micro-policy recommendations

1. Launching clear message from the MOPH to include all migrants

The MOPH should send a clear message on whether the current insurance policy is still open to 'all' migrants or just to 'migrant workers'. This confusion often leads to haphazard policy implementation. Results from Chapter 6 showed that the majority of migrants in Thailand were involved in the informal sector and some were even self-employed. These migrants did work and contribute to the Thai economy but were not recognised as 'workers'.

In addition, the OSS policy stipulated that 'migrant workers' and 'dependants' were eligible to buy the insurance once registered; 365 Baht for a child aged less than 7 and 1,600 Baht for an adult. This message indirectly indicated that a 'dependant' referred to a child aged below 7 and an adult worker had to pay 1,600 Baht for the insurance. As mentioned by the interview in Chapter 6, with the existing regulation, a child aged between 8 and 15 was likely to fall into this policy gap, that is, he/she was neither able to acquire the work permit nor eligible to buy the 365-Baht insurance (since his/her age was above 7).

Given a blurred line between 'workers' and 'non-workers' and between 'workers' and 'dependants', this thesis argues that the policy should aim to include 'all' migrants rather than just 'migrant workers', and set the cut-off point for 'dependants' at the age of 15 (or even 18 if this follows the international standards, for instance, the Convention on the Rights of the Child) to make the health insurance policy more consistent with other child protection measures.

2. Integrating information systems

The MOPH should consider integrating the information of the HICS with the SSS. This will enable the government to track records of migrants, who have already passed the nationality verification and are being employed in the formal sector, since, by law, their entitlements should be switched to the SSS. In addition, the MOPH should work closely with the MOI and the MOL to track records of migrants who failed to be verified of their nationality since these migrants will become 'stateless' persons. Though the government has already endorsed the national strategy to tackle citizenship problems of stateless people since 2005, the strategy mainly focused on ethnic minorities or highlanders who failed to register for their citizenship since birth while ignoring the fact that migrants could be stateless as well. Therefore, a seamless information linkage between authorities is indispensable.

3. Approving the employment of migrant health workers to work for health facilities

The MOPH should come to an agreement with the MOL in order to address restrictions to hiring low-skilled migrants to work as health personnel. Migrant health workers and volunteers (MHWs/MHVs) play an important role in reaching hard-to-reach populations and assisting health professionals to provide services and promote health education for migrant communities. The MHWs/MHVs can help bridge cultural and linguistic gaps between migrant patients and Thai health professionals. The limitations in employing these migrants stem from the legacy of the 1978 Working of Alien Act, and in reality, this Act is poorly enforced. Currently, health facilities use various tactics to hire migrants as health personnel, such as seeking support from NGOs or specifying in the work permit that a migrant is hired as household maid or manual labour, but in practice he/she is employed as a health worker or as an interpreter at health centres. Although such an approach is not wrong, there exists a concern over its sustainability.

This recommendation does not mean that migrant workers can perform all clinical tasks as normal health workers. If this issue is raised and discussed more extensively, it will be possible to specify which tasks migrants are allowed to perform. Also, this

recommendation might be beneficial to the MOPH in regulating and supervising the quality of service provided by MHWs/MHVs in a more systematic manner, rather than letting the MHWs/MHVs employment system function under the radar as at present.

4. Reorienting the process of recruiting migrants via the MOU channel

This recommendation is a 'quick-win' measure that may complement the earlier macro-policy recommendations. Since now there exists an MOU channel for legally recruiting migrant workers, the MOL should revise this channel to make it less costly and more convenient. Currently, there are no additional health insurance or other fringe benefits for a migrant recruited through the MOU, relative to entering the country illegally and seeking work via other means (including the black market). This recommendation would indirectly help reduce interference in the recruitment system by crooked brokers and to some extent help prevent trafficking problems.

5. Establishing an effective communication channel

A feedback channel that healthcare providers and service users can use to voice their concerns to the MOPH should be established as a matter of urgency. The MOPH should learn from the NHSO's 24-hour helpline, which has been in place since the inception of the UCS. A patient can check his/her insurance status and eligible benefits through the helpline and can make a complaint to the NHSO if he/she faces seemingly poor quality or unfair treatment. It does not mean that the system is flawless, but it is an important factor contributing to an increase in service satisfaction in both UCS providers and service users over the past decade (National Health Security Office, 2014). In contrast, after more than a decade of the HICS, information on patient and provider satisfaction is unavailable, and this point is one of many reasons that intensify the confusion in the HICS implementation. In practice, the MOPH could entrust this function to the NHSO by using the same helpline number for both the HICS and the UCS. This would also serve as another step towards harmonisation/unification between schemes as per the government's direction.

In addition, this recommendation is likely to reduce confusion in policy implementation and to assist the MOPH to monitor and regulate health facilities under its control. It does not mean that local implementers should not have any flexibility in exercising or adapting central authority policies, because results from fieldwork show that some adaptive behaviours are positive to both migrants and healthcare providers. The bottom line is that, without effective communication, the MOPH will not be able to know if and to what extent the adaptive behaviours of local implementers are acceptable and really benefit the health of the populations in the society as a whole.

9.4 Recommendations for research priorities

1. Expanding research to cover all non-Thai populations

One of the most important limitations of this thesis is that a number of non-Thai populations remain unexplored. The focus of this thesis was on the implementation of the HICS, which is mainly related to migrant workers and dependants from CLM nations. In reality, Thailand has a vast range of non-Thai residents, from the better-off groups, such as tourists and high-skilled foreign workers, to the vulnerable ones, for instance, refugees, urban detainees, the Rohingya, and stateless persons. Each group has its own idiosyncrasies, and overlapping features. Besides, even within a particular group, there may be differences in baseline characteristics, economic status, and health-seeking patterns. For instance, some western foreigners may suffer from poor economic status while, at the other end of the spectrum, some CLM illegal/undocumented migrants may have good quality of life. Thus, further research, which delves into the unique characteristics and health problems of each migrant group, and then contrasts the research findings across groups, might be useful to the design and arrangement of a health service system for all types of migrants in Thailand.

2. Conducting a household survey on non-Thai populations

A survey on migrants' access to care at household level could help answer the research questions of this thesis more thoroughly. Though this study analysed more than a

million records, the analysis is still limited to those who presented at health facilities. This knowledge gap cannot be addressed unless a household survey is carried out.

3. Research on equity

Further studies on the equity aspect of the insurance will help illuminate whether and to what extent the HICS really addresses the health problems of the poor. Equity in healthcare use and fairness in public health subsidies are important concerns in current policy making. Migrants are perceived as vulnerable compared to Thai citizens, but even amongst the vulnerable, there are disparities in socio-economic status between groups. As shown in Chapter 6, some migrant interviewees lived in deprived communities and suffered financial hardship, while some had a well-established house with favourable income.

Though this study had an impression that better-off migrants benefited more from the HICS than the poor, it still lacks quantitative evidence to confirm this. Since the facility-based records used in Chapter 7 lacked socio-economic variables, such as income, savings, assets and living conditions (and this is understandable as these variables are of little use in service provision), many inequity indicators (such as Gini index, Benefit Incidence index, and Kakwani index) cannot be analysed. Also, the equity analysis should be applied in all types of non-Thai populations. For example, it might be also interesting to explore the validity of the assumption (mentioned by one of the interviewees in Chapter 5) that western foreigners should not be eligible for the HICS as they are better-off. Is there any inequity in healthcare access between poor migrants and poor westerners? If so, how large is the gap?

4. Research on the use of biometric data for improving the information systems on migrants

In terms of health information data, further studies on the use of biometric data, and improvements to MOPH facility data recording systems, might be useful. One of the key limitations in Chapter 7 is the inability to find a good unique identifier for a migrant patient, and without this, accurate analysis of patients' utilisation patterns cannot be

achieved. In addition, a lack of accurate utilisation data will affect policy making in the long run. As immigration and citizenship status is fluid, a good unique identifier should attach to a real person, not a number. This is why a biometric information system comes into play. However, the application of biometric data still has caveats since it might breach individual privacy, and there should be measures to ensure that the data will not be used for discriminating against patients or for any uses that are against human rights. All potential benefits and caveats of the use of biometric data should be explored.

5. Research on alternative financing mechanisms

This point is linked with the above recommendations, which suggest that the government should aim at providing health protection for everybody on Thai soil. However, this does not mean that everybody can enjoy all health benefits free of charge. Different financing systems may be proper for different migrant groups. Future research questions on health financing should encompass all financing aspects, not just who should defray the cost of the insurance card, and the value of the premium. Other relevant questions that should be further investigated include whether the existing card price reflects the true cost of services, or to what extent the current payment mechanism is financially equitable.

Examples of possible financing alternatives are a tax-based system (like the UCS), payroll contributions (like the SSS), micro-credit mechanisms (like Grameen Bank in Bangladesh), and donor-driven innovative financing mechanisms (like the Global Fund for TB, AIDS, and Malaria). None of the mechanisms are flawless, and of course, there can be nuanced differences in the insurance arrangements for migrants and Thai citizens. Further studies that explore benefits and downsides, and feasibility of other financing alternatives, will be definitely helpful for future policy decision.

An example of a future research question is whether integrating the HICS into the UCS but adjusting the HICS benefit package according to a beneficiary's length of stay in the country (like in France) is an effective means for providing financial protection for all undocumented/illegal migrants in Thailand.

6. Research on social phenomena regarding the social perceptions towards migrants

Local officers' policy responses and adaptations are determined by various factors. Though this thesis has identified some factors that explain this phenomenon, such as policy volatility, outdated bureaucracy and legal limitations, there are still other causes that were left untouched (or just superficially explored), for instance, media role, social stigma, and the influence of education. To investigate these elements, alternative study designs and methods are needed. Ethnographic research, media studies and historical studies are all approaches worth exploring.

7. Costing studies

There should be studies on the real 'cost' of treating migrants as this will help inform the price set for the insurance card if the scheme revenue is still based on the card premium. This study explored payment by migrant patients, but that is a 'charge' indicated by each facility, not a true 'cost'. A unit cost study is needed and demands a different study design. The current premium is derived from a political decision rather than economic grounds. Besides, the unit cost study alone cannot answer a question about how much a migrant should pay for the card, unless a household survey is conducted in parallel. This is because information on non-users must be taken into account. Similar costing studies may be performed for other groups of migrants as well, such as seasonal workers, overseas visitors, and cross-border commuters.

8. Research on the feasibility of establishing cross-border insurance

There should be studies on the feasibility of establishing cross-border insurance in the ASEAN context. Now is an opportune period for starting this initiative since the ASEAN Community is formally open, and its country members are calling for better health protection for 'all' people in the Community. ASEAN countries may learn from the experiences in an already established Community like the EU. This point is also in line with the aim of achieving UHC in all countries in ASEAN. It does not mean that the insurance arrangement/design must be similar in all ASEAN countries. Future research

may start with some micro-functions at the borders, such as how to ensure a seamless and effective cross-country referral system between hospitals, then gradually broaden the study scope to cover all aspects of the insurance arrangements. However, this is not an easy path as the ASEAN Community is like a microcosm of the world with a great variation in terms of social, economic and political contexts. Yet Thailand is in a good position to be at the forefront of studies in this area, since the country has extensive experience of managing migrant health insurance and has already achieved UHC for its domestic population for more than a decade.

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Appendix 1: Data extraction table of the literature review on health-seeking barriers of migrants

Table 43 Main findings of the 28 selected articles for the literature review on health-seeking barriers of migrants

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
1. Aranda-Naranjo et al (2000)	South Texas, the US/ 13 HIV-positive migrant seasonal farm workers (MSFWs)	(1) How did HIV-positive MSFWs live with this disease?, (2) How did they seek healthcare?, and (3) What factors facilitated or hindered their care seeking behaviour?	The disruptive migrating behaviour had increased the likelihood of HIV exposure. Men migrating alone increased their risk of HIV infection because of unsafe sexual practices regardless of their marital status. Access to HIV information was quite difficult due to language barrier and difference in cultural beliefs as sex and AIDS issues were not openly discussed in Hispanic culture.
2. Arcury et al (2006)	North Carolina, the US/ 30 Latino farmworkers	To investigate the self-management practices of skin diseases amongst Latino migrants and seasonal farmworkers in North Carolina	Self-care actions of hygiene, home remedies and use of over-the-counter medicine were common practices of farmworkers in coping with skin diseases. While most migrants recognised the benefits of medical care, they were also mindful of barriers to its use. These barriers included difficulties in transportation and getting time off to health facility, and language difference.
3. Aslam et al (2009)	Sydney, Australia/ 5 Indian migrant women	To explore socio-cultural influences on decision makings and beliefs of migrant mothers with regards to co-	Health providers often advised migrant women to take the baby to sleep in his/her own cot. Yet, the participants

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
		sleeping as a risk factor for sudden infant death syndrome (SIDS)	usually resisted the advice of health practitioners. This resistance was tied with their cultural value since co-sleeping was regarded as means to facilitating child security, increasing breastfeeding, and strengthening family bonding and connectedness.
4. Aung et al (2010)	London, the UK/ 11 Burmese migrants in London	To evaluate (1) the knowledge of Burmese migrants on health services in Greater London, (2) the level of access to and utilisation of General Practice (GP) services, and (3) hindrances faced during registration with GPs and when consulting GPs, and also socio-demographic disparities in access to care.	Unsecure immigration status, shorter duration of stay and having lower age were key barriers to healthcare access amongst Burmese migrants. Many migrants did not recognise the importance of being registered to GPs since in Burma, patients were not required to be registered with primary care doctor. Some migrants coped with difficulty in access to care by self-medication, and bringing medicine when they left Burma since, unlike in UK, most of this medicine did not need official prescription.
5. Biswas et al (2011)	Copenhagen, Denmark/ 10 undocumented South Asian migrants	To analyse experiences of undocumented migrants regarding the access to care and the use of alternative health-seeking strategies in Denmark	The barriers to care of migrants included limited medical rights, uncertainty in healthcare professionals' attitudes, fear of being reported to the police, language incompetency, lack of knowledge about the Danish healthcare system, and lack of knowledge about networks of health professionals. Numerous coping strategies were applied, including self-medication, contacting doctors in countries of origin and borrowing health insurance cards from Danish peers.

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
6. Blignault et al (2008)	Sydney, Australia/ 9 China-born patients	To investigate factors that relate to the low utilisation rate of mental care services in Chinese immigrants in Australia	The participants identified several factors that limited access to mental healthcare and undermined the quality of care acquired. These factors included mental health literacy, communication difficulties, stigma, confidentiality concerns, and other service constraints (eg the unavailability of professional interpreters and long waiting time).
7. Bollini et al (2007)	Turkish and Portuguese communities in Switzerland/ 40 women with pregnancy experience in Switzerland (9 Swiss, 14 Turkish, and 17 Portuguese women)	To examine the issues of pregnancy and delivery in migrant women and in their interaction with the healthcare system in Switzerland	Migrant women in Switzerland were confronted with many stressful situations (such as precarious living conditions, heavy work during pregnancy, communication barriers, and feelings of racism and discrimination). In contrast, Swiss women tended to complain over the complexity of the health insurance system, lack of information about their rights, economic barriers, and excessive medicalisation.
8. Castaneda (2013)	Germany (specific study site, not specified)/ street-based male sex workers (SMSWs) from Romania and Bulgaria (The total number of all respondents, including physicians, health department staff and migrants, was 46, but the exact number of migrant interviewees was not reported in the article.)	To analyse the health issues encountered by SMSWs in Germany in light of the response to economic opportunities (freedom of movement across European countries) and constraints (measures limiting access to labour market)	Most migrant SMSWs were not registered as legitimate residents since they could not afford to rent an accommodation in their own. Therefore, they could not obtain a business license required for the registration. Most migrant SMSWs were in lower age group. Thus, they were ignorant about possible threats to their health and were more willing to take risks. Lack of job prospects, language barriers and insecure housing pushed them to work in risky settings.

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
9. Heyman et al (2009)	Texas, the US/ 84 undocumented or illegal migrants (mostly Mexican migrants)	To explore barriers to seeking care in unauthorised migrants living in Texas, and to identify resilient factors of learning and gaining confidence about available services	A number of barriers to accessing care amongst unauthorised migrants were identified. Direct barriers included the unavailability of healthcare programmes to the unauthorised, especially for children. Indirect barriers were fear of deportation and obstacles to movement (both to and from Mexico) by the immigration law. At the same time, some migrants were successful in overcoming these constraints through interpersonal networks and through referrals by trusted philanthropic institutions.
10. Hoang et al (2009)	Tasmania, Australia/ 10 Asian migrant women	Two main research questions: (1) How did migrants perceive on maternity care after having moved to Australia?, and (2) What were barriers hampering the access to maternity care in Asian migrants?	Some Asian women still retained traditional views and behaviours regarding child delivery. These behaviours (such as having diet in confinement, social restriction and keeping warm after birth) at times contradicted the practices of the Western medicine. Limited English language proficiency and cultural difference also served as barriers to expressing their need or enquiring healthcare providers about the services received.
11. Huffman et al (2012)	Sothern Kazakhstan/ 10 in-depth interviews with tuberculosis (TB) Uzbek patients and 12 focus group discussions	To explore mechanism that impeded migrants access to TB treatment	Three structural contexts (employment, legal and healthcare contexts) caused migrants vulnerable to exploitative work conditions and created a series of healthcare barriers. These barriers included lack of registration, poor work conditions, police harassment and

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
			brutality, etc. These conditions increased risk of TB exposure and reactivation of disease due to care-seeking delays and weakened immunity. Seasonal migration caused treatment interruption, which led to a risk of drug resistance.
12. Lue Kessing et al (2013)	Copenhagen, Denmark/ 29 migrant women from various countries, eg India, Somali, Turkey and Pakistan	To contextualise screening behaviour through the exploration of transnational ties of migrants and their influence on involvement with mammography screening in Denmark	Although most migrant women had knowledge about breast cancer and mammography screening, participation in screening programme was not their priority. All participants encountered emotional and financial stresses. These struggles in everyday life left little room for concerns about breast cancer screening.
13. Martin (2009)	Salt Lake City, the US/ 15 Iranian migrants	To explore whether the way mental health was conceptualised by Iranian immigrants had influence on their mental health-related practices	The Iranian migrants often faced cultural differences in mental health conceptualisation when seeking mental healthcare. Distrust in the effectiveness of the Western medication made many Iranian patients reluctant to take part in treatment. The notion that only 'crazy' people seek mental health service was commonly held by the Iranian migrants, and so this belief served as a hindrance to seeking mental health services.
14. Mukherjea et al (2012)	Chicago and San Francisco, the US/ 88 migrants from South Asian countries	(1) To understand the extent of culturally-specific tobacco products used by South Asian migrant communities, (2) to examine knowledge, attitudes, and beliefs regarding tobacco use, and (3) to	A large number of culturally-specific products were commonly used in the community. Respondents had diverse views about health outcomes of tobacco use. While mainstream cigarettes were deemed harmful, many culturally-

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
		explore the contextual dimensions of identity and culture pertinent to tobacco use behaviour	specific tobacco products were considered to have beneficial properties, including antiseptic, and local anaesthetic properties. Moreover, South Asian tobacco items were used to preserve their traditions and cultural values, and to maintain their ethnic identity.
15. Munyewende et al (2011)	Johannesburg, South Africa/ 15 Zimbabwean women	To explore perceptions of Zimbabwean migrants on HIV/AIDS and the access to HIV/AIDS health services in South Africa	Overall, the participants found that it was easier to access health services in South Africa compared to their country of origin. They, however, cited several constraints to health services in South Africa, including financial barriers, confusion about eligibility for treatment, and unfriendly attitudes of health facility staff. Furthermore, despite knowing the risk of HIV and the availability of free condoms and HIV-testing centres, some respondents still resorted to transactional sex and were involved with multiple sex partners in order to obtain extra stipend.
16. Navaza et al (2012)	Madrid, Spain/ 13 sub-Saharan African migrants (SSAMs)	To investigate the reasons why SSAMs residing in Spain were unwilling to undertake HIV blood test	The participants had different views on blood test from the Western medicine. Some participants believed that blood taken from them for HIV test could be given to other people, and having small amount of blood loss might lead to weakness. This situation was intertwined with the concern over cultural differences and linguistic barriers. Some participants were undocumented, and so, they were afraid

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
			of being exposed to police if they showed up at hospital, or if they were diagnosed with HIV.
17. Ochieng (2013)	North England, the UK/ 90 African migrants	To explore the experiences of newly arrived (less than 5 years) Black African migrant families in accessing health promotion services in the UK	Poor communication with health workers was key underlying problem in seeking antenatal information and support for participants, particularly, who had limited English proficiency. Some participants ever experienced health practitioners used volunteer translator in the clinical practice, but such practice did not happen regularly.
18. O'Mahony and Donnelly (2013)	Canada (specific province not specified)/ 30 immigrant women, including refugee from various countries (such as Mexico, and South America nations)	(1) To explore how contextual factors influenced the ways in which immigrant and refugee women sought help to manage postpartum depression (PPD), (2) to gain better understanding on the immigrant and refugee women's health-seeking behaviour and decision making with regards to postpartum care, and (3) to determine supportive and appropriate strategies for PPD prevention/treatment	Structural barriers and gender roles hindered women's ability to access necessary mental healthcare services. Gender hierarchy was dominant in their family context. Domestic violence was regarded as normal and this was also one of the key contributing factors to PPD. Insecure immigrant status coupled with emotional and economic dependence made immigrant women disadvantaged in protecting themselves against PPD.
19. Palmer and Ward (2007)	Several boroughs in England, the UK/ 21 refugees and asylum seekers from diverse countries (such as, Somalia, Russia, and Iran)	To explore the experiences of forced migrants in participating in healthcare services in UK	Uncertainty legal status and poor housing condition brought negative impact on mental health of refugees and asylum seekers. These factors were coupled with traumatic experience from their home countries. Long waiting time and unfamiliarity with the UK health system made this situation more complex. Moreover the concept of depression and stress in their cultural

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
			value differed from mainstream biomedical sense. Individuals seeking mental care were normally regarded as 'mad' or 'insane'.
20. Pirrone et al (2013)	Melbourne, Australia/ 30 African migrant women, who were Muslims and wore the Hijab.	(1) To explore perceptions, experiences and understandings of vitamin D deficiency (VDD) amongst African migrant women, (2) to identify the most useful sources of information regarding VDD in this population, and (3) to identify enabling factors and barriers to addressing VDD	Despite having quite a good understanding on VDD, several barriers to addressing VDD were identified. For instance, the change of housing type from a private house with backyard to high-rise buildings without balcony made it more difficult for them to obtain sufficient sun exposure in a culturally appropriate way (secluded from a male view). Some participants reported developing VDD due to poor compliance. A key explanation of the poor compliance was heavy domestic chore burden, which was tightly linked to their cultural role. This huge burden had made their health come second place after the needs of family.
21. Riggs et al (2014)	Melbourne, Australia/ 115 migrant women from Iraq, Lebanon and Pakistan	To explore the experiences of dental service from the perspective of migrant mothers residing in Melbourne, Australia	Despite recognising the importance of seeking dental care, the first dental contact for both immigrant women and their children was typically for emergency care. Accessibility, cost and waiting lists were significant barriers to attendance. There was general confusion about which services were free and which required payment. Communication barrier was also a challenge. Interpreters at times did not have knowledge about the dental care system.

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
22. Simich et al (2007)	Toronto, Canada/ 11 irregular migrants from Central America countries	To explore experiences of living without regular immigration status and implications for health security in irregular migrants (including refugee claimants and visitors with overstay visa) in Toronto	Study participants expressed that they perceived discrimination due to lack of legitimate immigrant status and felt the injustice of being hard working, but lacking rights to the same health services as the native citizens. Most irregular migrants remained excluded from public health services by the limited capacity of community health centres. Access to essential services was hampered by illogical bureaucratic rules.
23. Terry et al (2011)	Tasmania, Australia/ 36 Asian migrants	To examine the lived experience of healthcare-seeking behaviour of Asian migrants in Tasmania, and to identify strategies, which enabled migrants to utilise the health system better.	Although many participants felt positive towards the health system in Tasmania, there were anxieties from the lack of choice and the inability to access culturally appropriate care in timely manner, particularly, amongst small and remote communities. These communities also faced limited development of culture-specific specialist services, lack of translated health information, and inadequacy of culturally competent workers.
24. Van Cleemput (2007)	England, the UK/ 59 Gypsies and Travellers from Scotland, Ireland and Wales	To illuminate findings of the survey on the health status of Gypsies and Travellers by exploring their experiences of ill health and health beliefs	Ill health was considered a normal inevitable consequence of adverse social experiences, and it was stoically and fatalistically accepted. Travelling lifestyle had positive and negative effects on their health status. On the positive side, travelling meant moving away from potential troubles of the 'hostile world'. On the downside, travelling was associated with

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
			diminished choice of safe stopping place, shortage of clean water and basic amenities, and difficulties in accessing basic education and healthcare services.
25. van der Veen et al (2009)	Rotterdam, the Netherlands/ 54 Turkish migrants	To investigate social, cultural and behavioural determinants of migrants in relation to hepatitis B screening	In the view of Turkish migrants, hepatitis B was closely linked with inappropriate sexual activity, which was considered a taboo in Islamic culture. Nevertheless, this religious belief could be a motivating factor encouraging migrants to undertake screening since Muslims were taught to be obliged to care for their personal health in order to be 'pure' enough to return to the Allah, and to protect Muslim communities as a whole. Distrust towards the Dutch healthcare system and the feeling that Dutch physicians were less willing to prescribe medication for them (relative to Turkish doctors) also served as barriers to participating in the screening.
26. Walter et al (2002)	San Francisco, the US/ 38 Mexican and Central American day labourers	To identify the social context which affected risk for occupational injury amongst undocumented day labourers, and to characterise the ways in which this social context influenced their experience of disability	The prevalence of work injury was high in these migrants. The injuries caused not only detrimental impact on physical health, but also stressful feeling. Occupational injuries meant failure to fulfil masculine responsibility. Despite a high incidence of work injuries, the participants were reluctant to utilise health services due to precarious legal status as well as communication barriers.

Author(s), year	Setting and participants	Study objectives or research questions	Main findings
27. Weiler and Crist (2009)	Arizona, the US/ 10 Mexican migrants	(1) What were the socio-cultural influences that steered self-management practices amongst Latino migrant adults with type 2 diabetes?, (2) How did the social context influence the way in which these migrants manage their diabetes condition?, and (3) How did perceptions and experiences of migrant status and socioeconomic determinants influence the way Latino migrants coped with type 2 diabetes?	The biggest challenge was family gathering culture in Mexican community. These events revolved around the plenty of food and celebration. Declining food offers were considered disrespectful and socially unacceptable. Social stigma also played important role in diabetes management as having diabetes significantly resulted in embarrassment and shame in Mexican culture. On the other hand, tight kinship network between family members according to the Mexican tradition had positive influence on participants in many ways, such as providing encouragement, and serving as motivator in disease management.
28. Weine et al (2013)	Moscow, Russia/ 33 female sex workers from various countries (such as Tajikistan, Ukraine, Moldova)	To identify knowledge concerning HIV risks in female sex workers in Moscow, and to discuss risks, resources and challenges in HIV preventive measures	Some migrants were pulled into sex working in order to earn enough income. Many female migrant sex workers were intimidated and ever experienced violence by male clients. Despite having basic knowledge on HIV, some migrant sex workers denied to use condom in order to earn more money as per their clients' requests.

Appendix 2: Quality assessment of the selected articles for the systematic review

Table 44 Quality assessment of the 37 selected articles for the systematic review

Selected articles (author(s), year)	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1. Abbot and Riga (2007)	Y	Y	Y	N	Y	Y	?	Y	?	Y
2. Akhavan (2012)	Y	Y	N	Y	Y	Y	Y	Y	?	Y
3. Boerleider et al (2014)	Y	Y	Y	Y	Y	?	Y	Y	Y	Y
4. Briones-Vozmediano et al (2014)	Y	Y	?	Y	Y	N	Y	Y	Y	Y
5. Byrskog et al (2015)	Y	Y	Y	Y	N	Y	Y	Y	?	?
6. Cross and Bloomer (2010)	Y	Y	N	?	Y	N	Y	Y	?	N
7. Dauvrin et al (2012)	Y	Y	?	?	Y	N	Y	Y	Y	Y
8. Donnelly and McKellin (2007)	Y	Y	N	?	?	N	?	N	Y	?
9. Eklof et al (2015)	Y	Y	N	?	Y	N	Y	?	Y	Y
10. Englund and Rydstrom (2012)	Y	Y	?	?	Y	N	Y	Y	Y	Y
11. Farley et al (2014)	Y	Y	?	?	Y	N	?	Y	N	?
12. Foley (2005)	Y	Y	Y	?	Y	N	Y	?	Y	N
13. Fowler et al (2005)	Y	Y	Y	Y	Y	N	Y	?	?	Y
14. Goldabe and Okuyemi (2012)	Y	Y	?	N	?	N	?	Y	?	Y
15. Hakonsen et al (2014)	Y	Y	Y	N	Y	N	Y	Y	Y	Y
16. Health Protection Agency (2010)	Y	Y	?	?	?	N	Y	?	Y	?

Selected articles (author(s), year)	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
17. Hoye and Severinsson (2008)	Y	Y	Y	?	Y	N	Y	Y	?	Y
18. Hultsjo and Hjelm (2005)	Y	Y	Y	?	Y	N	Y	?	Y	Y
19. Kurth et al (2010)	Y	Y	Y	Y	Y	N	?	?	Y	?
20. Lindsay et al (2012)	Y	Y	Y	Y	Y	N	Y	?	Y	Y
21. Lyberg et al (2012)	Y	Y	Y	?	Y	N	Y	Y	Y	Y
22. Manirankunda et al (2012)	Y	Y	Y	Y	Y	N	?	Y	Y	Y
23. Munro et al (2013)	Y	Y	Y	?	?	N	?	?	Y	?
24. Nicholas et al (2014)	Y	Y	Y	Y	Y	N	?	Y	Y	Y
25. O'mahony and Donnelly (2007)	Y	Y	?	?	Y	N	Y	Y	Y	Y
26. Otero-Garcia et al (2013)	Y	Y	?	?	?	N	Y	Y	Y	?
27. Pergert et al (2008)	Y	Y	?	?	Y	Y	Y	?	Y	Y
28. Rosenberg et al (2006)	Y	Y	Y	Y	Y	?	Y	Y	?	Y
29. Samarasinghe et al (2010)	Y	Y	Y	Y	Y	Y	Y	Y	Y	?
30. Sandu et al (2013)	Y	Y	?	Y	Y	Y	Y	?	Y	Y
31. Straßmayr et al (2012)	Y	Y	Y	N	Y	N	?	Y	Y	Y
32. Suurmond et al (2013)	Y	Y	N	Y	Y	N	Y	Y	Y	?
33. Terraza-Nuñez et al (2011)	Y	Y	N	Y	Y	N	N	Y	Y	Y
34. van den Ameele et al (2013)	Y	Y	Y	Y	Y	N	?	Y	Y	Y
35. Vangen et al (2004)	Y	Y	?	Y	Y	N	Y	Y	Y	Y
36. Wachtler et al (2006)	Y	Y	N	?	?	?	?	?	Y	N
37. Worth et al (2009)	Y	Y	?	Y	Y	N	Y	?	Y	Y

Note: The above table was adapted from the CASP checklist (2013). The assessment questions are as follows:

- Q1—Was there a clear statement of the research aim?
- Q2—Was a qualitative methodology appropriate?
- Q3—Was the research design proper to address the research aim?
- Q4—Was the recruitment strategy appropriate to the research aim?
- Q5—Was the data collected in a way that addressed the research issue?
- Q6—Was the relationship between researcher and participants sufficiently considered?
- Q7—Was the ethical issue taken into consideration?
- Q8—Was the data analysis sufficiently rigorous?
- Q9—Does the research have a clear statement of the findings?
- Q10—Does the report sufficiently express the research value?
- Y—Yes (clearly described)
- N—No (Not described)
- ? —Cannot tell (described but with limited detail)

Appendix 3: Data extraction tables of the systematic review on challenges of providing care for migrants through providers' perspectives

Table 45 Characteristics of the 37 selected articles for the systematic review on challenges to providing care for migrants through providers' lens

Selected articles (author(s), year)	Study site	Migrants' profiles	Type of services	Healthcare providers	Data collection techniques
1. Abbot and Riga (2007)	The UK	Bangladeshi immigrants	Primary care	General practitioners (GPs), school nurses, etc	Focus group discussions (FGDs)
2. Akhavan (2012)	Sweden	Immigrants and asylum seekers (mostly from Eastern Europe)	Primary care	Midwives	Semi-structured interviews
3. Boerleider et al (2014)	Netherlands	Non-western immigrants (mostly from Turkey, Morocco, etc)	Postnatal care	Maternity care assistants	In-depth interviews (IDIs)
4. Briones-Vozmediano et al (2014)	Spain	Battered immigrant women (nationality not clearly specified)	Care for battered immigrant women	Social workers, psychologists, and mediators	IDIs and FGDs
5. Byrskog et al (2015)	Sweden	Somali-born women	Antenatal care	Midwives	IDIs
6. Cross and Bloomer (2010)	Australia	Migrant communities (nationality not specified)	Mental health care	Mental health clinicians	FGDs

Selected articles (author(s), year)	Study site	Migrants' profiles	Type of services	Healthcare providers	Data collection techniques
7. Dauvrin et al (2012)	16 countries in the EUGATE project*	Irregular migrants (nationality not specified)	Mental health services, Accident & Emergency (A&E) words and primary care	Clinicians and health managers	Semi-structured interviews
8. Donnelly and McKellin (2007)	Canada	Vietnamese immigrants	Breast cancer screening	Community physicians and nurses	IDIs
9. Eklof et al (2015)	Finland	Migrants and asylum seekers (countries not specified)	Primary care	Community nurses	IDIs
10. Englund and Rydstrom (2012)	Sweden	Non-western immigrant parents of children with asthma	Care for asthma patients	Nurses and physicians in asthma clinic	IDIs
11. Farley et al (2014)	Australia	Refugees (nationality not specified)	Primary care	General practitioners (GPs), nurses and administrative staff	Semi-structured interviews and FGDs
12. Foley (2005)	USA	HIV-positive African immigrants	HIV care	Medical practitioners and social workers	IDIs, informal interviews, and FGDs
13. Fowler et al (2005)	Canada	Kosovar refugees	General health services	Family physicians, nurses, dentists, etc	IDIs
14. Goldabe and Okuyemi (2012)	Costa Rica	Undocumented Nicaraguan migrants	Antenatal care, infectious diseases, and occupational injuries	Nurses, physicians, and social workers	IDIs
15. Hakonsen et al (2014)	Norway	Non-western immigrants	Community care	Community pharmacists	FGDs
16. Health Protection Agency (2010)	The UK	Refugees, asylum seekers, and irregular migrants (nationality not specified)	Various settings (eg Primary Care Trust—PCT)	Health workers, type unspecified	Phone interview
17. Høy and Severinsson (2008)	Norway	Non-western immigrants	Critical illness care	Intensive care unit nurses	FGDs
18. Hultsjö and	Sweden	Refugees and asylum	Emergency care,	Nurses and assistant	FGDs

Selected articles (author(s), year)	Study site	Migrants' profiles	Type of services	Healthcare providers	Data collection techniques
Hjelm (2005)		seekers (nationality not specified)	ambulatory care and intensive care	nurses	
19. Kurth et al (2010)	Switzerland	Asylum seeking women (nationality not specified)	Delivery and maternity care	Physicians, nurses, psychologists and interpreters	Semi-structured interviews
20. Lindsay et al (2012)	Canada	Immigrant families (nationality not specified)	Rehabilitation	Physiotherapists and social workers	IDIs and FGDs
21. Lyberg et al (2012)	Norway	Female migrants with diverse ethnicities	Maternity care	Midwives and public health nurse	FGDs
22. Manirankunda et al (2012)	Belgium	Sub-Saharan African migrants (SAMs)	HIV clinics	Nurses, midwives, and obstetricians	IDIs
23. Munro et al (2013)	Canada	Uninsured pregnant women with precarious immigration status (nationality not specified)	Antenatal care and delivery	Family physicians	Semi-structured interviews
24. Nicholas et al (2014)	Canada	Immigrant families, mostly from Asia and the Pacific region	Neonatal intensive care units	Neonatologists, nurse practitioners, social workers, administrative staff, etc	FGDs
25. O'mahony and Donnelly (2007)	Canada	Immigrant women (nationality not specified)	Mental health care	Social workers, physicians and nurses	IDIs
26. Otero-Garcia et al (2013)	Spain	Immigrant women (nationality not specified)	Sexual and reproductive health services	Midwives in primary care	IDIs
27. Pergert et al (2008)	Sweden	Immigrant patients in paediatric oncology units (nationality not specified)	Care for children with cancer	Nurses and nurse aides	FGDs and IDIs
28. Rosenberg et al	Canada	Immigrant patients,	Primary care	Family physicians	Non participant

Selected articles (author(s), year)	Study site	Migrants' profiles	Type of services	Healthcare providers	Data collection techniques
(2006)		mostly from Asia and Africa			observations and interviews
29. Samarasinghe et al (2010)	Sweden	Involuntary migrants (nationality not specified)	Nurse-led primary care clinics	Primary healthcare nurses (PCHNs)	Semi-structured interviews
30. Sandu et al (2013)	16 countries in the EUGATE project*	First-generation immigrants (diverse nationalities)	Mental health care	Psychiatrists, mental health nurses, social workers, etc	Semi-structured interviews
31. Straßmayr et al (2012)	14 European countries [#]	Irregular migrants (nationality not specified)	Mental health care	Mental health care experts	Semi-structured interviews
32. Suurmond et al (2013)	Netherlands	Asylum seekers (nationality not specified)	Primary care (first contact care)	Physicians and nurse practitioners	Group interviews
33. Terraza-Nuñez et al (2011)	Spain	Immigrant populations, mostly from Morocco, Romania, and Latin America countries	Primary and secondary care	Health managers and health professionals in primary and secondary care	Semi-structured interviews
34. van den Ameele et al (2013)	Morocco	Sub-Saharan African migrants	Sexual violence prevention	General practitioners, community workers, and obstetricians	Semi-structured interviews
35. Vangen et al (2004)	Norway	Immigrant pregnant women from Somalia	Antenatal and delivery care	Gynaecologists, nurses and midwives	IDIs
36. Wachtler et al (2006)	Sweden	Immigrant population, countries of origin not specified	Primary care	GPs	Semi-structured interviews
37. Worth et al (2009)	The UK	Asian Sikh and Muslim migrant communities	Hospitals, hospices, home care for life limiting illness	GPs, specialist nurses, social workers, and hospital manager	IDIs

Table 46 Key messages of the 37 selected articles for the systematic review on challenges to providing care for migrants through providers' lens

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
1. Abbot and Riga (2007)	To explore the views of primary care staff about delivering services to the local Bangladeshi community	Language and religious difference served as key difficulties in service provision.	Not clearly described	Peer pressure from families and communities played important role in inhibiting or promoting health services, especially in families with a large number of members
2. Akhavan (2012)	To explore the views of midwives on the factors that contribute to healthcare inequality amongst immigrants	Midwives conceived that healthcare inequality amongst in migrants was due to miscommunication, shortage of meeting time, language barriers, and lack of trust from patients.	Due to capacity/resources constraint in the workplace where these midwives were working, the time allotted for a consultative meeting with migrants was limited.	Patriarchal culture could create misunderstanding between midwives and migrant patients.
3. Boerleider et al (2014)	(1) How do Dutch Maternal Care Assistants (MCAs) feel about providing care to non-western clients?; and (2) Do Dutch MCAs adjust their care to non-western clients and if so in what ways?	MCAs often found that migrant clients had limited knowledge in maternity care. Language difference served as a barrier in health education. Some MCAs mentioned that caring for non-Dutch mothers was intensive and frustrating.	Telephone professional interpreters were requested to assist MCAs in communicating with non-western mothers. However, this service was not always available.	Family involvement played a pivotal role in maternity care. MCAs needed to put more effort in understanding cultural values of their clients, particularly, in patriarchal culture.
4. Briones-Vozmediano et al (2014)	To explore the experience of service providers in Spain concerning their daily	Some providers felt frustrated with the decision of immigrant women, particularly those	The abandonment of the help seeking process of a victim was due to the ineffectiveness of	The respondents found that many immigrant women, especially those in Arab families, failed to

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
	practice with battered migrant women	in low socioeconomic status, who abandoned the health seeking process due to ignorance of the system.	healthcare resources management.	escape the violence cycle due to a submission to patriarchal belief.
5. Byrskog et al (2015)	To explore ways antenatal care midwives in Sweden work with Somali born women and the questions of exposure to violence	Almost all midwife informants raised concerns about violence exposure in Somali born women. Communication barrier was an important factor that hampered care access.	Not clearly described	Some midwives lacked background information vis-à-vis cultural/religious conceptions of health, family life, value systems, and violence experience of Somali women.
6. Cross and Bloomer (2010)	(1) To explore how mental health clinicians modify communication practice to address cultural differences and promote client self-disclosure; and (2) To identify experiences that clinicians used when interacting with people from culturally diverse groups	The study participants recognised language as one of the communication difficulties. Besides, gender role in migrant community was another issue that made patients adapted their approach. In cases of sexual assault, abuse and childhood trauma, female clinicians were preferred.	Not clearly described	Healthcare providers found that there were diverse cultural beliefs in migrant communities. For instance, some migrants still understood that mental illness was a punishment from god or superstition.
7. Davrin et al (2012)	To investigate the experiences of health professionals in providing care to irregular migrants in three types of healthcare service (maternity care, accident & emergency care, and primary care) across 16 European	Health workers in accident and emergency (A&E) departments reported less of a difference between the care for migrant patients and for native patients in a regular situation than did health staff in primary care and mental health services.	Professionals in primary care and mental health services felt more difficulties in performing further diagnostic and/or therapeutic interventions due to the workplace restriction. Some clinicians solved this nuisance by prescribing	Even in countries with full rights of healthcare access for irregular migrants, there were still problems when referral was needed. Delay of treatment occurred frequently as providers and patients needed to wait until legal issue of the patients was

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
	countries*	Concern over language differences was more apparent in mental health services than in A&E departments.	medicines for their own names if a patient could not afford the medicine expense.	resolved. Notifying police was a rare practice, even in countries where healthcare providers were obliged to do so.
8. Donnelly and McKellin (2007)	To understand views of healthcare providers in catering breast and cervical cancer screening services for Vietnamese women in Candata	The majority of healthcare provider informants were aware that Vietnamese women were hesitant and embarrassed about breast and cervical examination due to cultural difference.	Healthcare providers adapted their routine practices to facilitate the service use of Vietnamese women by providing flexible hours of operation for the healthcare clinic, physicians reminding women of their check-ups, and having more accessible educational materials for women.	The Canadian government paid little attention on the promotion of cancer screening and specifically for the Vietnamese migrants. In some provinces, services for immigrants faced considerable funding cutbacks.
9. Eklof et al (2015)	To describe nurses perceptions when using interpreters in primary healthcare nursing with migrant patients	Nurses were aware of the importance of interpreters in tackling the differences in language when interacting with migrant clients. However, some nurses considered interpreters acting like cultural brokers rather than professional interpreters.	The ordering and availability of interpreters seemed to be challenging and time-consuming. With references to some nurses' experience, access to the interpreter service by phone was difficult and increased workload, specifically in urgent situations.	In Finland, there were several regulations regarding the use of interpreters. The interpreting costs were paid by the government if the patient was an asylum seeker; if not, the costs would be paid by a municipality, which often had strict guidelines.
10. Englund and Rydstrom (2012)	To gain a broader insight of the challenges healthcare professionals faced in their encounters with non-	Health professionals viewed that language differences and unfamiliarity with the Western medicine of	Not clearly described	A strong belief in some families that trusted male physicians far over female nurses created stressful feeling and sense of

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
	western immigrant parents of children with asthma	immigrant families created conflicts between providers and patients.		powerlessness in female nurses.
11. Farley et al (2014)	To explore enabling factors and barriers healthcare staff experienced in providing care to refugees	Participants perceived communication difficulties as one of the most important barriers for managing care for refugees.	Interpreter services were a crucial enabler of refugee healthcare but were also time consuming. The services were oftentimes unavailable and unreliable for the quality.	Not clearly described
12. Foley (2005)	To examine views of medical practitioners and social workers that provided clinical care to African immigrants living with HIV/AIDS	The provider informants expressed a keen awareness of the broad cultural gulf that secluded them from their African patients. Communicating with immigrants with little formal education and limited English or French fluency was their greatest frustration.	Nurses and social workers adapted the routine service guideline of a facility to match belief and culture of African HIV patients. These strategies included giving African patients their medications in unlabelled bottles, delivery of medications to locations other than their patients' homes, and helping women negotiate condom use with male partners without disclosing their HIV status.	To be insured at the city health centres, patients must provide proof of residence in the city of Philadelphia. Yet, African women often had no documentation in their own name since they lived with male partners. Some nurses, and social workers assisted uninsured migrant patients through several strategies, such as seeking funding from special government programmes.
13. Fowler et al (2005)	To investigate the main challenges and successes for providing care for Kosovar immigrants	Not clearly described	Many health professional respondents expressed concern over the inability to access information of refugees in a timely manner since the information system of a	The Canadian regulation allowed Kosovars to receive medical care through the Interim Federal Health (IFH) programme. However, some benefits were not

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
			Canadian health facility was not integrated with that in the country of origin of the refugees.	covered free of charge (home health care, eye glasses for refractive error, etc).
14. Goldabe and Okuyemi (2012)	To explore attitudes of providers in Costa Rica about deservingness to care of Nicaraguan undocumented migrants	Not clearly described	Not clearly described	By law, undocumented migrants were prohibited from public health services, except for, emergency care, health care for children <18 years, and prenatal care. Providers opined that undocumented migrants should not deserve treatment for occupational injuries as the benefits from the treatment did not go to the whole nation.
15. Hakonsen et al (2014)	To determine the cultural barriers encountered by Norwegian community pharmacists in providing service to non-western immigrant patients and to outline how these barriers were being addressed	The pharmacist participants found that language difference made the service provision for non-western immigrants challenging, and they were uncomfortable with situations where family members or friends acted as interpreters.	Not clearly described	Not clearly described
16. Health Protection Agency (2010)	To analyse the use of services in various types of migrants in the UK and to explore the needs of professionals	Respondents expressed concerns about language barriers, which impeded the provision of effective services, in particular,	Not clearly described	Respondents described the confusion in the NHS' regulation. The UK health workers sought support from civil networks to

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
	working with migrant patients	mental health care.		manage some services (eg housing aid) which were not regularly available to certain migrant groups.
17. Hoyer and Severinsson (2008)	To explore the perception of intensive care unit (ICU) nurses with regards to their encounters with families of culturally diverse patients	The ICU nurses became insecure when facing cultural differences.	The multicultural families consisted of larger number of family members, relative to Norwegian families. ICU rooms were at times crowded by many visitors, and such a situation might hamper nursing care.	ICU nurses felt that, due to patriarchal views held by immigrant families, female nurses often received lack of respect from the ethnic groups.
18. Hultsjö and Hjelm (2005)	To identify if healthcare staff in somatic and psychiatric emergency care experienced any problems in the services for migrants	All respondents expressed serious concerns over language barrier and difficulty to address the traumatic experiences of migrants.	Difficulties in finding an interpreter, especially at night, and minority language, and shortage of healthcare staff were the main setback in all wards.	Not clearly described
19. Kurth et al (2010)	To examine perceptions of health professionals in caring for asylum seeking women in the Women's Clinic of the University Hospital in the city of Basel, Switzerland	Language barriers were identified as a major struggle for a provision of care for asylum seekers.	Not clearly described	The Swiss government attempted to reduce health expenditure by limiting the asylum seekers' choice of where to seek care and assigning them to primary healthcare providers' networks. Physicians were forced to make difficult decisions in controlling the expenditure from treating migrants.
20. Lindsay et al (2012)	To better understand the experiences of	Language difficulties and unfamiliarity with	Even though professional interpreters were available,	Not clearly described

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
	healthcare providers working with immigrant families which had children with physical disability	Canadian health system of a patient were important barriers in caring migrant families in the providers' views	the use of professional interpreters was limited since it always added time on the clients' appointment.	
21. Lyberg et al (2012)	To illuminate public health nurses' and midwives' perceptions in caring prenatal and postnatal migrant patients in Norway	Linguistic and cultural barriers shaped the way providers delivered services. Some providers considered videotape education was more useful than face-to-face communication.	Respondents complained over the quality and availability of interpreting service in their workplace. Male interpreters did not understand vocabularies used in maternal care, and this could create distrust between providers and patients.	Not clearly described
22. Manirankunda et al (2012)	To identify physicians' HIV testing practices and barriers to managing provider-initiated HIV testing and counselling (PITC) for Sub-Saharan African migrants (SAM) in Belgium	Some health professionals were ignorant of the high prevalence of HIV in SAM communities. Lack of expertise in discussing sexuality and lack of time also served as key barriers in implementing PITC.	Not clearly described	Racism issue and shaky legal status of immigrants affected the decision of doctors in undertaking PITC. Some doctors felt that carrying out HIV test for undocumented migrants who might be deported at any time was unethical since they could not assure proper follow-up. Some providers fear being accused of racism when suggesting an HIV test in SAMs.
23. Munro et al (2013)	To explore the perceptions of family physicians who	Poverty and lack of understanding in the Canadian's insurance	Logistically, physicians had difficulty accessing prenatal resources for their	In Canada, refugees and refugee claimants were insured with the Interim

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
	provided services to uninsured pregnant women with precarious immigration status	system played a major role in inhibiting access to care of immigrants. Nevertheless, care of uninsured women was generally thought to be a professional obligation, regardless of the woman's ability to pay.	uninsured migrant patients. For example, social services were available only to officially recognised immigrants or refugees. Some physicians altered standard of care to avoid cost incurred by uninsured immigrants, and to avoid referrals to specialists	Federal Health Programme. Quebec province imposed a 3-month delay on the acquisition of health insurance for newly arrived immigrants. Due to administrative delays, some individuals with a right to public insurance found themselves without coverage.
24. Nicholas et al (2014)	To examine cross-cultural care from the healthcare providers' perspective within two tertiary level Neonatal Intensive Care Units (NICUs)	Language difference was common barrier to care. NICU healthcare staff felt that communication barrier was more pronounced in intensive wards due to frequent shifting nature of a patient's condition.	Limited availability of complementary and/or alternative treatments was thought to limit capacity for cross-cultural care. The lack of translators in the wards was also an important challenge.	Birthing rites and rituals were identified as culturally nuanced, yet often poorly understood and at times, disrespected and subjected to pejorative judgment.
25. O'mahony and Donnelly (2007)	To examine concerns of healthcare provider in managing mental health care for immigrant women	The participants often mentioned that misunderstandings of western biomedicine and unfamiliarity with mental healthcare service in migrant women badly affected how these women sought help.	Not clearly described	All healthcare providers viewed the cultural and social stigma as a key barrier to accessing mental health services for immigrant women. Some respondents expressed that in many cultures there were significant negative feelings towards mental illness and the taking of medication.

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
26. Otero-Garcia et al (2013)	To explore the perceptions of midwives providing maternal care for immigrant women	Midwives explained that language and cultural differences, and gender inequity, were significant barriers to care.	Not clearly described	Not clearly described
27. Pergert et al (2008)	To gain knowledge about how healthcare staff resolved obstacles when caring for immigrant families in paediatric oncology care units.	Nurses in paediatric oncology unit expressed their concern over linguistic difference. Many strategies, including nonverbal communication using 'signs' and 'printed information', were used to bridge this obstacle.	The organisation adapted its routine care policy by allocating extra time for immigrant patients, and attempting to recruit more staff with diverse ethnic backgrounds.	Not clearly described
28. Rosenberg et al (2006)	To explore challenges for family physicians and migrant patients with respect to intercultural communication (ICC).	Some physicians reported that when language barrier arose, they were more likely to bypass psychosocial aspects of the health problem since it was more time consuming than general somatic care.	Not clearly described	Physicians had different beliefs about the expression of distress and illness experience from the patients' views. In some cases, physicians viewed patient's behaviours as normal for a person of the given culture (such as tears and rotten words), while the same behaviour was considered psychological trouble in another culture.
29. Samarasinghe et al (2010)	To describe health promoting activities in involuntary migrant families in cultural transition through the	Some PCHNs approached patients by focusing only on somatic health of individuals as they deemed expanding more than	Not clearly described	Some PHCNs empowered immigrant family members to be able to integrate into Swedish society by seeking support

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
	views of Swedish primary healthcare nurses (PHCNs)	physical health required much more time, and was sometimes costly.		from non-health workers, such as social workers and preschool teachers.
30. Sandu et al (2013)	To investigate health providers' experiences in managing care for immigrants in 16 European countries *	Interviewees noted a general concern about mistrust and unfamiliarity with the healthcare system of a host country in migrant patients	Not clearly described	Divergence in belief systems was a key barrier undermining the quality of mental care. It was difficult for practitioners to distinguish a culturally normal response of an immigrant patient from what was an indication of mental pathology.
31. Straßmayr et al (2012)	Objective 1—to identify barriers to mental health care in irregular migrants; Objective 2—to identify how health professionals tackle these problems in the real practice	Language difference was the key barrier to care in the providers' views.	Shortage of resources and limited capacities in mental health services were reported. Problems included long waiting lists, which restricted the availability of psychological treatment. Physicians usually employed informal networks and non-government organisations to cover the unfilled gaps.	Experts from the countries that provided no legal access to mental health care for irregular migrants beyond emergency care described a lack of legal entitlement as the main barrier. Some providers lacked the general knowledge about the entitlements to health care for migrants.
32. Suurmond et al (2013)	To explore insight of healthcare providers about how to address health problems of newly arrived asylum seekers.	The respondents felt that asylum seekers had little knowledge about the way their body functions. It was questionable to screen mental health problems when there was no	Not clearly described	Not clearly described

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
		guarantee for follow-up. Not all respondents were strict to the screening guideline.		
33. Terraza-Nuñez et al (2011)	To analyse health personnel perceptions about the provision of care to immigrant population	Providing health care to immigrants created feelings of distress, overload and exhaustion in health professionals, especially in primary care setting. Communication barrier was one of the main problems.	Informants ascribed the inadequacy of resources to an absence of suitable planning on the side of the health authority (Department of Health), as well as to its lethargy in mobilising resources in the health system (human resources, regulations and clinical instruments) to the sudden increase in the immigrant population.	Not clearly described
34. van den Aamele et al (2013)	To identify the current role and position of the healthcare sector in Morocco towards the prevention of sexual violence against sub-Saharan migrants	Some respondents acknowledged the need for prevention of sexual violence against migrants, but differences in language, and cultures, occasionally, encumbered healthcare workers to identify victim cases and exploring traumatic experiences of migrants.	Limitations of the Moroccan public health sector re the response to sexual violence included inadequate staffing, and resources. Several informants indicated that migrants preferred relying on NGOs over the public health system when seeking care.	The providers viewed that reporting the presence of illegal migrants to police would increase risk of being deported, and such practice contradicted the professional norm.
35. Vangen et al (2004)	To explore how perinatal care practice influenced labour outcomes in circumcised women.	Health professionals were uncertain about delivery procedures for infibulated women and caesarean sections were at times	The communication between outpatient clinics and hospitals regarding the management of infibulation was quite	Not clearly described

Selected articles (author(s), year)	Objective(s) or research question(s)	Patient factor	Workplace factor	Societal factor
		done in lieu of defibulation. Neglect of circumcision might lead to unnecessary caesarean sections or even adverse birth outcomes.	poor. The antenatal clinics had stopped referring women to the hospital for antenatal defibulation since their requests had been refused.	
36. Wachtler et al (2006)	To examine how general practitioners (GPs) in Sweden managed clinical consultations when facing immigrant patients	GPs conducted consultations with immigrants in the same way that they performed in normal patients. Yet, the consultations with migrant patients did not always lead to positive clinical outcome and this created a feeling of failure in GPs.	Not clearly described	Not clearly described
37. Worth et al (2009)	To examine the experiences of South Asian Sikh and Muslim patients (and their families) in Scotland with life limiting illness and to identify how to tackle these problems	Most healthcare professionals expressed intentions to provide equitable care for migrants and normal citizens, but their aim was hampered by language difficulties and lack of understanding of Muslim tradition.	Healthcare services faced difficulty in managing basic needs under Muslim culture, such as, the Halal diet, and need for specific hygiene practices, such as Wudu (ritual ablution preceding daily prayers), which were not prepared in clinical routine.	Not clearly described

Note: * Austria, Belgium, Denmark, Finland, France, Italy, Lithuania, Germany, Greece, Hungary, the Netherlands, Poland, Portugal, Spain, Sweden, and the United Kingdom

Austria, Belgium, Czech Republic, France, Germany, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, and the United Kingdom

Appendix 4: Question guides for the interviews with local implementers

The following question guides were used in the real interview. Phrases in hard brackets are suggested prompts/memos for the researcher. Note that the questions listed below were not asked in sequential order as, in reality, the researcher adapted the questions to match the respondents' dialogue.

Table 47 Example of question guides for the interviews with local implementers

Domain	Examples of questions [prompts/memos for reminding the interviewer]
General information of the interviewees and their workplaces	<ul style="list-style-type: none"> ▪ Please tell me about your job [How long have you been in this job?, What about your past experience in this job?] ▪ Please tell me about your organisation [Role and responsibility of your organisation in association with the card policy?]
History and background of migrant situation	<ul style="list-style-type: none"> ▪ Please tell me about your daily job with regards to migrants [Do you have many migrants coming to your facility each day?, Can you please estimate how many migrants visit your facility per day?] ▪ What are problems that you experience in dealing with migrant patients? [What about the legal status problem? Is there any problem about the language barrier?, What about the cost of treatment of illegal uninsured migrants?, How did you do when migrants could not pay for the treatment?—Link this information with the interview with migrants] ▪ In your opinion, before and after the HICS policy, are there any changes of the use of service by migrant population? Please tell me more about your perceptions on this issue? [Is there any change in the disease pattern or the common age group of migrant patients?, and what are the changes?] ▪ In your opinion, why do these changes in migrant service utilisation happen? [Check this information with the interview with migrants]
Perception on the policy and association with daily work	<ul style="list-style-type: none"> ▪ Please tell me how you know about the HICS policy [From which routes/channels (official document from the ministry, attending workshop, being informed by peers, etc)?] ▪ Has the policy made any impact on your daily work [No change? or significant change?, What about any additional burdens?] ▪ Have you ever experienced any constraints in your work with regards to this policy? Please explain more about that situation and how you cope with it. [Any innovations that your organisation set up to address such problem?—Link this answer to the theory of 'street-level bureaucracy': any discrepancy between '<i>de jure</i>' policy design and '<i>de facto</i>' policy implementation] ▪ Please tell me about how you cope with the situation when migrants without the card (uninsured migrants) come to your facility to utilise

Domain	Examples of questions [prompts/memos for reminding the interviewer]
	<p>services [Who paid for them? How did you help them obtain the card?— Then link this answer with the interview with migrants]</p> <ul style="list-style-type: none"> ▪ What do you think about the policy guideline from the ministry [Does it work? If so, or if not, why do you think accordingly?]
Participation with other organisations	<ul style="list-style-type: none"> ▪ Please tell me how the Ministry of Public Health communicates with your facility regarding the HICS policy [Any documents sent to and from the ministry regularly?, Any workshops or consultative meetings held by the ministry?, How did you feedback your concerns to the ministry?] ▪ Who else that you have to work with in running this policy? [Ministry of Labour? Ministry of Interior?, NGOs?] ▪ What is your experience in working with them [Supportive or inhibitive? Any challenges?, Can you please give an example or explain more about why you think accordingly?]
Overall perceptions and opinions with regards to the policy	<ul style="list-style-type: none"> ▪ To what extent the HICS policy design fit your local context? [Please tell me why you think accordingly.] ▪ In your view, what are benefits and downsides of this policy? ▪ Please tell me your suggestions how the policy should be improved in order to better fit your local context [Any suggested improvement for better services for migrant populations as a whole?]

Appendix 5: Question guides for the interviews with migrants

The following question guides were used for the interviews with migrants. Similar to the interview guides in strand 1, the questions listed below were just a starting point for the dialogue. In practice, the researcher let the interview flow naturally while gradually shaping the dialogue to meet the topics of interest.

Table 48 Example of question guides for the interviews with migrants and employers

Domain	Examples of questions [prompts/memos for reminding the interviewer]
General information of the interviewees and their household members	<ul style="list-style-type: none"> • Please tell me about yourself [Please describe more about your occupation, How long have you been here in Thailand?] • Please tell me about your family [How many family members are there in your family? What are their occupations?] • How do you support your family? [Please tell me about the estimated monthly income of your family and the estimated monthly expense] • How did you come to be working here in Ranong? [Please describe more about how you came into the country, Who helped you settle down in Thailand]
Health beliefs and healthcare seeking behaviours	<ul style="list-style-type: none"> • Please tell me about your health [Note that the index cases are selected—link this answer to the disease information from the family folders but the interviewer must bear in mind the issue of confidentiality.] • Tell me about your most recent visit to a health facility? [What is your registered facility?, What treatment did you receive?, Why did you choose to visit that facility?, Have you ever had problems in seeking care when travelling away?—Note that some migrants are mobile, particularly, in Muang district where a number of migrants spent most of the time in the fishing boats.] • Please tell me about your experience in receiving services at that facility [What about the outcome of the treatment?, Do you feel that health practitioners really paid attention to your needs?, Do you feel that you are welcome at public facility?, Did they talk to you nicely?, etc] • Is there anything done at public facility that made you comfortable in utilising services? [Use of translators, Providing leaflet in non-Thai language, etc] • Have you ever visited healthcare providers outside public facilities? [Private clinics?, Traditional healers?, NGOs?, etc—Then link this to the question below; why migrants chose not to visit the public facilities] • Please tell me why you decided to visit them

Domain	Examples of questions [prompts/memos for reminding the interviewer]
	<ul style="list-style-type: none"> • Is there a time that you (or your family) were sick and really needed treatment, but you did not seek care from anybody? [Could you please tell me what happened at that time?, Why did you fail to meet healthcare providers?, How did you cope with that problem?, etc]
Perception on the policy	<ul style="list-style-type: none"> • Have you ever heard about the health insurance card for migrants? And by what means? • Please describe the process of obtaining the card [How much did you pay for the card? How long have you got it?—Link to the question about cost] • Have you ever used the card when you needed treatment? • What was your experience on care/services when you used the card? [Did you feel that a doctor treat you differently compared to those without card and Thai beneficiaries?, What about your treatment expenses (compared to if without the card)?, Is there any specific interest in obtaining the card in your view?, etc]
External support and influences	<ul style="list-style-type: none"> • Did anyone help you obtain the card [Who helped you?, How they helped you?, etc] • When you needed help in your health problems, who did you turn to?, and how they helped you? [Please tell me about your past experience on this issue—Link to the previous question about health seeking behaviour] • Have you ever heard your neighbours or friends talking about the card?, What did they say?, Do you agree with what they said?, Please tell me your opinions on this matter [Link to previous questions about perception on the card]
Overall perceptions and opinions with regards to the policy	<ul style="list-style-type: none"> • In your opinion, are there any differences in your well-being between before and after having the card? • In your opinion, what are advantages of the card? And what are drawbacks and also limitations of the card? [Please tell me reasons why you think accordingly] • If you were able to change anything about the card to make it better fit your need, what would you suggest? [Please give reasons why you think accordingly]

Appendix 6: Detailed information of variables used in the quantitative analysis

The following table describes all variables used in the quantitative analysis in objective 3. It should be noted that the analysis also added the interaction terms between confounding factors and the insurance variable.

Table 49 Example of variables used in quantitative analysis

Variable	Justification	Expected outcome
IP utilisation volume (visits/person/year)	Dependent variable	IP utilisation rate has increased over time in all patients. Migrants with the card are likely to have less IP use than the UCS counterparts as most migrants are in working age group. Amongst all beneficiaries, migrants without the card possibly enjoy least services due to huge financial burden.
OP utilisation volume (visits/person/year)	Dependent variable	OP utilisation rate has increased over time in all patients. Amongst all beneficiaries, migrants without the card possibly enjoy service least frequently.
OOP (Baht/person/visit, both OP and IP)	Dependent variable	The uninsured migrants are likely to suffer from higher OOP payment than their counterparts.
Insurance type (HICS, UCS, and no insurance)	Independent variable	The HICS benefits migrant patients by increasing utilisation and lessening OOP payment.
Sex (male and female)	Confounding factor	No significant difference in utilisation volume and disease severity between sexes.
Occupation (formal and informal sector)	Confounding factor	Patients in formal employment are supposed to have higher possibility in obtaining the card, but there should be no significant difference in the number of services used.
Age (years) and age groups	Confounding factor	The older age groups tend to utilise more services than the younger.
Domicile (proximity to the facility and non-proximity)	Confounding factor	Patients residing the area close to the health facility (proximity) are likely to utilise more services than those living far from the facility (non-proximity). Proximity is determined by if the home address of a patient is located in the same district of the address of the health facility.
Principal diagnosis	Confounding factor	Patients with critical/catastrophic illnesses are likely to utilise more services than those without. To identify 'catastrophic illness', the researcher used the cut-off point of the fifth digit of the Diagnostic Related Groups code.

Variable	Justification	Expected outcome
Time variable	Confounding factor	The utilisation volume before the change in the HICS policy in 2014 was larger than after 2014 since in practice most healthcare providers interpreted that the OSS measure allowed only healthy migrants to be insured (details in Chapter 6).

Appendix 7: Mathematical details of key econometric techniques for the quantitative analysis

In econometric study, there are two most common models for the panel data analysis: (1) Random-effects model and (2) Fixed-effect model.

Random-effects (RE) model

Let's say Y_{it} is the dependent variable, X_{it} is set of independent variables and β is corresponding coefficients. Consider data with N observations and T time periods;

$$y_{it} = \beta x_{it} + \mu + (\mu_i + \varepsilon_{it}) \text{ for } t = 1, 2, 3, \dots, T \text{ and } i = 1, 2, 3, \dots, N$$

where μ is the mean of random intercepts, and the errors, μ_i (between entity error) and ε_{it} (idiosyncratic error), are considered the composite error term with variances σ_μ^2 and σ_ε^2 respectively. The transformation for random effects estimation is $y_{it}^* = y_{it} - \theta \bar{y}_i$ and $x_{it}^* = x_{it} - \theta \bar{x}_i$, where $\theta = 1 - [\sigma_\varepsilon / (T\sigma_\mu^2 + \sigma_\varepsilon^2)^{1/2}]$.

Though the RE model seemed to fit well with the dataset of this thesis, it was found that the RE model produced similar results to the OLS due to a very small between entity error (σ_u).

Fixed-effect (FE) model

Consider data with N observations and T time periods;

$$y_{it} = \beta x_{it} + \alpha_i + \varepsilon_{it}, \text{ for } t = 1, 2, 3, \dots, T \text{ and } i = 1, 2, 3, \dots, N \rightarrow \text{Equation (1)}$$

While α_i is the unknown intercept for each entity/individual, Y_{it} is the dependent variable, X_{it} is set of independent variables, β is corresponding coefficients and ε_{it} is the error term. β for the 'card' variable reflects the policy impact on the outcomes of interest (after adjusting all covariates). By averaging the observations on the i^{th} individual over T time. The equation is appeared to be:

$$\bar{y}_i = \beta \bar{x}_i + \alpha_i + \bar{\varepsilon}_i \quad \rightarrow \text{Equation (2)}$$

Subtracting equation (2) from (1), the equation is displayed as:

$$y_{it} - \bar{y}_i = \beta(x_{it} - \bar{x}_i) + (\varepsilon_{it} - \bar{\varepsilon}_i)$$

Regressing $y_{it}^* = y_{it} - \bar{y}_i$ on $x_{it}^* = x_{it} - \bar{x}_i$ will produce a fixed effect estimator.

Though the FE model appeared to be a good alternative for the analysis in Chapter 7, it had serious downside, that is, the FE model was incapable of estimating the effect of time invariant variables, such as sex or insurance status. Therefore, results from the FE model were not shown in this thesis.

Treatment-effect model

There are several tests under the family of Treatment-effect model, such as 2-Stage-Least-Square (2SLS) and Probit-2SLS. These tests are variants of the Instrumental variable (IV), and normally have very similar structure as they originated from the same logics. The assumption of these techniques are as follows. Consider data with N observations and T time periods;

$$Y_{it} = \beta X_{it} + \alpha_i + \mu_{it} \text{ for } t = 1, 2, 3, \dots, T \text{ and } i = 1, 2, 3, \dots, N$$

While α_i is the unknown intercept for each entity/individual, Y_{it} is the dependent variable, X_{it} is set of independent variables, β is corresponding coefficients and μ_{it} is the

error term. β for the 'card' variable reflects policy impact on the outcomes of interest (after adjusting all covariates). The structure of the equation is composed of two stages (Khandker et al., 2010):

- First stage: $T_{it} = \gamma Z_{it} + \Phi X_{it} + \mu_{it}$
- Second stage: $Y_i = \delta Q_i + \eta_j + v_{it}$, where $t = 1, 2, 3, \dots, T$ and $i = 1, 2, 3, \dots, k$

Note that

- Q refers to a vector of covariates, including exogenous variables (X) and 'predicted' treatment variable (T^{\wedge}).
- T is (troublesome) treatment variable, in this case, the 'card'.
- μ and v are idiosyncratic errors.
- η is unobserved fixed effect.
- Z is instrument(s).

The treatment variable is regressed on instrument(s) Z in the first stage; T^{\wedge} (predicted T) is then applied (by embedded in Q) in the second stage. A key concern is that Z should be strongly correlated with the treatment variable, but independent from the error terms.

Two part model

The following equation is the final estimation of the Two part model.

$$E(y|x) = \Pr(y_i > 0 | x_i^j) \times \exp(\beta^j x_i^j)$$

For part 1 (Logit regression), the dependent binary variable y, is estimated in the form of log odds ratio ($p/(1-p)$). The probability of an event lies between 0 and 1:

$$\ln(y) = \ln((p/(1-p))) = Z = \beta_1 + \beta_2 x_i$$

$$p = e^z / (1 + e^z), \text{ where } p \text{ is a probability of an interested event.}$$

For part 2 (Generalised linear model [GLM] with a gamma family and log link transformation), the GLM consists of

- a random component for response variable y , of which the distribution is a member of exponential family (in this case, gamma family);
- a linear predictor that is a linear function of regressors,
 - $\eta_j = \alpha + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_k x_{ik}$;
- a smooth and inverse link function, g^{-1} , which transforms the expectation of the response variable, $\mu = E(y_i)$ to the linear predictor,
 - $g(\mu_i) = \eta_j = \alpha + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_k x_{ik}$; and in the analysis of health expenditure, a log transformation is applied as a link function.

Appendix 8: Participant information sheet and consent form

English version

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Participant Information Sheet

"Health Insurance Card for Foreigners" policy for cross-border migrants in Thailand: Responses in policy implementation & outcome evaluation

I would like to invite you to be interviewed as part of a research study that aims to explore how the health insurance card for migrants affect healthcare providers and cross-border migrants in Thailand. This sheet provides general information about the research and how you would be involved, explains the confidentiality and data storage arrangements, and gives details of how the research has been funded and reviewed. Please read the following information and if there is anything that is not clear, or if you wish to have further information, please contact the researcher as per detail below.

The research is undertaken as part of my doctoral degree at the London School of Hygiene and Tropical Medicine (LSHTM), which is supervised by Prof Anne Mills.

This study is funded by the Health Insurance Systems Research Office and the International Health Policy Programme, the Ministry of Public Health, Thailand.

The study objectives are: (1) to explore policy aims and objectives through views of policy makers in Thailand, (2) to explore the response of local healthcare providers to the HICF policy, and how the policy affects migrant health-seeking behaviour, (3) to assess the influence of the policy on service utilisation and out-of-pocket expenditure of insured migrants, and (4) to provide recommendations on the Thai migrant healthcare policy.

The key methods are: (1) reviewing relevant evidence and interviewing with policy makers, (2) interviewing both Thai healthcare providers at the ground level and also migrants about how they respond to the current health insurance policy for migrants, and (3) analysing facility-based data on the volume of use and out-of-pocket expenditure of migrants.

I would like to interview you because your interest in and experience of this policy in Thailand might be beneficial to the improvement of healthcare services policy for migrants in Thailand, and I sincerely hope that you are able to participate in this study. The interview will last approximately 60-90 minutes, and will be held at a location and in language as per your preference.

If you decide to take part, you will be asked to sign a consent form. Having signed the consent form you will remain free to withdraw from the study at any time, without having to give a reason for this. You will be ensured that your participation in the research will not affect your rights and benefits of any kinds, such as, healthcare access and/or career advancement.

Confidentiality

With your permission, the interview will be digitally recorded and transcribed. You may request a copy of your transcript to be sent to you, and you can correct any part of the transcript that you believe to be in error. Direct quotes will only be used in the research

reports with your consent, and all quotes will be anonymised in the way that the interviewees cannot be identified. Only the research team, consisting of the researcher, the research assistants, the student's supervisor and a transcriber, will be able to access to the audio files.

Dissemination of results

Preliminary finding of the research will be reported back to the participants in 1-2 study seminars, probably by September 2015. This will be an opportunity to feedback on emerging results, and validate the information collected. The final study results will be disseminated only for academic purpose and will be presented in several forms, such as, journal, research report and thesis.

Data storage

Audio files and anonymised transcripts will be securely stored by the researcher until the completion of his study, probably by December 2016. The LSHTM research governance requirements stipulate that files are then securely stored with the LSHTM records management service for a further 10 years. During this time, only the researcher can access – or give permission to access – the stored files. No permission will be granted to access the audio files. After 10 years, the files will be disposed.

With your permission, the researcher will archive your anonymised transcript with LSHTM's data repository, under the option "request access", for 10 years from the point of deposit, after which time they will be destroyed. Requests for access will be sent to the researcher. Information about LSHTM repository can be found at: <http://blogs.lshtm.ac.uk/rdmss/files/2014/04/Data-Collection-Structure-Mar2014.pdf>.

Ethical Review

The study has been approved by the London School of Hygiene and Tropical Medicine Ethics Committee and by the Institute for Development of Human Research Protection in Thailand.

Further Information and Complaints

If you have a concern about any aspect of this study, please contact me via email at Rapeepong.Suphanchaimat@lshtm.ac.uk or rapeepong@ihpp.thaigov.net, or call my Thai mobile number, +66 (0) 81544 6966 and I will do my best to answer your questions. If you are concerned about your rights as a research participant, think you have not been treated fairly or wish to make a complaint, you can contact the London School of Hygiene and Tropical Medicine Ethics Committees at ethics@lshtm.ac.uk or call +44 (0) 207 927 2221.

Yours sincerely,

Rapeepong Suphanchaimat

Informed consent form

By signing below, you are agreeing that: (1) you have read and understood the Participant Information Sheet, (2) questions about your participation in this study have been answered satisfactorily, (3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily (without coercion).

Participant's signature

(Participant's name)

Principal investigator's signature

(Principal investigator's name)

Witness' signature

(Witness' name)

Date __/__/__

Thai version

Thai version

เอกสารชี้แจงข้อมูลแก่ผู้เข้าร่วมโครงการวิจัย

โครงการศึกษาการตอบสนองและผลลัพธ์ของนโยบายบัตรประกันสุขภาพสำหรับคนต่างด้าวและผู้ติดตามในประเทศไทย

ปัญหาคนต่างด้าวนับเป็นปัญหาที่สำคัญในวงการสาธารณสุขไทย โดยเฉพาะกลุ่มที่เป็นแรงงานต่างด้าวและแรงงานเหล่านี้ล้วนเป็นผู้ขับเคลื่อนทางเศรษฐกิจที่สำคัญของประเทศ กระทรวงสาธารณสุขไทยจึงได้กำหนดนโยบายขยับบัตรประกันสุขภาพให้แรงงานต่างด้าวที่ไม่อยู่ในระบบประกันสังคมเพื่อดูแลปัญหาสุขภาพสำหรับแรงงานกลุ่มนี้ซึ่งส่วนใหญ่เป็นแรงงานไร้ฝีมือ ในภาคเกษตรกรรมภาคบริการและการประมง

แม้ว่านโยบายบัตรประกันสุขภาพสำหรับคนต่างด้าวก่อนข้างเปิดกว้างทั้งที่เข้าเมืองถูกกฎหมายและผิดกฎหมาย โดยดำเนินการมาอย่างต่อเนื่องแต่ยังไม่มีการประเมินถึงการบริหารจัดการและการดำเนินนโยบายดังกล่าวอย่างเป็นระบบ รวมถึงยังไม่มีการประเมินผลลัพธ์ของนโยบายในเรื่องการให้บริการและค่าใช้จ่ายของคนต่างด้าวที่ประกันตนเมื่อมาใช้บริการสุขภาพ

การศึกษานี้จึงมีวัตถุประสงค์เพื่อเพื่อช่วยผู้กำหนดนโยบายพัฒนาระบบประกันสุขภาพสำหรับคนต่างด้าวผ่านการวิเคราะห์และประเมินการรับรู้ของคนต่างด้าวและผู้ให้บริการต่อนโยบายบัตรประกันสุขภาพในปัจจุบันซึ่งประกอบด้วยระเบียบวิธีวิจัยทั้งเชิงคุณภาพและเชิงปริมาณ โดยมีรายละเอียดคือการศึกษาทบทวนวรรณกรรมอย่างเป็นระบบ การสัมภาษณ์เชิงลึกผู้ให้บริการสุขภาพและการสัมภาษณ์เชิงลึกคนต่างด้าว การวิเคราะห์ข้อมูลโรงพยาบาล และพัฒนาข้อเสนอเชิงนโยบายการศึกษานี้ได้รับงบประมาณสนับสนุนจากสำนักงานวิจัยเพื่อการพัฒนากลุ่มประกันสุขภาพไทย (สวปก) โดยมีกรอบระยะเวลาดำเนินโครงการ 6 เดือน

เป้าหมาย

การศึกษานี้มีเป้าหมายเพื่อช่วยผู้กำหนดนโยบายพัฒนาระบบประกันสุขภาพสำหรับคนต่างด้าวผ่านการวิเคราะห์และประเมินการรับรู้ของคนต่างด้าวและผู้ให้บริการต่อนโยบายบัตรประกันสุขภาพสำหรับคนต่างด้าวในปัจจุบัน

วัตถุประสงค์

1. เพื่อทบทวนวรรณกรรมอย่างเป็นระบบเกี่ยวกับทัศนคติการรับรู้การปฏิบัติการของผู้ให้บริการสุขภาพแก่คนต่างด้าว

2. เพื่อสำรวจและวิเคราะห์ว่า

ก. นโยบายบัตรประกันสุขภาพสำหรับคนต่างด้าวได้ดำเนินการอย่างไรในพื้นที่จริงเปรียบเทียบกับวัตถุประสงค์และเป้าหมายดั้งเดิมของนโยบาย

ข. การรับรู้ของคนต่างด้าวต่อนโยบายเป็นอย่างไร คนต่างด้าวได้ซื้อบัตรหรือไม่และเหตุใดจึงได้ซื้อหรือไม่ซื้อบัตร และบัตรประกันสุขภาพนี้ช่วยส่งเสริมการใช้บริการได้อย่างไร

3. เพื่อประเมินว่านโยบายบัตรประกันสุขภาพสำหรับคนต่างด้าวมีผลเพิ่มปริมาณการใช้บริการและลดรายจ่ายของคนต่างด้าวที่เป็นผู้ประกันตนจนจุกบริการได้เพียงใด

4. เพื่อพัฒนาข้อเสนอเชิงนโยบายสำหรับการพัฒนาและปรับปรุงนโยบายบัตรประกันสุขภาพนี้ในอนาคต
ประโยชน์ที่จะได้รับ

การศึกษานี้ช่วยแสดงให้เห็นถึงข้อดีข้อเสียและผลการดำเนินงานของนโยบายบัตรประกันสุขภาพสำหรับคนต่างด้าวในปัจจุบัน รวมถึงเสนอแนะการบริหารจัดการในระดับปฏิบัติการให้นโยบายนี้ดำเนินการได้อย่างมีประสิทธิภาพยิ่งขึ้น

สิทธิของท่าน

ท่านมีสิทธิที่จะปฏิเสธการให้สัมภาษณ์ทั้งก่อนการสัมภาษณ์หรือยุติการสัมภาษณ์ระหว่างการให้สัมภาษณ์และแม้สัมภาษณ์ไปแล้วท่านมีสิทธิที่จะปฏิเสธให้นำข้อมูลที่ได้จากการสัมภาษณ์ท่านไปวิเคราะห์ การตัดสินใจของท่านไม่มีผลกระทบต่อสิทธิการรักษาพยาบาลหรือกระทบต่อหน้าที่การงานของท่านในทุกกรณี

การรักษาข้อมูลเป็นความลับ

ข้อมูลจากท่านและผู้เข้าร่วมคนอื่นจะนำไปวิเคราะห์ข้อมูลในภาพรวมและข้อมูลจะเก็บเป็นความลับ โดยไม่มีการเปิดเผยข้อมูลส่วนตัวหรือข้อมูลรายบุคคล และผลการสัมภาษณ์ครั้งนี้จะไม่กระทบต่อหน้าที่การงานและสิทธิของท่าน เพื่อให้ได้ข้อมูลที่ครบถ้วนกรุณาตอบแบบสอบถามตามความเป็นจริงที่สุดและหากท่านมีคำถามใดเกี่ยวกับการสำรวจนี้ กรุณาติดต่อผู้รับผิดชอบโครงการที่ระบุไว้ด้านล่างนี้ได้ตลอดเวลา

นายแพทย์ระพีพงศ์ สุพรรณไชยมาตย์ (โทรศัพท์ 081-544-6966 หรือ email: rapeepong@ihpp.thaigov.net)

สำนักงานพัฒนานโยบายสุขภาพระหว่างประเทศกระทรวงสาธารณสุขจังหวัดนนทบุรี

ยินยอมด้วยความสมัครใจโครงการศึกษาการตอบสนองและผลลัพธ์ของนโยบายบัตรประกัน
สุขภาพสำหรับคนต่างด้าวและผู้ติดตามในประเทศไทย

วันที่ให้คำยินยอมวันที่เดือนพ.ศ.....

ก่อนที่จะลงนามในใบยินยอมให้ทำการวิจัยนี้ข้าพเจ้าได้รับการอธิบายจากผู้วิจัยถึงวัตถุประสงค์ของการ
วิจัยวิธีการวิจัย รวมทั้งประโยชน์ที่จะเกิดขึ้นจากการวิจัยอย่างละเอียดและมีความเข้าใจดีแล้ว ซึ่งผู้วิจัยได้ตอบ
คำถามต่างๆที่ข้าพเจ้าสงสัยด้วยความเต็มใจ ไม่บีบบังคับซ่อนเร้น จนข้าพเจ้าพอใจและเข้าร่วมโครงการนี้โดย
สมัครใจ

ข้าพเจ้ามีสิทธิ์ที่จะบอกเลิกการเข้าร่วมการวิจัยนี้เมื่อใดก็ได้ถ้าข้าพเจ้าปรารถนาโดยไม่เสียสิทธิในการ
รักษาพยาบาลที่จะเกิดขึ้นตามมาในโอกาสต่อไป และการตัดสินใจนี้จะไม่กระทบกับหน้าที่การงานของข้าพเจ้า
ในทุกกรณี

ผู้วิจัยรับรองว่าจะเก็บข้อมูลเฉพาะเกี่ยวกับตัวข้าพเจ้าเป็นความลับ จะไม่มีการเปิดเผยข้อมูลส่วนตัว
หรือข้อมูลรายบุคคลต่อสาธารณะ ซึ่งผลการสำรวจทั้งหมดนี้จะวิเคราะห์สรุปผลในภาพรวม

ข้าพเจ้าได้อ่านข้อความข้างต้นแล้วและมีความเข้าใจดีทุกประการและได้ลงนามในใบยินยอมนี้ด้วยความ
ความเต็มใจ ในกรณีที่ข้าพเจ้าไม่สามารถอ่านหนังสือได้ผู้วิจัยได้อ่านข้อความในใบยินยอมนี้ให้ข้าพเจ้าฟังจน
เข้าใจดีแล้ว

ข้าพเจ้า (นาย/นาง/นางสาว).....จึงลงนามในใบยินยอมนี้ด้วยความเต็มใจ

ลงนาม.....ผู้ยินยอม

(.....)

ลงนาม.....พยาน

(.....)

ลงนาม.....พยาน

(.....)

ကမ္ဘာ့ ကျန်းမာရေး နှင့် ဖွံ့ဖြိုးမှုဌာန
ပြည်သူ့ကျန်းမာရေးနှင့် မူဝါဒ မဟာဌာန
လန်ဒန် သန့်ရှင်းမှုနှင့် အပူပိုင်းဆိုင်ရာ ရောဂါဆေးပညာ ကောလိပ်
လိပ်စာ- အမှတ် ၁၅-၁၇ တာဗီစတော့



လန်ဒန် ဒဗလျူစီ (၁) အိတ်ချ် (ကိုး) အက်စ်အိတ်ချ်
15-17 Tavistock Place
London WC1H 9SH

တယ်လီဖုန်း- +၄၄ (၀) ၂၀ ၇၉၂၇ ၂၇၀၀

ယူကေ မိုဘိုင်းဖုန်း- +၄၄ (၀) ၇၇ ၆၃၂၁ ၇၉၃၄

ထိုင်းမိုဘိုင်းဖုန်း- +၆၆ (၀) ၈၁၅ ၄၄၆ ၉၆၆

အီးမေးလ်- Rapeepong.Suphanchai@lshtm.ac.uk, rapeepong@ihpp.thaigov.net

“သုတေသန လုပ်ငန်းတွင် ပါဝင်ဖြေကြားမည့်သူကို အချက်အလက် တင်ပြရှင်းလင်းခြင်း”

“နိုင်ငံခြားသားများအတွက်ကျန်းမာရေးအာမခံကဒ်” မူဝါဒ။ ။နယ်စပ်ဖြတ်ကျော် ရွှေ့ပြောင်းလူထု ၏ တုန့်ပြန်ခံစားရမှုများ (မူဝါဒ အကောင်အထည်ဖော်ခြင်းနှင့် အကျိုးထိရောက်မှုပြန်လည်စမ်းစစ်ခြင်း သုတေသန ကျမ်း”

ထိုင်းနိုင်ငံအတွင်းရှိနယ်စပ်ဖြတ်ကျော်လူထုနှင့် ကျန်းမာရေးဝန်ဆောင်မှုပေးသူများ အပေါ်တွင် “ရွှေ့ပြောင်းလူထုအတွက် ကျန်းမာရေး အာမခံ ကဒ်” မူဝါဒ အကျိုးသက်ရောက်မှုကို ရှာဖွေဖော်ထုတ်နိုင်ရန်အတွက် သင့်အား သုတေသနလုပ်ငန်းစဉ်တစ်စိတ်တစ်ဒေသအဖြစ် အင်တာဗျူးမေးခွန်းများ ဖြေဆိုရန် ဖိတ်ခေါ်ပါသည်။ ဤစာရွက်တွင် သုတေသနလုပ်ငန်းစဉ် ၏ယေဘုယျ အကြမ်းဖျင်းသတင်းအချက်အလက်များ၊ သင်မည်သို့ မည်ပုံ သုတေသနလုပ်ငန်းစဉ်တွင် ပါဝင်အင်တာဗျူးအမေးခံရမည်ကို ဖော်ပြထားပါသည်။ ထို့အပြင် သင်ပေးသောအချက်အလက် အကြောင်းအရာများကို လုံခြုံအောင် မည်ကဲ့သို့ လျှို့ဝှက်၍ထိန်းသိမ်းထားမည် နှင့် သုတေသန စာတမ်းကို ပြုလုပ်ရန် မည်သည်က မည်သို့ ရန်ပုံငွေ ထောက်ပံ့ သည် နှင့် ပြန်လည်ကြည့်ရှုမည်ကို ဖော်ပြပါမည်။ အောက်ဖော်ပြပါ အချက်အလက်များကို ဖတ်ရှုပြီး နားမလည် မရှင်းလင်းသော အချက်အလက်များရှိပါက (သို့မဟုတ်) ပိုမိုသိရှိလိုပါက သုတေသနပြုလုပ်သူအား အောက်တွင်ဖော်ပြထားသော လိပ်စာအတိုင်း ဆက်သွယ် မေးမြန်းနိုင်ပါသည်။

ဤသုတေသနသည် သုတေသနပြုလုပ်သူ၏ ပါရဂူဘွဲ့ သင်ကြားခြင်း အစိတ်အပိုင်းတစ်ခုအဖြစ် ဒေါက်တာ အန်း(မ်)မေးလ် ကြီးကြပ်မှုဖြင့် ပြုလုပ်ခြင်းဖြစ်ပါသည်။ သုတေသနလုပ်ငန်းစဉ်များကို ထိုင်းနိုင်ငံ ကျန်းမာရေးအာမခံစနစ် သုတေသနရုံး နှင့် နိုင်ငံတကာ ကျန်းမာရေးမူဝါဒ စီမံကိန်းမှ ရန်ပုံငွေထောက်ပံ့ပေးပါသည်။

သုတေသန၏ ရည်ရွယ်ချက်များမှာ

(၁) ရွှေပြောင်းလူထုအား ကျန်းမာရေးစောင့်ရှောက်မှု တွင် စောင့်ရှောက်မှုပေးသူများ၏ ဆောင်ရွက်ချက်များအား နိုင်ငံတကာ သက်သေအထောက်အများနှင့် နည်းစနစ်ကျကျ ပြန်လှန် ကြည့်ရှုသုံးသပ်ရန်

(၂) ဒေသဆိုင်ရာကျန်းမာရေးစောင့်ရှောက်မှုပေးသူများ၏ "နိုင်ငံခြားသားများအတွက် ကျန်းမာရေးအာမခံကဒ်" မူဝါဒ အပေါ် အမြင်တူနဲ့ပြန်ပြန်နှင့် အဆိုပါမူဝါဒ သည် ရွှေပြောင်းလူထု၏ ကျန်းမာရေးစောင့်ရှောက်မှု လက်လှမ်းမီ ခံယူရှာဖွေမှု အမူအကျင့်များအပေါ် မည်သို့ သက်ရောက်မှု ရှိသည်ကို ဖော်ထုတ်ရန်

(၃) အဆိုပါ မူဝါဒ သည် ကျန်းမာရေးအာမခံ ရယူထားသော ရွှေပြောင်း လူထု၏ ကျန်းမာရေး ဝန်ဆောင်မှုများကို အသုံးပြုမှု နှင့် ကျန်းမာရေးစရိတ်အိတ်စိုက် ကုန်ကျခံမှုများအပေါ် လွှမ်းမိုးမှုများကိုလေ့လာစမ်းစစ်ရန် နှင့်

(၄) အဆိုပါ မူဝါဒ အပေါ် အကြံပြု လေ့လာဆွေးနွေးပေးရန် ရည်ရွယ်ပါသည်။

အဓိက အသုံးပြုမည့် သုတေသန နည်းလမ်းများမှာ

(၁) ရွှေပြောင်းလူထုအား ကျန်းမာရေးစောင့်ရှောက် ပေးနေသော ဝန်ထမ်းများ၏ လက်တွေ့ လုပ်ဆောင်ချက်များ၊ စိတ်ထားခံယူချက်များနှင့် ပတ်သက်သော သက်သေအချက်အလက်များကို ပြန်လေ့လာသုံးသပ်ခြင်း

(၂) အဆိုပါ ဒေသဆိုင်ရာ ထိုင်း ကျန်းမာရေးစောင့်ရှောက်မှုဝန်ထမ်းများကို အင်တာဗျူးခြင်းနှင့် ရွှေပြောင်းလူထု သည် ကျန်းမာရေးအာမခံ မူဝါဒကို မည်သို့မည်ပုံ တုန့်ပြန်အသုံးပြုမှု ရှိမရှိကို မေးမြန်းခြင်း

(၃) ရွှေပြောင်းလူထု ကျန်းမာရေးစရိတ် အိတ်စိုက် ကုန်ကျမှုများနှင့် ကျန်းမာရေးထောက်ပံ့မှု ဌာနဆိုင်ရာ အချက်အလက် များ ခွဲခြမ်းစိပ်ဖြာခြင်းတို့ ဖြစ်ပါသည်။

သင်၏ စိတ်ဝင်စားမှု၊ ပါဝင်မှု၊ အတွေ့အကြုံ များသည် ထိုင်းနိုင်ငံအတွင်းရှိ ရွှေပြောင်းလူထုအပေါ် ကျန်းမာရေးဝန်ဆောင်မှုများ တိုးတက်စေရန် အထောက်အကူ ဖြစ်စေနိုင်သောကြောင့် သင့်အား မေးမြန်းခွင့် ပြုစေချင်ပါသည်။ အင်တာဗျူး မေးမြန်းခြင်းသည်

တစ်နာရီမှ တစ်နာရီခွဲ အထိ ကြာမြင့်နိုင်ပြီး သင်ဖြေဆိုရန်အဆင်ပြေ သော နေရာတွင် သင် အဆင်ပြေမည့် ဘာသာစကားဖြင့်သာ မေးမြန်းမည် ဖြစ်ပါသည်။

သင် ပါဝင်ဖြေဆိုချင်ပါက သဘောတူညီမှု စာရွက် တွင် သဘောတူညီကြောင်း လက်မှတ်ရေးထိုးစေလိုပါသည်။ လက်မှတ်ထိုး ဖြေဆိုသော်လည်း သင့် စိတ်ဆန္ဒအတိုင်း အကြောင်းပြချက်မလိုဘဲ မည်သည့်အချိန်တွင်မဆို ဖြေဆိုရပ်တန့် နှုတ်ထွက်နိုင်ပါသည်။ သင် ပါဝင် ဆွေးနွေးသောကြောင့် သင့်အပေါ်တွင် မည်သို့မျှ သင့်၏အခွင့်အရေးများ၊ ဆေးကုသခွင့်၊ အလုပ်လုပ်ပိုင်ခွင့် များအပေါ်တွင် မည်သို့မျှ ကောင်းကျိုးဆိုးကျိုး သက်ရောက်စေမည် မဟုတ်ကြောင်း အသေအချာ အာမခံပါသည်။

ကိုယ်ရေးကိုယ်တာ အချက်အလက်များ မပေါက်ကြားစေရန် ထိန်းသိမ်းခြင်း

သင်ခွင့်ပြုချက်ရမှသာ အမေးအဖြေ များကို အသံဖမ်း ၍ ရေးသားမှတ်သားထားပါမည်။ ထိုမှတ်တမ်းအား သင့်ထံသို့ ပို့ပေးစေကြောင်း သင်သည်တောင်းဆိုနိုင်၍ မှားသည်ဟု သင်ထင်သည့် အချက်များကို ပြန်လည် ပြင်ဆင်နိုင်ပါသည်။ သင်ဖြေဆိုချက်များကို သင်ဖြေဆိုသည်ဟု အခြားသူများမသိရှိစေရန် မေးခွန်းအဖြေ တွေ့ရှိချက်များကို သုတေသန စာတမ်းတွင် ဖော်ပြပါကလည်း နာမည်အတုများဖြင့်သာ ဖော်ပြမည် ဖြစ်ပါသည်။ သင်ဖြေဆိုချက်များကို တိုက်ရိုက်အတိုင်း အသုံးပြုလိုပါက သင့်ထံတွင် ခွင့်ပြုချက်တောင်းခံပြီး သင်ခွင့်ပြုမှသာ သုံးစွဲမည်ဖြစ်ပါသည်။ တစ်ဦးတစ်ယောက်ချင်းစီ၏ အဖြေများ အသံဖိုင်များကို သုတေသနပြုသူနှင့် သူ၏အကြံပေးဆရာ၊ သုတေသနလက်ထောက်နှင့် မှတ်တမ်းရေးသားသူ သာ နားထောင် အသုံးပြုရေးသားနိုင်မည်ဖြစ်ပါသည်။

သုတေသန ရလဒ်များကို ဖြန့်ဝေပေးခြင်း

ရှေးဦး တွေ့ရှိချက်များကို သုတေသနပြုသူသည် ပါဝင် ဖြေကြားသူများထံသို့ စာသင်ကာလ ပထမနှင့် ဒုတိယ လေးလပတ် စာသင်ကာလများတွင် (ခန့်မှန်းခြေ စက်တင်ဘာလ ၂၀၁၅) ပြန်လည် တင်ပြ ဖြန့်ဖြူးပေးသွားပါမည်။ ၎င်းသည် တွေ့ရှိချက်များနှင့်ပတ်သက်ပြီး ပါဝင်ဖြေဆိုသူများထံမှ ပေးချင်သော သုံးသပ်ချက်များ ရရှိရန်နှင့် ခွဲခြမ်းစိပ်ဖြာထားသော အချက်အလက် တွေ့ရှိချက်များမှန်မမှန် ပြန်လည်စမ်းစစ်ရန် အခွင့်အရေးတစ်ရပ်လည်းဖြစ်ပါသည်။ နောက်ဆုံးတွေ့ရှိချက် များကို ပညာရေးအတွက်သာရည်ရွယ်ပြီး သုတေသန အစီရင်ခံလွှာ၊ ပါရဂူဘွဲ့ကျမ်း၊ သက်ဆိုင်ရာ ပညာရပ် ဂျာနယ် များတွင်သာ ထည့်သွင်းဖော်ပြ ဖြန့်ဝေသွားပါမည်။

အချက်အလက်များထိန်းသိမ်းထားသည့်ခြင်း

အသံဖိုင်များနှင့်အမည်မဖော်ပြထားသောအင်တာဗျူးအမေးအဖြေ မှတ်တမ်းမှတ်ရာများကို သုတေသန ပြီးသည်အထိ ပါရဂူဘွဲ့ သင်တန်းပြီးသည်အထိ (ခန့်မှန်းခြေ ဒီဇင်ဘာ ၂၀၁၆ အထိ) လုံခြုံစွာသိမ်းဆည်းထားပါမည်။ ထို့နောက် သုတေသန ပြုလုပ်သူ တက်ရောက်နေသောကျောင်း၏ သုတေသန စီမံခန့်ခွဲအုပ်ချုပ်ထိန်းကျောင်းမှ လိုအပ်ချက်အရ နောက်ဆယ်နှစ်အထိ အဆိုပါ ဖိုင်များကို လုံခြုံစွာ သိမ်းဆည်းထားပါမည်။ ထိုအချိန်အတွင်းတွင် ဤသုတေသနပြုလုပ်သူ သာအသုံးပြုနိုင်ခွင့် (သို့မဟုတ်) အသုံးပြုခွင့်သာ ပေးနိုင်ပါသည်။ မည်သူမျှ အသုံးပြုခွင့် ပေးမည်မဟုတ်ပါ။ ဆယ်နှစ်ပြည့်ပါက ဖိုင်များအားလုံးကို ဖျက်ဆီးပစ်မည်ဖြစ်ပါသည်။ သင်ခွင့်ပြုမှသာလျှင် သုတေသနပြုသူသည် သင်၏ အမည် မဖော်ပြထားသော သုတေသန အမေးအဖြေ မှတ်တမ်းမှတ်ရာများအား ကျောင်း၏ အချက်အလက်ထိန်းသိမ်းမှု အား ရရှိစေပါမည်။ သုတေသနပြု သူက သင့်ထံမှ ဆယ်နှစ်အထိ အသုံးပြုခွင့် တောင်းခံပြီး ဆယ်နှစ်ပြည့်ပြီးမှသာ အဆိုပါ ဖိုင်များ အချက်အလက်များအား ဖျက်ဆီးပစ်မည်ဖြစ်ပါသည်။

အဆိုပါနှင့်ပတ်သက်သောအချက်အလက်များအား

<http://blogs.lshtm.ac.uk/rdmss/files/2014/04/Data-Collection-Structure-Mar2014.pdf>

အင်တာနက်စာမျက်နှာတွင် ကြည့်ရှုနိုင်ပါသည်။

သုတေသန ကျင့်ဝတ်ဆိုင်ရာ စီစဉ်မှုပြုခြင်း

ဤသုတေသနကို

လန်ဒန် သန့်ရှင်းမှုနှင့် အပူပိုင်းဆိုင်ရာ ရောဂါဆေးပညာ ကောလိပ်

နှင့် ထိုင်းနိုင်ငံ လူသားဆက်စပ် သုတေသန ကာကွယ်ခြင်း ဖွံ့ဖြိုးမှု အင်စတီကျု မှ သုတေသန ကျင့်ဝတ် ဆိုင်ရာ ကိုက်ညီမှုရှိကြောင်း အတည်ပြုပေးထားပါသည်။

နောက်ဆက်တွဲ သတင်းအချက်အလက်များသိရှိလိုလျှင် (သို့မဟုတ်) တိုင်ကြားလိုလျှင် သုတေသနပြုလုပ်သူကို အောက်ပါအတိုင်း ဆက်သွယ်နိုင်ပါသည်။

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+66 (0) 81544 6966 (+၆၆ (၀) ၈၁၅၄၄ ၆၉၆၆)

သုတေသနလုပ်ငန်းစဉ်အတွင်း မတရားဆက်ဆံခံရလျှင် (သို့မဟုတ်) အခွင့်အရေး
ချိုးဖျောက် ခံရလျှင် (သုတေသနလုပ်ငန်းစဉ်နှင့်ပတ်သတ်ပြီး) အောက်ပါ ကျောင်းလိပ်စာသို့
တိုင်ကြားနိုင်ပါသည်။

London School of Hygiene and Tropical Medicine Ethics Committees

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ရိုသေလေးစားစွာဖြင့်

Rapeepong Suphanchaimat

ရက်စီပေါင် ဗူဖန်ချိုင်မတ်

(ပါရဂူဘွဲ့ သုတေသနပြုလုပ်သူ)

"သုတေသန လုပ်ငန်းတွင် ပါဝင်ရန် နားလည်သဘောပေါက်၍ မိမိသဘော စိတ်ဆန္ဒအရ သဘောတူ လက်မှတ်ရေးထိုးခြင်း"

- (၁) "သုတေသန လုပ်ငန်းတွင် ပါဝင်ဖြေကြားမည့်သူကို အချက်အလက် တင်ပြရှင်းလင်းခြင်း" စာရွက်နှင့် ဤစာရွက်ပါ အချက်အလက်များကို ဖတ်ရှု နားလည်သဘောပေါက်ပါသည်။
- (၂) သင်သည် သုတေသန လုပ်ငန်းနှင့်ပတ်သက်ပြီး မရှင်းလင်းသော မသိသော အချက်အလက်များကို သုတေသနပြုလုပ်သူ၊ (သို့မဟုတ်) သုတေသနပြုလုပ်သူ လက်ထောက်မှ စိတ်ကျေနပ်ဖွယ် ရှင်းလင်းပြီးဖြစ်ပါသည်။
- (၃) သုတေသနနှင့် ပတ်သက်ပြီး ရရှိနိုင်သော ဆုံးရှုံးမှုများ အန္တရာယ် ရှိမရှိ သေချာမေးမြန်း သိရှိပါသည်။
- (၄) မည်သည့် ခြိမ်းခြောက်မှု၊ အကျပ်ကိုင်မှု၊ မရှိဘဲ ကျွန်တော် (သို့မဟုတ်) ကျွန်မ ၏ ကိုယ်ပိုင် စိတ်သဘောတူညီမှုဖြင့် သုတေသနလုပ်ငန်းစဉ်တွင် ပါဝင် ဖြေဆိုပါသည်။

ဤသုတေသန လုပ်ငန်း နှင့်ပတ်သက်ပြီး အထက်ပါ အကြောင်းအရာအချက်အလက်များ သိရှိကြောင်း သဘောတူလက်မှတ်ရေးထိုးပါသည်။

.....
ပါဝင်ဖြေကြားသူ၏လက်မှတ်
အမည် -

.....
သုတေသနပြုလုပ်သူ၏လက်မှတ်
အမည်-

.....
အသိသက်သေလက်မှတ်
အမည်-

ရက်စွဲ - / / -

Appendix 9: Original and translated interview quotes

Interview with policy makers (Chapter 5)

1. *"The bottom line of migrant health problems in Thailand is many people, particularly Thai NGOs are overly afraid of using the term, 'aliens', and try to replace it with more beautiful words like, 'foreigners' or 'migrants'. This made us forget the non-nationals who cannot identify their country of origin. It is like hiding a problem; using a hand to cover the sun. Can we hide it?" [PM06]*

"ปัญหาของคนต่างด้าวในไทยคือ หลายคนโดยเฉพาะเอ็นจีโอไม่กล้าใช้คำว่าต่างด้าว เลยไปใช้คำว่าข้ามชาติบ้างหรือไมแกร์นบ้าง มันเลยทำให้เราลืมคนที่ไร้สัญชาติไป เหมือนกับเราพยายามปิดบังปัญหา ถามหน่อยว่าเอามือมาบังพระอาทิตย์มันจะบังได้ไหมล่ะ" [PM06]

2. *"When you talk about migrant policy in Thailand, that's wrong. Because, there has never been a migrant policy in this country...Policy makers in this country never saw farther than the end of their noses, and never thought of addressing structural problems." [PM02]*

"คุณถามผมว่าไมแกร์นโพลิซีในไทยเป็นยังไง นั่นคิดแล้ว เพราะประเทศนี้มันไม่เคยมีไมแกร์นโพลิซี ...นักการเมืองในประเทศนี้ไม่เคยมองอะไรเกินกว่าปลายจมูกของตนเอง ไม่เคยคิดแก้ปัญหาเชิงโครงสร้าง" [PM02]

3. *"I was involved in the drafting of the 2005 Strategy. At that time, the spearhead of the Strategy was Mr XXX, who then held a high position in the Ministry of Education in few months after the 2005 Strategy was introduced." [PM06]*

"ที่เข้าร่วมในการร่างยุทธศาสตร์ปี 48 ตอนนั้นคุณ XXX เป็นหัวหน้า แล้วต่อมาก็ไปมีตำแหน่งในกระทรวงฯ" [PM06]

4. *"The 2012 Strategy belongs to the right-wing hawk. Unlike the 2005 Strategy, which ensures human rights of a person, the 2012 Strategy rarely touches this (humanitarian) issue. In the XXX international meeting, the Strategy was shamefully criticised."* [PM06]

"ยุทธศาสตร์ปี 55 มันเป็นของพวกเขาสายเหยี่ยว ไม่เหมือนยุทธศาสตร์ปี 48 ซึ่งมีการรับรองเรื่องสิทธิมนุษยชน ยุทธศาสตร์ปี 55 ไม่แตะเรื่องนี้เลย ในการประชุม XXX นานาชาติ ยุทธศาสตร์นี้ถูกวิจารณ์จนขายหน้ามาก" [PM06]

5. *"I just knew that there was a quota (for migrant recruitment), but I had no idea how it (the MOL) allocated this quota. If I request 5 housemaids, I am not sure whether it (the MOL) will check this request."* [PM02]

"ผมเพิ่งรู้ว่ามันมีโควต้าแล้วจัดโควต้าให้ผมยังไงไม่รู้ ถ้าผมบอกว่าต้องการคนใช้ 5 คน เขาจะดู ยังไงผมไม่รู้" [PM02]

6. *"There was an idea that once a work permit was obtained, and to avoid duplicate payment of premiums, the SSO should register this person (regardless of the completeness of the NV). But in practice, during the first two weeks, it (the DOE) needs to check information on that migrant, including his/her criminal background and so on. So that migrant is not fully eligible for the SSS. Accordingly, that migrant cannot be insured by the SSS during that time. This is a constraint in practice."* [PM05]

"ก็มีแนวคิดว่าคุณได้เวิร์คเพอร์มิตถูกต้องและป้องกันการจ่ายซ้ำซ้อน เพราะฉะนั้น ประกันสังคมควรรีจิสเตอร์เขาเลย (โดยไม่ต้องรอพิสูจน์สัญชาติแล้วเสร็จ) แต่ในทางปฏิบัติ การอนุญาตทำงาน

ในช่วงสองอาทิตย์แรกอย่างไรเขา (กรมการจัดหางาน) ก็ต้องไปตรวจสอบข้อมูล ทั้งประวัติ อาชญากรรมนูนี่ จึงไม่ได้อนุญาตอย่างเต็มที่ ก็เลยกลายเป็นว่า อย่างนี้ก็ยังลงทะเบียนคุณเข้าสู่ระบบ ประกันสังคมไม่ได้ ในช่วงนั้นเลยเป็นปัญหาในทางปฏิบัติ" [PM05]

7. *"Even within the MOL, both parties (the SSO and the DOE) rarely talk to each other. Those responsible in insuring migrants work in the SSO. Those finding jobs for migrants work in the DOE. Those responsible for issuing work permit just do their job. They do not care if migrants will be insured for their health. It is not my business! Because it is not written in the law (that migrants with work permit must be insured)."* [PM03]

"กระทรวงแรงงานสองฝ่ายก็ไม่ค่อยคุยกัน คนทำประกันก็อยู่ประกันสังคม คนจัดหางานก็อยู่กรมการจัดหางาน คนออกเวิร์คเพอร์มิตมีหน้าที่ออกเวิร์คเพอร์มิต คุณจะประกันไม่ประกันไม่ใช่เรื่องของฉัน กฎหมายไม่ได้เขียนไว้นี่นา" [PM03]

8. *"(Interviewer: What factors that you consider a bottleneck for operating the migrant insurance at this moment?) We must make the insurance system supported by a legal instrument. Without legal grounds supporting the system, it is not possible to set up an authority to work on this issue in the long run."* [PM04]

"(ผู้สัมภาษณ์: อะไรเป็นปัญหาคอขวดของการทำงานในเรื่องประกันคนต่างด้าวในปัจจุบันครับ) ... ต้องให้ฐานะทางกฎหมายกับตัวระบบมัน การที่ไม่มีกฎหมายกับระบบประกันของต่างด้าว ทำให้ไม่มีการตามมาด้วยการตั้งองค์กรเพื่อทำงานในระยะยาว" [PM04]

9. *"There are only 10 staff members in the office. Two of them have just resigned. Seriously, I wish to resign too...The big-picture policy (on migrants) is always shaky. This consumes much of our time since we need to change our works according to a new*

policy. If the new policy was developed based on what we have done, this would lead to a progress. But nowadays it is always volatile. " [ADM_CO1]

"เรามีเจ้าหน้าที่สิบคน สองคนก็เพิ่งลาออกจริงๆ พี่ก็กำลังจะลาออกด้วย นโยบายภาพใหญ่เปลี่ยนตลอด มันทำให้เราเสียเวลาไปกับส่วนที่ต้องมาคิดตามนโยบายใหม่ตลอด ถ้านโยบายมาจากพื้นฐานเดิมแล้วไปข้างหน้า มันจะเป็นการต่อ ยอดแต่ มันพลิกไปมาตลอดทุกวันนี้" [ADM_CO1]

10. "They (the BHA) launched health examination regulations and other miscellaneous measures. But when local providers faced problems with the insurance, the BHA didn't solve the problems of local providers. So they (local providers) always speak to us (the HIG) instead." [ADM_CO1]

"เขา (สำนักบริหารการสาธารณสุข) ทำหน้าที่เรื่องการตรวจสุขภาพออกประกาศและมาตรการต่างๆ แต่เวลาเกิดปัญหาเรื่องการประกันแล้วเขาไม่ได้ตอบหน่วยบริการ เรื่องมันก็เลยมาอยู่ที่เรา" [ADM_CO1]

11. "We intended to have reverse financing design to the UCS. Since each province has its own specific context. So the money should be pooled only where needed but distributed as much as possible." [PM01]

"เราตั้งใจให้มันรีเวิร์สจากยูซี เพราะแต่ละจังหวัดมีบริบทไม่เหมือนกัน เราจึงพยายามพูลเงินเท่าที่จำเป็นแต่กระจายให้มากที่สุด"[PM01]

12. "Some hospitals are bluffing by not sending (high-cost) money to us (the MOPH). They may think that they have already sold a large number of cards so they don't want to pool the high cost with us." [ADM_CO1]

"โรงพยาบาลที่ล็กโกไม่ส่งก็มียังมี คือเขาคาดว่าขายได้เยอะแล้ว โดยไม่ต้องส่งเงินค่าใช้จ่ายสูงให้กระทรวง" [ADM_CO1]

13. "I am the one that is not convinced that we should force migrants to have health screening. Even though, it sounds good... But I am an epidemiologist. I know that a yearly health check does not benefit you that much. But if you take all of them to the insurance, this is the best disease surveillance system. It is a win-win situation. Now it is like you need to know whether a migrant is having diseases and you ask him/her to pay you to get this answer. But if you insure all of them, it means that I promise to protect your health all year long. That migrant will benefit from the treatment and you will be able to know his/her health status." [PM03]

"ผมเป็นคนหนึ่งที่ไม่ค่อยเห็นด้วยว่าควรมีการตรวจโรคนะ...แม้ว่าการตรวจโรคนั้นจะฟังดูดี แต่ผมเป็นนักระบาด ผมรู้ว่าการตรวจโรคปีละครั้งมันไม่ได้ช่วยอะไรมาก แต่ถ้าคุณเอาเขาอยู่ในระบบ ถ้าเขาเจ็บป่วยเขาจะมามาก คุณนี่คือการเฝ้าระวังโรคที่ดีที่สุด วินวิน ตอนนี้อยู่คุณแค่อยากรู้ว่าเขาเป็นโรคอะไร คุณให้เขามาเสียตังค์แล้วคุณได้คำตอบ แต่ถ้าให้เขาประกันกับเรานั้นเป็นการสัญญาว่าเราจะรักษาเขาตลอดทั้งปี เขาก็ได้ประโยชน์คุณก็ได้ประโยชน์ที่รู้ว่าเขาเป็นโรคอะไร" [PM03]

14. "Children and women are potential victims of human trafficking. I am also a member of the White Ribbon (a campaign against violence on women and children) [The interviewee showed the White Ribbon badge to the researcher while interviewing]...That is why we made the 15-January-2013 insurance policy to enable us to insure all migrants in Thailand....and the '365-Baht' card is the country's CSR. ...And if we take care of them well, once they return home, they will definitely wish to come back to us." [PM01]

"ผู้หญิงและเด็กเป็นเหยื่อของการค้ามนุษย์ ผมเป็นสมาชิกกลุ่มริบบิ้นขาว (โครงการรณรงค์ต่อต้านความรุนแรงต่อผู้หญิงและเด็ก) [ผู้ถูกสัมภาษณ์โชว์เข็มกลัดริบบิ้นขาวต่อนักวิจัย]... เราจึงทำนโยบาย

ประกันสุขภาพ 15 มกราคม 2556 เพื่อให้เราสามารถประกันคนต่างด้าวทุกคนได้ และบัตร365 บาท
ยังเป็นซีเอสอาแบบหนึ่ง นั่นคือถ้าเราดูแลเขาดีเมื่อเขากลับบ้านเขาก็อยากกลับมาหาเราอีก" [PM01]

15. "This (the 365-Baht card) shows how the government has brain but no wisdom. How can they say that this is a charitable gift?...If the problem is so huge, it should not be CSR...Concerning structural problems, if the problem is so big, it means we must do something (systematically). We should know how 'strict' we are going to be in dealing with these illegal migrant children." [PM02]

"เรื่องนี้ (บัตร365 บาท) โข้วว่ารัฐบาลมีสมองแต่ไม่มีกึ้น มีอะไรมาก็บอกว่าเป็นการกุศล ถ้า
หากว่าปัญหามากก็ไม่ควรเป็นซีเอสอา คือถ้าเชิงระบบแล้วปัญหามันมากนี้ แปลว่าเราก็จะต้อง
ดำเนินการอะไรบางอย่างแล้ว เราจะเข็มแคไหนกับเด็กๆ" [PM02]

16. "The problem of this policy (the Cabinet Resolution on 15 January 2013) is 'who is the target population?'. When policy makers talk to the public, they said 'everybody'. Then, it created problem. Can a foreign husband of a Thai wife in Udonthani (one of the provinces in the Northeast) come to buy the card?...Healthy foreigners will not buy the card for sure. Those who bought the card are sick foreigners, who used to pay the hospital over 60,000-70,000 Baht a year. Now they just pay 2,200 Baht. Of course, they will be happy. So, we launched a letter telling the hospitals to stop selling the card (to western foreigners)." [PM03]

"ปัญหานโยบายตอนนั้นคือว่า ใครเป็นกลุ่มเป้าหมายบ้าง เวลาผู้ใหญ่ไปพูดก็บอก'ทุกคน' คราวนี้มันก็
ยุ่งนะสิ ชาวฝรั่งที่อยู่อุดรธานีซื้อได้ไหม ที่แข็งแรงก็ไม่ซื้อ ก็มีแต่ชาวฝรั่งที่เคยมาอายุที่โรงพยาบาลปี
ละหกเจ็ดหมื่นมาซื้อ คราวนี้ซื้อแค่สองพันสอง แสบปี๋จะตาย ตอนหลังเลยต้องออกหนังสือห้าม"
[PM03]

17. "[Laughing] Oh!, they use the term, 'farang' (referring to Caucasian foreigners). The MOPH must answer whether these foreigners are aliens in legal terms." [PM06]

"[หัวเราะ] โอ้! เขาใช้คำว่าฝรั่งเลยหรอจ้ะ กระทรวงสาธารณสุขก็ต้องตอบคำถามว่า ฝรั่งคือคนต่าง
ตัวในเชิงกฎหมายไหม" [PM06]

18. "I am more than happy to see more than 100,000 Cambodian migrants fleeing out of the country. It makes the government realise that they (migrants) are not voiceless [Bang the table!]. I wish Thai people would petition the government too." [PM02]

"ผมแฮปปี้มากตอนที่คนงานเขมรเดินออกนอกประเทศทั้งหมดกว่าแสนคน มันทำให้รัฐบาลเริ่มคิดว่า
พวกนี้เขาก็มี訴ข้อมีเสียง [ทุบโต๊ะ!] ผมอยากให้คนไทยทั่วไปไว้วางด้วย" [PM02]

19. "Initially, this (the OSS) was a measure to pull Cambodian migrant workers back to Thailand. And finally, there was a policy to cover all irregular migrants. But our data are of bad quality. I asked in the meeting how many Cambodian migrants who were in this exodus came back to us? Nobody can answer this. At that time, many constructions in Thailand, let's say roads, express ways, and so on, were badly affected." [PM03]

"ตอนแรกก็ทำโครงการนี้ขึ้นมาเพื่อดึงพวกเขมรกลับบ้าน และสุดท้ายก็มีนโยบายที่เปิดให้คนเดือนมา
ทั้งหมด แต่ข้อมูลของเราแย่มาก ผมถามในที่ประชุมว่า ช่วยตอบผมที่ว่าเขมรที่ไหลกลับไป กลับมากี่
คน ไม่มีใครตอบได้ ตอนนั้นพวกก่อสร้างถนนทางด่วนอะไรต่อมิอะไรกระทบเลยนะ" [PM03]

20. "Speaking in lay language, once an illegal migrant passes the OSS door, he will become a legal migrant...The government used to say that they would be able to clear all illegal migrants within two months, which I told them that was impossible...See, then they extended...The MOL also negotiated with us to reduce the insurance price to reduce barriers. Then the negotiation began and the price was set to 1,600 Baht...But there exist problems, you can recall Burmese guys that were accused of killing a British

girl [During the interview period, there was news reporting that two British backpackers were murdered in Thailand by Burmese migrant], they still have not yet joined the OSS...Like dependants issue, to what extent we will cover? Only one wife? Parents of migrants? What is the cut-off age of dependants? These questions need lots of further negotiations. And I believe that even you ask the government, they cannot answer..." [PM03]

"พูดง่ายๆว่านายจ้างเอาลูกจ้างผิดกฎหมายมาเข้าไอเอสเอสออกมาถูกกฎหมายเลย ตอนแรกรัฐบาล บอกว่าจะจัดการให้เสร็จในสองเดือนซึ่งผมบอกเขาว่ามันเป็นไปได้ เห็นไหม สุดท้ายก็ขยายเวลา ทางแรงงานมาเจรจาบอกขอลดราคาบัตรเพื่อจูงใจ ...แต่ก็ยังมีปัญหา คุณคงจำได้ พม่าที่ถูกกล่าวหาว่า ฆ่าหม่อมฉันก็ยังเถื่อนนะ ยังไม่ได้ไปทำบัตรเลย ...หรือเรื่องผู้ติดตามนี้จะรวมใครบ้าง เมียหนึ่งคน ไหม พ่อแม่ไหม คำถามเหล่านี้มันต้องอาศัยการเจรจา และผมก็เชื่อว่าถ้าคุณถามรัฐบาล เขาก็ตอบ ไม่ได้หรอก" [PM03]

Interview with local officers, NGOs, employers and migrants (Chapter 6)

1. *"I think the health card gives right to a migrant patient equal to or even more than a Thai patient, especially in case of pregnancy. Thais can enjoy two pregnancies at most but the Burmese are allowed to have free deliveries with unlimited number...pregnant again and again...Now, in Ranong, there are more Burmese residents than Thais. In my opinion, we will face problems in the future, particularly problems with these Burmese children, who will be brought up in Thailand."* [RN_HC2]

"ที่ว่าตอนนี้บัตรสุขภาพบริการเท่าเทียมกับคนไทยหรือมากกว่าคนไทยด้วยซ้ำ โดยเฉพาะเรื่องคนท้อง คนไทยใช้ได้แค่สองท้องพม่าใช้ได้ทุกท้อง ท้องๆๆ... ตอนนี้พมามารระนองมากกว่าคนไทย ในความคิดพืนะ เราจะมีปัญหาในอนาคต โดยเฉพาะเรื่องเด็กในอนาคตที่จะโตมาในไทย" [RN_HC2]

2. *"Last year (2013), we got profit from the card...But we need to use this money to cover the uninsured as well. See!, We are generous. Last year (2013), we shouldered the unpaid debt by 2.5 million Baht, so, 11.9 million Baht left. But this is the money that we will use to care for all migrants throughout the whole coming year. Certainly, this (money) won't be adequate."* [RN_RNH1]

"ปีที่ (2556) แล้วเราได้กำไรจากบัตร...แต่เราต้องเอาไปคัพเวอร์คนไข้กลุ่มที่ไม่ได้ทำบัตรด้วย นี่ไงเรา มีมีความเมตตากรุณา ปีที่แล้ว (2556) เราอนุเคราะห์ไป 2 ล้าน 5 แสนบาท เหลือ 11.9 ล้าน แต่นี่คือเงิน ที่เราต้องไปดูแลเขาในรอบหนึ่งปีซึ่งไม่พออยู่แล้ว" [RN_RNH1]

3. *"There are people who are hired to act as an employer and even attorney. There was a woman with stage-3 breast cancer came to the hospital to buy the card. She was over 80. The employer said that she was his household maid. The attorney emphasised that if we didn't sell the card, he would sue us. The attorney might receive 5,000 Baht and the employer might receive 3,000 Baht from that migrant. Certainly, she cannot work at such an advanced age."* [RN_RNH1]

"มีคนที่ได้รับเป็นนายจ้างและรับเป็นทนายด้วยคนไข้เป็นมะเร็งเต้านมระยะที่สาม อายุก็แปดสิบกว่า แล้วบอกทำงานล้างถ้วยชามในบ้าน ทนายบอกไม่รับผมฟ้องเลยนะ ทนายอาจจะได้สักห้าพัน นายจ้างอาจจะได้รับสักสามพัน ก็ทำงานไม่ไหวอยู่แล้วอายุตั้งแปดสิบกว่า" [RN_RNH1]

4. *"I think now there are more Burmese children than Thai children for the EPI (Extended programme on immunisation)...The PPHO gives us some money per head for the service (EPI) provided. But we need to submit this info (to the PPHO) on a monthly basis."* [RN_HC2]

"พี่ว่าคนพม่ามารวมอีพีไอเยอะกว่าคนไทยอีก ...อย่างอีพีไอ สสจ.เค้าก็ให้เราเป็นรายหัว แต่ว่าเราต้องส่งข้อมูลทุกเดือน" [RN_HC2]

5. *"If a patient from hospital X comes to us, he will not need to pay for the service. We will send the bill to the PPHO to be reimbursed for 700 Baht per case. But there is now a debate. Because sometimes the medicine cost is about 3,000 Baht but we earn only 700 Baht. If the PPHO insists on applying this system, next time we will prescribe medicine at the cost of not more than 700 Baht."* [RN_RNH1]

"เช่นคนไข้โรงพยาบาล X มาที่เรา ก็ไม่ต้องจ่ายเงิน เรายังมีบิลไปเรียกเก็บที่สสจ. 700 บาท แต่กำลังเป็นประเด็นเพราะบางทีมาอายุ 3,000 บาท เราเก็บได้แค่ 700 บาท ถ้าทางสสจ.ยังยืนยัน 700 บาท เราจะจ่ายยาในราคาไม่เกิน 700 บาท" [RN_RNH1]

6. *"We employ 34 MHWs. Before 2012, all money (used for hiring the MHWs) was from NGOs. In 2012 the NGOs quit. So we needed to shoulder this cost. Frankly, we don't have enough money. But we still had some savings in our purse, about 10 million Baht. I may be able to extend this project (hiring MHWs) just for the next 2-3 years."* [RN_PHO2]

"เราจ้างพสต.อยู่ 34 คน ก่อนหน้านี้เอ็นจีโอจ่ายหมด เมื่อปี 55 พอสิ้น 57 เค้าออกกะ เราต้องจ่ายเอง เราไม่มีเงินหรอก แต่ของเก่าเรามีเงินสะสมอยู่ลืบกว่าล้าน ผมคงช่วยได้ระยะหนึ่งนะคงประมาณ 2-3 ปี"

[RN_PHO2]

7. "We (as an NGO) mobilised money from many sources, such as the Australian Embassy, AusAID, and recently from Global Fund; but now Global Fund is about to fade away....So we try to reduce our work size, from 9 provinces to 4 provinces."

[RN_NGO1]

"เราก็ขอทุนจากหลายแหล่ง เช่น สถานทูตออสเตรเลีย ออสเตรเลีย และหลังๆมาก็จากโกลบอลฟันด์ แต่ตอนนี้โกลบอลฟันด์ก็ค่อยๆเฟดออก เราก็ลดขนาดพื้นที่ลงจากทำงาน 9 จังหวัด ก็เหลือ 4 จังหวัด" [RN_NGO1]

8. "The PPHO may not support the hiring of MHWs for this year. They (the PPHO) said they have no money. Our MHW earns only 5,000 Baht for her salary. That is low, compared to if they work in a factory." [RN_HC2]

"สสจ.อาจไม่ให้ (จ้างพสต.)ด้วยซ้ำในปี นี้ เค้าบอกว่าไม่มีเงิน น้องเค้าก็ได้เงินแค่ห้าพันบาทเอง น้อยนะถ้าเทียบกับเค้าทำงานโรงงาน" [RN_HC2]

9. "We tried to tell the hospital to sell the card to as many people as possible. Some hospitals said they wouldn't sell the card to children because of a fear of running deficit. They said they wouldn't sell the card to sick people. I told them we should not think like that. We must sell the card to them and ask them to persuade other migrants to buy the card. Finally, the province earned more than 70 million Baht (from selling the card). I even promoted this by making a huge cutout written in both Thai and Burmese. I even travelled to Kawthaung district to seek more clients. The reason for doing this was because the hospitals were very inert." [RN_PHO2]

"เราพยายามบอกโรงพยาบาลให้ขายให้เต็มที่ แก้วบอกเค้าไม่ขายเด็ก เพราะว่าขาดทุน ไม่ขายคนป่วย เราบอกว่าไม่ได้ เราต้องขาย และให้คนป่วยไปกระตุ้นให้คนอื่นมาซื้อ แล้วทั้งจังหวัดก็ได้มาเจ็ดสิบกว่าล้านบาท ผมก็ไปโปรโมทโดยการทำป้ายให้ใหญ่ เขียนภาษาไทยและภาษาพม่า ผมข้ามไปที่เกาะสองเพื่อตั้งลูกค้าฝั่งนู้น เหตุผลคือโรงพยาบาลอยู่หนึ่งๆไป" [RN_PHO2]

10. "There was a time when the PPHO went to Kawthaung district to campaign for the card but the hospital did not agree with such campaign. It happened before the advent of the One Stop Service. The bottom line is if we can make mass sales, this will be financially worthy. But it is not like that because we found the majority of the buyers are sick or pregnant migrants. We used to face a case with thyroid disease and renal disease. We asked his history and he could not answer naturally. Finally, he confessed that he was from Kawthaung district." [RN_RNH3]

"เคยมีช่วงที่นโยบายของสสจ.บอกไปรณรงค์ขายบัตรที่เกาะสองแต่โรงพยาบาลไม่ได้รับรู้ด้วย ตอนนั้นก่อนช่วงวันสต็อปเซอร์วิส คือถ้าเป็นกรุปใหญ่มันก็คุ้ม แต่มันไม่ใช่ ส่วนใหญ่คือคนป่วยและคนท้อง คราวก่อนก็มีเคสเป็นไทรอยด์และโรคไต ก็ลองถาม แก้วก็อึ้ง ก็หลุดออกมาว่ามาจากเกาะสอง"

[RN_RNH3]

11. "I used to speak in the meeting (between the VHVs and the inspectors from health centres) as well but they (the inspectors) had never visited the community. I told them that we need the officials to come and check whether many small-sized grocery stores here sell medicine because I found that those drug sellers have never attended the training." [RN_HP1]

"พี่เคยไปพูดในที่ประชุม (ระหว่างอสม.กับเจ้าหน้าที่โรงพยาบาลส่งเสริมสุขภาพตำบล) แต่เขายังไม่เคยลงมาตรวจสอบในชุมชน เราจำเป็นให้เจ้าหน้าที่ลงสำรวจหน่อย ว่าร้านค้าเล็กๆเหล่านี้ว่าเขาเอามาจำหน่ายรีเปลา เพราะการอบรมเขาก็ไม่มี" [RN_HP1]

12. "I used to meet a chubby woman with heart failure. She said she was working as a maid. It seemed that she was still able to work (therefore this case was able to buy the card). From my experience, most of the buyers passed the health check. There were only 2-3% not passing the health check. Let's say if we face a cancer patient, we will not let them pass the health check since cancer requires high-cost care" [RN_RNH3]

"ดิฉันเคยเจอคนอ้วนเป็นโรคหัวใจ เค้ายกกว่าทำงานแม่บ้าน ก็ดูว่าเค้ายังพอทำงานได้ (ดังนั้นจึงให้ซื้อบัตรได้) ที่ตรวจมาส่วนใหญ่ผ่านการตรวจสุขภาพ มีสองถึงสามเปอร์เซ็นต์ที่ไม่ผ่านการตรวจสุขภาพ อย่างถ้าเป็นมะเร็งเราก็ไม่ให้ผ่าน อย่างมะเร็งมันค่อนข้างค่าใช้จ่ายสูงเราเลยไม่ให้ผ่าน" [RN_RNH3]

13. "All of these measures (such as forbidding unhealthy migrants from being insured) were initiated by us. These measures put us at risk of being sued. To insure a patient, the MOPH should give us the right to say yes or no...May I ask you something? When you buy a health insurance from a private company, does it accept every case? If you take a guy, who is going to die soon, to the company, will it accept?" [RN_RNH1]

"นโยบายเหล่านี้เราทำกันเองนะ มีสิทธิถูกฟ้องได้ทั้งนั้น ในการทำประกันสุขภาพ กระทรวงควรให้อำนาจพื้นที่ตัดสินใจ ว่าเคสนี้รับเคสนี้ไม่รับ ...ผมถามว่าเวลาคุณทำประกันเอกชน เค้ายับทุกรายไหม เอาคนที่กำลังจะตายประกันจะเอาไหม" [RN_RNH1]

14. "Some hospitals said they won't sell card to pregnant and sick migrants. So who is smarter than whom? Do you think migrants are not smart? They all know. If you are fair enough, you should sell the card to pregnant (and sick) cases. Of course, it might

run a deficit. But these migrants will persuade more people to buy the card, this will make us earn more in the end." [RN_PHO2]

"บางโรงพยาบาลบอกใครต้องไม่ขายคน ป่วยไม่ขายเลย ถามว่าตกลงใครโง่ใครฉลาด แรงงานเขาไม่ฉลาดหรี เขาก็รู้ถ้า เราแพ้เราต้องขายคนต้อง (และคนป่วย) ซึ่งมันขาดทุนอยู่แล้ว แต่เขาจะไปหาคนอื่นมาซื้อกับเรา ซึ่งเราก็ได้มากขึ้นจริงๆ" [RN_PHO2]

15. "We have used such text for several years. It means that only patients with such diseases (active TB, filariasis, and elephantitis, etc) can't buy the card. It is the problem of that hospital. If this case is voiced to us, we will be on patient side." [ADM_CO1]

"เราก็ใช้ข้อความนี้มาหลายปี มันหมายถึงว่าคนไข้ที่มีโรคอันนี้ (วัณโรคระยะแพร่เชื้อ, ฟิลาเรียสิส, และเท้าช้าง เป็นต้น) ไม่ให้ซื้อบัตร มันเป็นปัญหาของโรงพยาบาล ถ้าเคสนี้ร้องมาที่เราเราก็อยู่ข้างคนไข้อยู่แล้ว" [ADM_CO1]

16. "To enjoy the right, the system should not allow an immediate effect. There should be a one-month lag time like private insurance company. We used to see a patient. He did not buy the card, then he got an accident, and had fracture of femur. He was admitted in the orthopaedic unit. He didn't have money. Then, our staff advised him to be discharged from the hospital first. Then, he bought the card. And he could buy it since at that time our staff were confused about the policy. One day later, he was admitted again (to enjoy the treatment free of charge)." [RN_RNH1]

"การใช้สิทธิไม่ควรใช้สิทธิได้ทันที จะต้องรอรยะเวลาหนึ่งเดือนเหมือนประกันชีวิตเอกชน ...เราเคยเจอคนไข้แบบนี้ มีคนไข้คนหนึ่งไม่ได้ซื้อบัตรสุขภาพแล้วก็ถูกรถชนขาหักเข้ามาในตึกออร์โธปิดิกส์ ไม่มีเงินเค้าใช้สิทธิไม่ได้แล้วอาจจะมีเจ้าหน้าที่เราแนะนำให้ศิษาร์จออกไปก่อนแล้วก็ไปซื้อบัตร

สุขภาพ แล้วก็ซื้อได้ด้วย เพราะตอนนั้นเจ้าหน้าที่เราก็มีเงินอยู่ แล้วอีกวันหนึ่งก็มานอนโรงพยาบาล (เพื่อใช้สิทธิรักษาพยาบาลฟรี)" [RN_RNH1]

17. *"(Interviewer: So what will you do when facing unhealthy migrants who really wish to buy the card?)...I will tell them to buy it at another hospital. Since then they can use service anywhere in the province." [RN_RNH2]*

"(ผู้สัมภาษณ์: พี่ทำอะไรรับถ้าเจอคนป่วยมายืนยันว่าจะขอซื้อบัตรจริงๆ) ...พี่ก็จะบอกให้ไปซื้อโรงพยาบาลอื่น จากนั้นเค้าก็สามารถใช้บริการที่ไหนก็ได้ในจังหวัดอยู่แล้ว"[RN_RNH2]

18. *"During the One Stop Service, the MOPH said the target population was migrant workers. So we perceive that a buyer must have work permit (in order to be eligible to buy the 1,600-Baht card). And what about those without work permit? Yes, they are still eligible. But the card price is 2,200 Baht and he/she must be a displaced Thai." [RN_RNH2]*

"ช่วงวันสต่อปเซอร์วิส กระทรวงบอกต้องเป็นกลุ่มแรงงาน เราก็เลยมาคิดกันว่าแปลว่าต้องมีใบอนุญาตทำงาน (จึงจะซื้อบัตร 1,600 บาทได้) ถ้าไม่มีใบอนุญาตทำงานได้ใหม่ ก็ได้ แต่ขายในราคา 2,200 บาท แต่นั่นสำหรับไทยพลัดถิ่น" [RN_RNH2]

19. *"The term, 'dependant', for the MOPH is different from the MOI. Now we are selling the card to only those below 7. For those between 8 and 15, we have not opened (the card selling policy) yet. Because the term, 'dependent', for the MOI uses the cut-off at 15. (Interviewer: So far, is there any consensus for this difference?) No!, we have stopped selling the card (for children aged 8-15) at this moment" [RN_RNH3]*

"นิยามเป็นคนละแบบกับของมหาคไทยค่ะ ตอนนี้อายุเฉพาะต่ำกว่า 7 ปี แต่ช่วง 8-15 ปีเรายังไม่เปิดขายบัตร เพราะคำว่าผู้ติดตามในส่วนของมหาคไทยบอกว่าต่ำกว่า 15 ปี (ผู้สัมภาษณ์: เลยยังไม่รู้ว่าจะตกลงอย่างไรหรือครับ) ใช่ค่ะ เลยยังไม่ขายไปก่อน" [RN_RNH3]

20. *"(Interviewer: If I were Burmese, and I somehow did not join the One Stop Service, what would you do to me?) We dare not sell the card. Suppose we sell, there might be a question whether we are against the national policy. (Interviewer: Have you ever raised this issue to the MOPH?) I did. Dr XXX (policy maker in the MOPH) told me that 'Yes!, you may sell them the card but do this covertly.' I then replied that 'Sir!, if you said so, no local facility will dare sell the card.' Because nobody will protect our action if that migrant is caught and charged by the police."* [RN_PHO1]

"(ผู้สัมภาษณ์: ถ้าผมเป็นพม่าและผมไม่สามารถเข้าร่วมวันสต็อปเซอร์วิสพี่จะทำอย่างไรครับ) เราไม่กล้าขาย ถ้าขายบ้าง ถ้ามว่าเราคิดกับนโยบายของประเทศใหม่ (ผู้สัมภาษณ์: เคยถามไปในที่ประชุมกับกระทรวงใหม่) ผมเคยถามแล้วท่าน XXX ก็บอกว่า เนี่ยล้กลอบขายได้ ผมเลยบอกว่า ท่านครับ ถ้าแบบนี้หน่วยบริการก็ไม่กล้าขายแล้วละ ไม่มีใครมาเป็นประกันให้เราเลยเกิดพม่าคนนี้ถูกจับถูกฟ้อง"

[RN_PHO1]

21. *"There were some legal and administrative constraints re the reimbursement of extra stipend for staff or the problem about human shortage. Because when you summoned lots of staff in a short time to work in a special venue, you needed to ask for help from many authorities. The government might say that it is your duty. But it is difficult for us (the MOI), as the host (of the venue) to ask for support from others. Because if we cannot give them an extra stipend, they might ask why they have to participate in this event (the OSS). I wish to stay at my workplace so that I can save my travel cost."* [RN_MOI1]

"มันมีระเบียบกฎหมายบางเรื่องที่ยู่ในการบริหารจัดการ เช่น เรื่องค่าตอบแทน เบี้ยเลี้ยง หรือเรื่องคน เพราะว่าเวลาเอาคนมารวมกันในเวลาที่จำกัดต้องระดมคนจากหน่วยงานต่างๆ รัฐก็ออกจะบอกว่าก็ คุณต้องทำงานอยู่แล้ว แต่เราเป็นเจ้าภาพมันพูดยาก (เพราะถ้าไม่มีเบี้ยเลี้ยงให้) เขาก็บอกว่า งั้นทำไม ฉันต้องมาฉันก็อยากอยู่ที่เดิม "ไม่ต้องเสียค่าน้ำมันมา" [RN_MOI1]

22. "(Interviewer: Could you please tell me about the coordination between you and non-MOPH authorities?) Frankly, we are voiceless. The two parties (the MOI and the MOL) will inform us after they had already talked to, and agreed with each other." [RN_RNH2]

"(ผู้สัมภาษณ์: การประสานงานกับหน่วยงานนอกกระทรวงสาธารณสุขเป็นอย่างไรบ้างครับ) ออกแนวเฉยๆไม่ได้ค่ะ พูดตรงๆ เข่าประสานกันสองฝ่ายเรียบร้อยค่อยบอกโรงพยาบาล" [RN_RNH2]

23. "To be honest with you, I think we at times have difficulties when working with the MOPH. I may not understand the culture and the way of thought of the health sector. For example, the MOPH always told us to force everybody to buy the insurance. But if they could not afford the price, can we force them (to buy the card)? To my knowledge, it is just a ministerial announcement. The MOPH told us to speak in the same language (that all migrants are obliged to buy the card). That makes us feel uncomfortable (to say so)." [RN_MOI1]

"ผมพูดตรงๆนะ ผมว่าทำงานกับทางสาธารณสุขบางเรื่องค่อนข้างยาก ผมอาจไม่เข้าใจวัฒนธรรมและวิธีคิดของทางสาธารณสุข เช่น กระทรวงสาธารณสุขบอกว่า ให้เก็บค่าประกันสุขภาพทุกคน ถ้าเกิดเขาไม่จ่ายจะทำอย่างไร บังคับได้ไหม เท่าที่ผมทราบ มันเป็นแค่ประกาศกระทรวงทางสาธารณสุข ก็บอกว่าให้ทุกหน่วยพูดให้เหมือนกันว่าต้องเก็บๆ เราก็ลำบากใจ" [RN_MOI1]

24. *"There are three main agencies at the central level that deal with migrant health, namely the BPS, the BHA, and the HIG. I used to be invited to attend the meetings about migrant health in the MOPH. In the morning, there was a meeting by the HIG, and then in the afternoon, there was a meeting by the BPS. And the meeting agendas (between authorities) were the same. So, who is insane? If you cannot talk amongst your teams at the central level, you should not invite the local level like us. We are frontline staff. The order must be clear, then we can act according to the order. If the order is blurred, that's pointless."* [RN_PHO2]

"ส่วนกลางมีสามหน่วยที่คูเรื่องต่างค้ำว สนย., สบรส., และกลุ่มประกัน ผมเคยเข้าประชุมในกระทรวง
เข้าของกลุ่มประกัน บ่ายของสนย. ประชุมเรื่องเดียวกัน ตกงใครเพี้ยน ถ้าคุณยังคุยกันเองไม่ได้ คุณ
ไม่ควรเชิญหน่วยบริการแบบเรา เพราะผมคือหน่วยปฏิบัติ คำสั่งต้องชัดผมถึงทำได้ ถ้าคำสั่งไม่ชัด
คุณ ไม่มีความหมายเลยนะ" [RN_PHO2]

25. *"The work permit is issued by me as the registration officer. But, in case there are employers who refuse to pay monthly contribution for their employees, the SSO should be the plaintiff, not the DOE...I have power to check only whether you are working in the site according to what it is shown in your work permit."* [RN_WP1]

"ใบอนุญาตทำงานออกโดยผมที่เป็นนายทะเบียน แต่ในกรณีที่มีนายจ้างที่มีลูกจ้างแล้วไม่จ่ายเงิน
สมทบเข้าประกันสังคม คนกล่าวโทษร้องทุกข์คือประกันสังคม ไม่ใช่จัดหางาน ...ผมมีอำนาจแค่ดูว่า
คุณทำงานถูกตามประเภทงานตามที่ระบุในใบอนุญาตทำงานไหม" [RN_WP1]

26. *"In our area, we tried to block the influx of migrants. But we admit that we still face some limitations. In many work sectors, if we always caught illegal migrants, there might not be enough workers left. Then, we might have problems with the entrepreneurs. So we need to use other measures aside from law enforcement. For example, we tried to*

create the zoning area that we will be somewhat strict in the inner city and will be more relaxed in the outer zone." [RN_MOI1]

"ในพื้นที่เราก็พยายามสกัดกั้นการเข้ามาของคนต่างด้าว แต่ก็ยอมรับว่ามีข้อจำกัดพอสมควรในหลายจุด ถ้าเราใช้มาตรการจับกุมตลอดเวลา แรงงานอาจไม่เหลือ เราก็จะมีปัญหากับผู้ประกอบการ เราก็พยายามใช้มาตรการบางอย่างนอกจากมาตรการทางกฎหมาย เช่น เราก็จัดโซนนิ่ง กวดขันในพื้นที่ตอนใน พื้นที่ตอนนอกเราก็อนุโลมบ้าง" [RN_MOI1]

27. "(Interviewer: Normally, how long is a migrant required to pause before coming back to Thailand again?) In fact, they came back immediately, just get their passport stamped and then re-enter the country. But, in theory, they should pause. I knew this from my own experience. I knew one of the immigrants who did this." [RN_NGO2]

"(ผู้สัมภาษณ์: ปกติแล้วเค้าต้องกลับไปนานแค่ไหนจึงจะกลับเข้ามาได้อีกกะ จึงจะกลับมาได้) จริงๆ แล้วไม่ เค้าก็เดินทางไปสแตมป์ออกและสแตมป์เข้าได้เลย แต่โดยหลักการแล้วมันควรเว้นวรรค ผมประสบด้วยตนเองไง มีแรงงานคนหนึ่งที่ผมรู้ที่ทำแบบนี้" [RN_NGO2]

28. "During the OSS, there was a transition period where the visa of some legalised migrants was about to expire and they needed to journey back to their home country. As a result, they turned themselves into illegal migrants again in order to enter the OSS instead of legally extending their visa and passport ...Because it was cheaper, faster, and more convenient, then re-entered the NV again. Thus, the increase of the registration volume (during the OSS) might be false. I think the figure was too high." [RN_NGO2]

"ผมว่าช่วงวันสต็อปเซอร์วิสมันมีช่วงเปลี่ยนผ่านที่แรงงานที่ถูกกฎหมายแล้วและวีซ่ากำลังจะหมดอายุ และจำเป็นต้องกลับประเทศ เขาเลยเปลี่ยนรูปแบบตนเอง โดยการเข้าวันสต็อปเซอร์วิสใหม่ ทั้งๆที่

ควรต่อวีซ่าและหนังสือเดินทาง ...ก็มันถูกกว่า ไวกว่า และสะดวกกว่า แล้วก็พิสูจน์สัญชาติใหม่อีก
ยอดตัวเลขในการลงทะเบียนช่วงวันสต่อปเซอร์วิสที่สูงขึ้นมาอาจจะเป็นที่ก็ได้ ผมว่าตัวเลขมันเยอะ
ไป" [RN_NGO2]

29. "I always opposed the HICS. If that is for land migrants or those at the fish docks, I will be OK with it. But for seafarers, I totally disagree because they don't have a chance to use the insurance. They are always aboard. I lost over a million for the insurance. Some migrants stayed with me for just a couple of months, then they left their work. And who paid for their insurance? It is the employer! I didn't even have a chance to deduct their salary to recover my expense. The policy makers did not understand this setting. Do you think this policy is successfully implemented? I think it was just 30% successful." [RN_E3]

"ประกันสุขภาพผมคัดค้านมาตลอด อย่างแพปลาหรือคนทำงานบนบกผมเห็นด้วย แต่ลูกเรือประมง
ผมคัดค้าน เพราะทำแล้วไม่ได้ใช้ เค้าอยู่บนเรือตลอด ผมหมดไปเป็นล้านแล้ว บางทีเค้าก็อยู่เดือนสอง
เดือนเค้าก็หนี แล้วใครเป็นผู้จ่าย นายจ้างนะครับ ยังไม่ทันหักเงินเดือนเลย คนที่อยู่ตรงนั้นไม่รู้แล้วก็
ออกนโยบาย พอออกนโยบายถามว่าทำได้ทั้งหมดไหม ผมว่าแค่สามสิบเปอร์เซ็นต์เท่านั้นแหละ"
[RN_E3]

30. "Now there emerges a new job that helps complete the registration for migrants on behalf of the employers...It is more convenient but I had to pay more (laugh!). It charged me 500 Baht per head of migrant. But the registration takes numerous steps, and is very tiresome, and there are so many people. That's why I don't want to get involved. So I am OK with hiring them (brokers)." [RN_E2]

"ตอนนี้มันมีอาชีพใหม่ นะคือรับทำบัตรไง เราก็สะดวกขึ้นแต่ก็จ่ายตั้งค์มากขึ้น (หัวเราะ!) เค้าคิดเป็นหัว หัวละห้าร้อย แต่ว่าการขึ้นทะเบียนแรงงานพม่ามีขึ้นตอนมาก เหนื่อยมาก คนเยอะมาก ทำให้เราไม่อยากไปเลย จ้างๆไปเถอะ" [RN_E2]

31. "The current migrants are those who expect that the rubber price may go up. But there are fewer new workers now. Some of our migrants even have their own rubber field on the other bank (of the river). It is like they use us as their learning field [laugh!]." [RN_E2]

"ตอนนี้พม่าปัจจุบันคือพม่าเดิมที่ยอมทนอยู่กับเราเพื่อว่ายางจะราคาดีขึ้น พม่าใหม่ น่าจะน้อยลง พม่าที่มาอยู่กับเราอย่างน้อยเค้าก็มีสวนฝั่่งนู่น เค้ามาอยู่กับเราระหว่างที่ยังไม่ตัดยาง ก็มาอยู่กับเราศึกษาดูงาน (หัวเราะ!)" [RN_E2]

32. "The advantage of the card is if we have surgery or if giving birth, we pay only 30 Baht...But the policy changed very quickly. We went to tell the villagers (about the card), and then it changed again, and the villagers came to blame us (for giving wrong information)" [MM3]

"ข้อดีของบัตรนะคะ คือถ้าเราผ่าตัดหรือคลอดลูกเราก็จ่ายแค่ 30 บาท ...แต่่นโยบายเปลี่ยนบ่อย บางทีเราไปบอกชาวบ้าน (เกี่ยวกับบัตร) แล้วนโยบายเปลี่ยนอีกแล้วเค้าก็มาว่าเรา (ว่าให้ข้อมูลผิด)" [MM3]

33. "The Social Security Office told that they will give us the money back when we reach 60 years of age, and also when we die. Who will guarantee that we will receive that money? And they say they will give us 1,000 Baht when we leave for our home. But you must send notice (to the SSO) in advance... Who knows that their cousin will die by next month? Just 1,000 Baht!, I can collect it by myself." [MM3]

"ประกันสังคมบอกว่าเค้าจะให้เงินคืนตอนเราอายุ 60 หรือตอนตาย ใครจะไปรับรองได้ว่าเราจะได้ใช้เงินนั้น แล้วก็บอกว่าจะให้เงินคืน 1000 บาทถ้าเรากลับพม่า แต่ต้องไปบอกเค้าก่อน ... ใครจะรู้ว่าญาติเราจะตายเดือนหน้าแค่ 1,000 บาท ฉันเก็บเองได้" [MM3]

Appendix 10: Section 7bis of the Thai Nationality Act 1965 (B.E.2508) as amended by the Thai Nationality Act 2008 (B.E.2551)

Section 7. The following persons can acquire Thai nationality by birth:

1. A person born of a father or a mother of Thai nationality, whether within or outside the Thai Kingdom;
2. A person born within the Thai Kingdom except the person under Section *7bis* paragraph one.

...*Section 7bis.* A person born within the Thai Kingdom of alien parents does not acquire Thai nationality if at the time of his birth, his lawful father or his father who did not marry his mother, or his mother was:

1. the person having been given leniency for temporary residence in Kingdom as a special case; or
2. the person having been permitted to stay temporarily in the Kingdom; or
3. the person having entered and resided in the Thai Kingdom without permission under the law on immigration.

In case the Minister deems it appropriate, he may consider and give an order for each particular case granting Thai nationality to any person under paragraph one, in conformity with the rules prescribed by the Cabinet.

The person who is born within the Thai Kingdom and has not acquired Thai nationality under paragraph one shall be deemed to have entered and resided in the Thai Kingdom without permission under the law on immigration unless an order is given otherwise according to the law on that particular matter.

Appendix 11: Case studies of selected migrant interviewees

Case 1 A 47-years-old female with DM and HT

Monn was a 47-years-old Burmese woman. She illegally migrated to Thailand about 20 years ago and has been living in Ranong province since then. At the time of migration, she was accompanied by her husband, her two sons born in Myanmar and her sister. The family migrated to Thailand with an aim to seek better job opportunities. Currently, her household income was 13,000 Baht (US\$ 394) per month, while the expense was about 10,000 Baht (US\$ 333) per month.

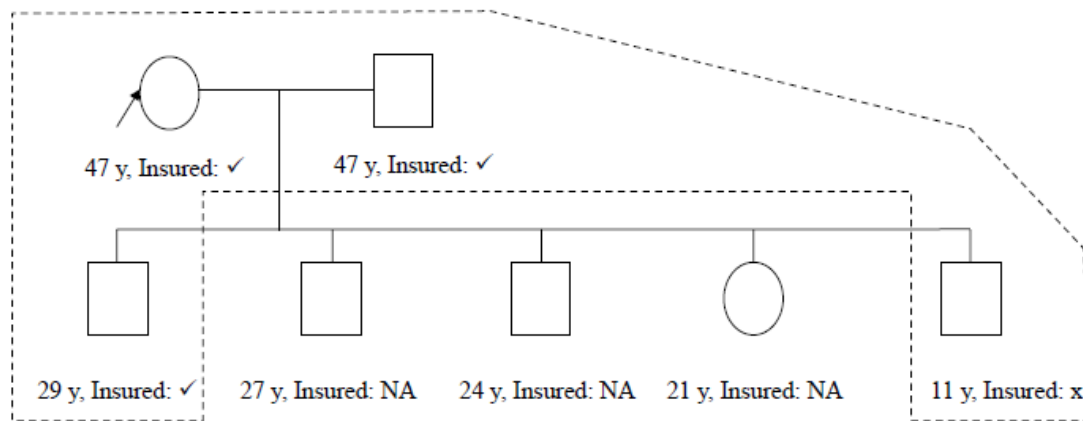
When Monn first arrived Thailand, she worked in a wood factory. Then she became ill with HT and DM. The illness got worse when she was engaged with the extensive labour work. She needed to visit Ranong hospital to receive medication every 3-4 months. Monn preferred visiting the hospital to the health centre since she felt that there were many more doctors at the hospital, and the doctors often treated her nicely. However, she admitted that utilising services at the hospital was not convenient due to a long waiting queue and a lack of interpreters.

She used to pay her medicine about 500 Baht (US\$ 15) per visit; but in 2012 she bought the card and after that she could enjoy services free of charge. Monn mentioned that her illness was the main reason of buying the card, and she renewed the card every time it met the expiry date.

The employer of her husband and her eldest son (working as construction labour) accepted to put her name in the list of employees (despite the fact, in practice, that she was not able to work heavily) because her husband and her son were quite skilful in their job, and the employer was care about the living of his employees. Her husband's employer also managed all paper works for her (passport, work permit, and health card)

with the overall expense of 5,000 Baht (US\$ 152), but this was later deducted from her husband's monthly wages.

Now there were four members in the household. Everybody in her household was insured, except for her youngest (11 years old) son, as she reckoned that the card price was too expensive. Monn expressed that, for her health benefit, if the card price went up, she still wished to buy the card. However, she opined that if she had not been ill, she would not have been interested in buying the card. The genogram of Monn's household is presented below.



Case 2 A 58-years-old female with dyspepsia

Za migrated to Thailand about ten years ago. Currently, she has been living with her husband, her daughter and three grandchildren. She peeled shrimps for a living, with an estimated daily income of 100-120 Baht (US\$ 3-4). Every morning there was a pickup truck containing many buckets of shrimps, coming to her community.

Her (and her neighbour's) duty was to peel the shrimps before the pickup truck came to recollect the buckets in the evening. Her wage depended on the amount of shrimps she peeled (approximately 12-15 Baht (US\$ 0.4-0.5)/kg). Almost all villagers joined this work. However, she had no specific knowledge about who the employer was.

Her general health condition was fairly good. She occasionally suffered from dyspepsia (stomach pain) but has never been admitted in the hospital. She used to enjoy service both at the hospital and at a private clinic, with an average expense of 350-700 Baht (US\$ 11-21) per visit.

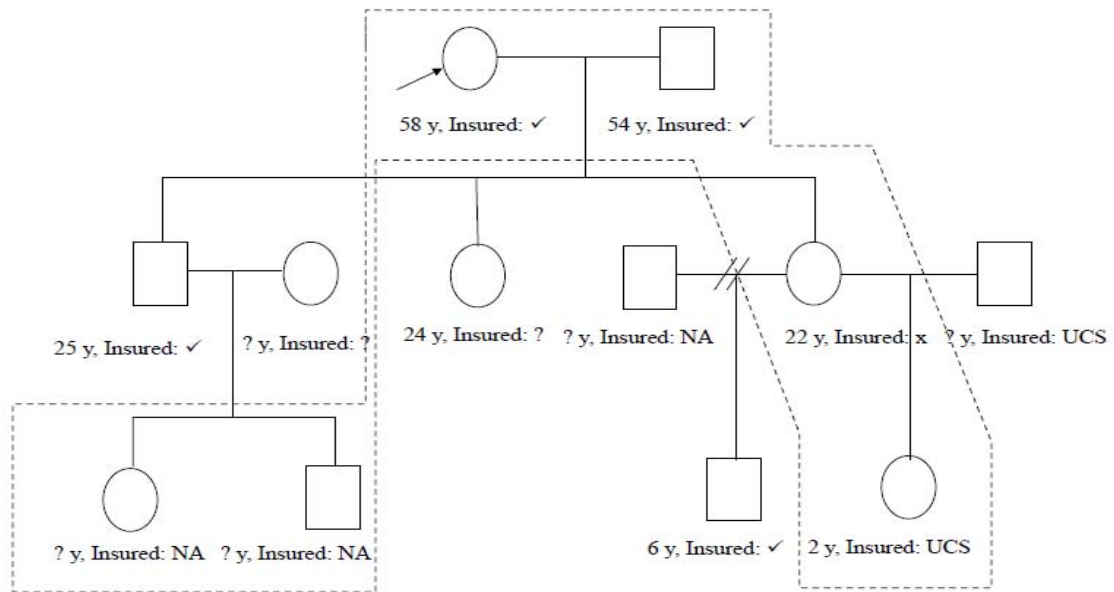
Za did not have any legal documents until July 2014 when the OSS was set up. She joined the registration process due to a fear of being arrested. She spent about 10,000 Baht (US\$ 303) to acquire all essential documents, which were processed by a broker.

Now she had work permit and the health card, but she has not yet received the passport as the NV is still on the way. Name of the employer appearing on her work permit was the employer of her husband, working at the fish dock. The entire household expense was about 8,000 Baht (US\$ 242), and the income was somewhat unpredictable.

Her 22-year-old daughter also had problems with the work status as she just came to live with Za after being away to work in another province for a while, and her work permit was tied with the former employer. She was about to get a new job at the mobile phone shop but there was problem with the work permit. This was because to obtain a new work permit, she needed to inform the Department of Employment at the province where her existing work permit was issued and this required much paper work as well as consent from her ex-employer. However, she told that the mobile shop owner did not worry much about her work permit.

As her work permit was issued at another province, she was not insured with the health facility in Ranong province. However, she was still healthy, thus the health card was not of her concern at the moment. Now she was living with her 2-years-old daughter (Za's niece), whose father is a Thai national. Therefore her child acquired Thai nationality since birth and this made her carefree with the health security of her baby.

The genogram of Za's family presented below reflects the fact that, though the current government intended to have all migrants involved in the OSS and insured with the HICS, not all migrants took part in the registration.



Note: NA = not applicable or no information

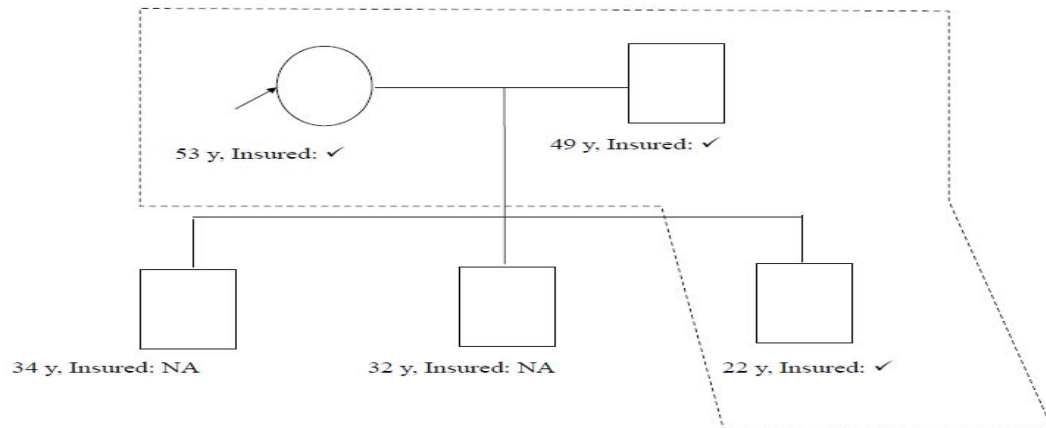
Case 3 A 53-years-old female with NCD

Wei had been residing in Kraburi district for more than 23 years. She moved from Myanmar to Thailand with an intention to search for better job prospect. In her household, there were Wei, her husband and her youngest son. All of them were the rubber field workers. They had been working for the current employer for over 11 years. However, Wei travelled back to Myanmar occasionally as she still owned the rubber field on the other bank of the river, and her two elder sons were staying in Myanmar.

The household monthly income was about 20,000 Baht (US\$ 606). The land owner provided her family a house in the rubber field free of charge. The family spent only utility bill. The landlord also took care of the whole legalisation process, and later deducted the cost of registration from her income. Her wage depended on the amount of latex acquired (about 5 Baht [US\$ 0.2] per raw rubber fluid). Wei's underlying diseases were DM and HT; however she was still fit enough for work. She received medicine regularly at the nearby health centre, and at times visited a private clinic due to a shorter waiting time. Wei mentioned that a mutual support from the employer was vital factor

that kept her staying in Thailand. The employer was very kind and he even bought the blood sugar self-monitoring machine for her.

Her family genogram is as follows:



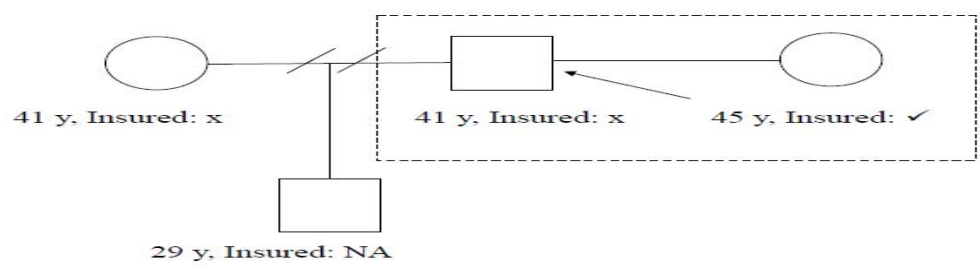
Note: NA = not applicable or no information

Case 4 A 41-years-old male with HIV/AIDS

Tan illegally migrated to Ranong province around 15 years ago and started to work as an offshore fisherman. He then settled his life with the second wife in Muang district. In 2010 he found a swelling mass in the neck and thereafter it was diagnosed of TB lymphadenitis. While being treated for TB, the hospital further investigated his immunity and discovered that he was infected with HIV/AIDS. In 2012 his health became worse and he was admitted in the hospital. At that time, the cost of treatment was over 5,000 Baht (US\$ 152), and there must be regular expense of lifelong ART for about 1,800 Baht per month (US\$ 55). Tan could not afford the treatment cost. He asked for a waiver from the hospital. The hospital still offered him medication and collected money from him according to the ability to pay. Now Tan's viral blood level was much better but his physical function was still impaired due to malnourishment and a lack of proper rehabilitation. He could not walk due to poor muscle mass in the lower extremities.

The situation seemed to be better between 2013 and mid 2014 as at that time the card policy was relatively open to all migrants. His wife's employer agreed to buy the card for him. Tan's wife also had HIV/AIDS but her health status remained in a good condition. She already acquired work permit and passport through the assistance of a broker. The only document that Tan possessed was the health card issued in February 2014. Tan heard about the OSS, but he failed to join the event due to a very poor physical condition. In February 2015 his card expired and he turned to be uninsured again; and this worsened the financial difficulty of the household (though the hospital still continued the treatment even after his card expired, but he still needed to pay for the ART according to the ability to pay).

Now there was the local NGO that offered help to him by partially subsidising transportation cost and laboratory expense as he was required to monitor his CD4 level and viral loading twice a year (a subsidy from NGO is about 1,400 Baht [US\$ 43]/year). Tan wished to be insured again but he admitted that his request might be in vain due to the strict regulation of the hospital that barred unhealthy migrants from being insured. The family did not have any plan for the future, whether to settle down here or to return to Myanmar, as Tan must continue the treatment here, and in the meantime the family's economic status was in trouble as the only income generator was Tan's wife. His wife earned only 5,000 Baht (US\$ 152) per month, and this could hardly offset the household's monthly expense. Tan also had a son of working age, born from his first wife, but they have not been in contact for years. The family genogram of Tan is displayed below.



Note: NA = not applicable or no information

Appendix 12: Crude utilisation rate

Table 50 Details of the calculation for IP and OP utilisation rates of the UCS and the HICS beneficiaries

Service type	Insurance	Variables	Facilities	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Inpatient	HICS	Total registered beneficiaries (persons)	Kraburi hospital (a)	6,393	10,443	8,171	7,343	11,917
			Ranong hospital (b)	29,829	39,244	26,660	31,928	45,543
		Utilisation volume (admissions)	Kraburi hospital (c)	285	448	511	454	484
			Ranong hospital (d)	2,654	3,495	3,444	4,044	2,401
		Utilisation rate (admissions/person/year)	Kraburi hospital (c/a)	0.04	0.04	0.06	0.06	0.04
			Ranong hospital (d/b)	0.09	0.09	0.13	0.13	0.05
	UCS	Total registered beneficiaries (persons)	Kraburi hospital (a)	37,915	38,393	37,565	61,549	61,527
			Ranong hospital (b)	59,898	60,952	62,155	37,192	36,972
		Utilisation volume (admissions)	Kraburi hospital (c)	1,522	2,301	2,571	2,395	2,185
			Ranong hospital (d)	7,467	8,334	8,336	7,653	7,411
		Utilisation rate (admissions/person/year)	Kraburi hospital (c/a)	0.04	0.06	0.07	0.04	0.04
			Ranong hospital (d/b)	0.12	0.14	0.13	0.21	0.20
Outpatient	HICS	Total registered beneficiaries (persons)	Kraburi hospital (a)	6,393	10,443	8,171	7,343	11,917

Service type	Insurance	Variables	Facilities	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
		Utilisation volume (visits)	Ranong hospital (b)	29,829	39,244	26,660	31,928	45,543
			Kraburi hospital (c)	NA	9,768	9,935	12,442	13,556
		Utilisation rate (visits/person/year)	Ranong hospital (d)	NA	33,642	31,309	25,718	30,368
			Kraburi hospital (c/a)	NA	0.94	1.22	1.69	1.14
		Ranong hospital (d/b)	NA	0.86	1.17	0.81	0.67	
		UCS	Total registered beneficiaries (persons)	Kraburi hospital (a)	37,915	38,393	37,565	61,549
	Ranong hospital (b)			59,898	60,952	62,155	37,192	36,972
	Utilisation volume (visits)		Kraburi hospital (c)	NA	82,155	79,304	80,882	82,378
			Ranong hospital (d)	NA	135,039	144,969	135,174	148,619
	Utilisation rate (visits/person/year)		Kraburi hospital (c/a)	NA	2.14	2.11	1.31	1.34
			Ranong hospital (d/b)	NA	2.22	2.33	3.63	4.02

Note:

1. The utilisation of the UCS beneficiaries might be underestimated since the visits by a Thai national who was willing to pay out of pocket were coded as 'insurance not shown' or 'uninsured' though the fact is he/she was already covered by the UCS.
2. The calculation above was just a rough analysis of utilisation rate and it still suffered from a limitation that the researcher could not track the personal ID (13-digits code), which was a unique identifier of a person because the health staff in the study hospitals felt uncomfortable to share the 13-digit ID of a patient for fear of breaching ethics. This limitation did more or less affect the calculation accuracy.
3. The figures were cumulative numbers of registered beneficiaries at the start of given fiscal year. For example, the figure, '7,343', in the table above refers to the number of the migrant card holders at the beginning of FY 2014 in Kraburi hospital (which was a cumulative number of all registrations by the end of FY 2013).
4. The calculation did not include newborn admissions.

Appendix 13: Examples of the OLS on inpatient utilisation with various interaction terms

The following table (Table 51) is an extension of Table 27 in Chapter 7 after adding the interaction term between the insurance variable and the facility level variable. The interaction between HICS and facility level did not yield statistical significance. Also, the LR test exhibited the P-value of 0.175. This implied that the interaction term did not lead to a significant increase in the goodness of fit of the equation ($R^2 = 0.094$, equal to the restricted equation).

Table 51 Multivariate analysis of IP utilisation volume by the OLS after adding interaction term between the insurance variable and the facility level variable

Sum of visits ($R^2=0.094$)	Coef.	Std. Err.	P-value	[95% Conf. Interval]
Insurance (v uninsured)				
• HICS	0.012	0.012	0.344	-0.012 0.036
• UCS	0.114	0.013	<0.001	0.088 0.139
Ever had catastrophic illness (v never)	0.054	0.012	<0.001	0.030 0.078
Insurance##Catastrophic illness				
• HICS##Ever had catastrophic illness	0.226	0.030	<0.001	0.166 0.285
• UCS##Ever had catastrophic illness	0.433	0.023	<0.001	0.388 0.477
Provincial hospital (v district hospital)	0.021	0.008	0.012	0.005 0.037
Insurance##Facility level				
• HICS##Provincial hospital	0.000	0.013	0.977	-0.025 0.026
• UCS##Provincial hospital	-0.033	0.015	0.034	-0.063 -0.002
Age group (v ≤ 7 yr)				
• 8-15	-0.081	0.010	<0.001	-0.100 -0.062
• 16-30	-0.039	0.008	<0.001	-0.054 -0.024
• 31-60	0.029	0.010	0.003	0.010 0.049
• >60	0.150	0.017	<0.001	0.118 0.183
Female (v male)	-0.007	0.008	0.372	-0.023 0.009
Proximity (v non-proximity)	0.120	0.008	<0.001	0.105 0.135
Post-OSS (v pre-OSS)	-0.020	0.007	0.005	-0.034 -0.006
Insurance##OSS				
• HICS##Post-OSS	0.002	0.011	0.854	-0.020 0.025
• UCS##Post-OSS	-0.018	0.013	0.149	-0.044 0.007
Constant	0.954	0.012	<0.001	0.930 0.978

One might be interested to examine if there was an interaction between the HICS and age group since the HICS had different card prices between a migrant adult and a migrant child. In this regard, the researcher added an interaction between the insurance variable and the age group variable. To avoid having too many unnecessary interaction terms and for better interpretation of the results, the age group variable was converted from 5 categories to 2 categories, namely, child (≤ 7 years) v non-child (> 7 years).

Table 52 and Table 53 present the OLS with and without insurance##child interaction respectively. It was clear that results from both models were very alike. The HICS##child interaction did not have statistical significance. However, the child variable itself revealed a statistically significant effect despite a minute negative effect size. This finding was consistent with the result before converting the age group variable, suggesting that patients with advanced age tended to have more admissions than the younger ones. P-value of the LR test was 0.903, reflecting that the interaction term did not lead to a significant increase to the goodness of fit of the equation.

Table 52 Multivariate analysis of IP utilisation volume by the OLS after substituting age group variable with child variable

Sum of visits ($R^2=0.087$)	Coef.	Std. Err.	P-value	[95% Conf.	Interval]
Insurance (v uninsured)					
• HICS	0.011	0.005	0.040	0.001	0.021
• UCS	0.109	0.005	<0.001	0.099	0.119
Ever had catastrophic illness (v never)	0.081	0.012	<0.001	0.057	0.105
Insurance##Catastrophic illness					
• HICS##Ever had catastrophic illness	0.221	0.031	<0.001	0.161	0.282
• UCS##Ever had catastrophic illness	0.456	0.023	<0.001	0.411	0.501
Child (v non-child)	-0.021	0.008	0.012	-0.037	-0.005
Female (v male)	-0.015	0.008	0.059	-0.031	0.001
Proximity (v non-proximity)	0.118	0.008	<0.001	0.103	0.132
Post-OSS (v pre-OSS)	-0.016	0.007	0.020	-0.030	-0.003
Insurance##OSS					
• HICS##Post-OSS	-0.005	0.012	0.696	-0.027	0.018
• UCS##Post-OSS	-0.023	0.013	0.077	-0.048	0.002
Provincial hospital (v district hospital)	-0.006	0.011	0.568	-0.028	0.015
Constant	0.980	0.013	0.000	0.954	1.006

Table 53 Multivariate analysis of IP utilisation volume by the OLS after adding interaction term between the insurance variable and the child variable

Sum of visits ($R^2=0.087$)	Coef.	Std. Err.	P-value	[95% Conf.	Interval]
Insurance (v uninsured)					
• HICS	0.011	0.005	0.037	0.001	0.022
• UCS	0.109	0.006	<0.001	0.097	0.120
Ever had catastrophic illness (v never)	0.081	0.012	<0.001	0.056	0.105
Insurance##Catastrophic illness					
• HICS##Ever had catastrophic illness	0.222	0.031	<0.001	0.161	0.283
• UCS##Ever had catastrophic illness	0.456	0.023	<0.001	0.411	0.501
Child (v non-child)	-0.022	0.006	0.001	-0.035	-0.009
Insurance##Child					
• HICS##Child	-0.010	0.017	0.532	-0.043	0.022
• UCS##Child	0.003	0.012	0.826	-0.022	0.027
Female (v male)	-0.015	0.008	0.058	-0.031	0.000
Proximity (v non-proximity)	0.117	0.008	<0.001	0.103	0.132
Post-OSS (v pre-OSS)	-0.016	0.007	0.020	-0.030	-0.003
Insurance##OSS					
• HICS##Post-OSS	-0.004	0.011	0.716	-0.027	0.018
• UCS##Post-OSS	-0.023	0.013	0.077	-0.048	0.002
Provincial hospital (v district hospital)	-0.006	0.011	0.569	-0.028	0.015
Constant	0.980	0.013	<0.001	0.954	1.007

Appendix 14: Subgroup analysis after excluding delivery-related conditions

Inpatient utilisation

As displayed in the descriptive statistics' findings, delivery-related diagnoses were the most common causes of admissions in all insurance types. The analysis in this step therefore excluded observations with delivery-related diagnoses to assess if and to what extent the multivariate analysis results deviated from the full sample. Of note is that the researcher defined a delivery-related condition as any diagnosis with ICD10 starting with 'O' (because the 'O' category in ICD10 refers to gynaecologic and obstetric diseases).

Table 54 displays that the subgroup analysis results were somewhat similar to the full sample analysis results. Almost all independent variables in the subsample analysis still had the same IRR direction as in the full sample and none of the independent variables experienced a change in the statistical significance. This meant though delivery was the main purpose of admissions by all beneficiaries (particularly the non-Thai patients) in the crude analysis, it did not render more yearly admissions by an individual after all covariates were taken into account.

Table 54 Multivariate analysis of IP utilisation volume by Poisson regression with interaction terms after excluding obstetric conditions

Variable	IRR	Std. Err.	P-value	[95% Conf. Interval]
Insurance (v uninsured)				
• HICS	1.029	0.007	<0.001	1.014 1.043
• UCS	1.091	0.006	<0.001	1.080 1.103
Ever had catastrophic illness (v never)	1.063	0.012	<0.001	1.039 1.086
Insurance##Catastrophic illness				
• HICS##Ever had catastrophic illness	1.210	0.032	<0.001	1.150 1.274
• UCS##Ever had catastrophic illness	1.338	0.022	<0.001	1.296 1.381
Age group (v ≤7 yr)				

Variable	IRR	Std. Err.	P-value	[95% Conf.	Interval]
• 8-15	0.928	0.008	<0.001	0.913	0.944
• 16-30	0.932	0.007	<0.001	0.919	0.945
• 31-60	1.034	0.009	<0.001	1.016	1.053
• >60	1.117	0.014	<0.001	1.091	1.144
Female (v male)	0.988	0.008	0.140	0.973	1.004
Proximity (v non-proximity)	1.125	0.009	<0.001	1.108	1.143
Post-OSS (v pre-OSS)	0.985	0.009	0.091	0.967	1.002
Insurance##OSS					
• HICS##Post-OSS	0.970	0.016	0.071	0.939	1.003
• UCS##Post-OSS	0.982	0.013	0.167	0.957	1.008
Provincial hospital (v district hospital)	0.999	0.011	0.960	0.979	1.021

Outpatient utilisation

Subgroup analysis in this section was performed in the same way as the IP treatment. However, as 'delivery' was not normally treated as an outpatient care, a new variable, 'ever had O group', was used instead. The variable was coded as 1 if a patient was ever involved with any condition with its ICD10 starting with 'O', which refers to obstetric and gynaecological conditions, in a given fiscal year, and 0 if otherwise. Table 55 below demonstrates that after excluding O group diagnoses, there was a slight difference between the full sample and the subsample results as seen in the HICS effect that marginally subsided in the subsample analysis (from +9.9% to +9.0%).

Table 55 Multivariate analysis of OP utilisation volume by the Negative binomial regression with interaction terms after excluding obstetric conditions

Variable	IRR	Std. Err.	P-value	[95% Conf.	Interval]
Insurance (v uninsured)					
• HICS	1.090	0.017	<0.001	1.058	1.123
• UCS	1.303	0.015	<0.001	1.275	1.333
Ever had ACSC (v never)	1.528	0.031	<0.001	1.468	1.590
Insurance##ACSC					
• HICS##Ever had ACSC	1.127	0.032	<0.001	1.067	1.192
• UCS##Ever had ACSC	1.317	0.029	<0.001	1.262	1.375
Ever had Z group (v never)	1.302	0.018	<0.001	1.267	1.337
Insurance##Z group					

Variable	IRR	Std. Err.	P-value	[95% Conf.	Interval]
• HICS##Ever had Z group	1.971	0.045	<0.001	1.884	2.062
• UCS##Ever had Z group	1.687	0.026	<0.001	1.636	1.740
Age group (v ≤7 yr)					
• 8-15	0.950	0.008	<0.001	0.933	0.966
• 16-30	0.985	0.009	0.089	0.969	1.002
• 31-60	1.476	0.013	<0.001	1.450	1.502
• >60	2.165	0.026	<0.001	2.114	2.217
Female (v male)	1.002	0.008	0.792	0.987	1.017
Proximity (v non-proximity)	1.204	0.012	<0.001	1.180	1.227
Post-OSS (v pre-OSS)	1.184	0.022	<0.001	1.142	1.228
Insurance##OSS					
• HICS##Post-OSS	0.855	0.020	<0.001	0.817	0.895
• UCS##Post-OSS	0.830	0.016	<0.001	0.799	0.862
Facility level (v health centres)					
• District hospital	1.506	0.015	<0.001	1.476	1.536
• Provincial hospital	1.446	0.014	<0.001	1.419	1.474