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KAZAKHSTAN

# Health Systems in Action (HSiA) Insights Kazakhstan

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This edition of the Health Systems in Action Insight for Kazakhstan was written by Yulia Litvinova, Astrid Eriksen, Yerbol Spatayev and Bernd Rechel.

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- · provide core information and data on health systems succinctly and accessibly;
- outline the country health system context in which WHO Europe's Programme of Work is set;
- · flag key concerns, progress and challenges; and
- build a baseline for comparisons, so that Member States can see how their health systems develop over time and in relation to other countries.

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### HEALTH SYSTEMS IN ACTION INSIGHTS: KAZAKHSTAN

#### Key points

- The Ministry of Healthcare governs Kazakhstan's health system and is responsible for policy, legislation and regulation. The Oblast Health Departments play an important role in managing all publicly owned health facilities within their territories.
- The country's recent health reforms aim to progress towards universal health coverage (UHC) through strong primary health care (PHC) and family medicine, particularly in rural and remote areas. Regional and local governments lead these changes, with increased autonomy for PHC facility managers.
- Kazakhstan transitioned to a social health insurance (SHI) system in 2020, aiming to address equity, access and service quality by improving the pooling of public funds and enhancing the participation of private providers in publicly funded health care.
- Residents have access to two packages: a government-guaranteed package for all and a SHI package with a wider package of benefits for those who pay contributions or for whom the government pays on their behalf.
- Per capita spending on health has increased in recent years to US\$ 1114 in 2021 (adjusted for purchasing power). The share of public spending in overall health spending has also increased (65.3% in 2021) and is now much higher than in the Central Asian countries overall (39.6%). Out-of-pocket (00P) spending has subsequently declined, from 33.9% of health spending in 2019 to 25.0% in 2021.

- Kazakhstan has an extensive hospital network, with most hospitals being focused on a single specialty. The Ministry of Healthcare aims to optimize efficiency going forward by promoting multidisciplinary hospitals.
- Despite a high physician density of 407 professionally active staff per 100 000 population, rural areas face shortages, with 82.8% of physicians working in urban areas. Nurse numbers have fluctuated but are generally below the average in the WHO European Region.
- Life expectancy at birth in Kazakhstan steadily increased in the last two decades, from 65.7 years in 2000 to 73.3 years in 2019. However, the country experienced a notable decline during the COVID-19 pandemic, to 70.3 years in 2021. Life expectancy for females is 7.6 years higher than that of males.
- The pandemic resulted in a disruption of essential health services and increased mortality rates, including substantial excess mortality. Mental health problems and maternal mortality increased markedly.
- Cardiovascular diseases are the leading causes of mortality, including premature mortality, underscoring the need for continued prevention efforts and improved access to care.
- High blood pressure, poor nutrition and smoking are major causes of deaths and ill-health. Kazakhstan has initiated policies targeting these factors, including initiatives to reduce salt consumption and tobacco use and a ban on vaping products.

## 1 ORGANIZING THE HEALTH SYSTEM

## Health system governance is the responsibility of the Ministry of Healthcare

The Ministry of Healthcare is the key agency governing the health system. Its responsibilities include developing national health policies and legislation, regulating health care organizations and defining the benefits packages (the state-guaranteed benefits package and the SHI benefits package, both administered by the same purchaser, the Social Health Insurance Fund (SHIF), see below). The Ministry of Healthcare also owns nationallevel health facilities (mainly tertiary care hospitals). The oblast or city health departments of the country's regional authorities (17 oblasts and 3 cities – Almaty, Astana and Shymkent) own all publicly run health facilities in their respective territories, regardless of city or rural location (WHO Regional Office for Europe, 2022a).

PHC services are provided by general practitioners (GPs) or a combination of district internists (for adults) and paediatricians (for children), working in PHC units (polyclinics), which may be standalone or located within rayon (rural) hospitals (owned privately or by the oblast or city health department). Specialized care is available in large polyclinics, ambulatory care centres, rural hospitals, city hospitals, and regional, specialized and national hospitals.

## Health care is increasingly focused on a multidisciplinary PHC-based model

Over the past two decades, Kazakhstan has undertaken several reforms to strengthen family medicine and the role of PHC. These reforms have focused on developing a people-centred, multidisciplinary model that prioritizes people's psychosocial needs and expands access to high-quality services in rural and remote areas. This transformation was enabled by arrangements encouraging regional and local governments to take the lead in transforming PHC, including allocating more resources and granting greater autonomy to PHC facility managers (WHO Regional Office for Europe, 2023a).

## The SHIF contracts public and private providers to deliver all publicly funded health services

Since 2020, Kazakhstan has transitioned to a SHI-based system, where the SHIF consolidates public funds (including contributions from employers and employees) and purchases health services from public and private health care providers. The establishment of a SHI system was preceded by a shift to centralized pooling of public funds in 2010 from the district and regional levels. This change enhanced financial equity among regions by reducing regional funding disparities through the implementation of a unified national health system and the introduction of per capita funding with corrective coefficients. It also introduced unified planning and payment mechanisms and aimed to improve access, quality of services and the development of PHC.

There are two benefits packages for publicly funded health services that complement each other: the stateguaranteed benefits package and the SHI package, both of which are administered by the SHIF but with distinct funding pools. The state-quaranteed benefits package is based on legal residence, regardless of insurance status. Entitlement to the SHI package depends on contributions being made to the SHIF. On behalf of employed individuals, employers contribute 3% of the monthly wage (not exceeding 10 minimum wages annually). In contrast, self-employed or self-paying individuals pay a flat fee of 5950 tenge (equivalent to approximately €12 in 2024) per month. The state covers contributions for specific groups such as children, unemployed people, pregnant women, those on parental leave, caregivers and pensioners. At the beginning of 2024, over 84% of the population had SHIF coverage (SHIF, 2024). Non-covered groups of the population include undocumented migrants and those working in the informal sector (WHO Regional Office for Europe, 2024a).

#### Even without SHI coverage, people have access to a broad scope of publicly paid services

The state-guaranteed benefits package includes emergency medical services, PHC services and specialized outpatient and inpatient services for acute cases, as well as prevention and treatment of HIV, tuberculosis (TB) and other "socially significant diseases". Outpatient prescription medicines and vaccinations for these diseases are covered by public funds.

The SHI package available to the insured extends beyond the basic package, including diagnostic and outpatient specialized care through GP referral, chronic disease management programmes, some dental care, rehabilitation services, planned and emergency inpatient care for diseases outside the category of "socially significant diseases" (such as TB, HIV/AIDS, hepatitis, cancer, diabetes or poor mental health), and a broader range of outpatient prescription medicines. In both benefits packages, OOP payments are required for specialist services provided without a GP referral or at a facility not contracted through the SHIF. In addition, the list of prescribed medications included in both benefits packages is limited, also resulting in OOP payments (see Section 2).

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## 2 FINANCING AND ENSURING FINANCIAL PROTECTION

#### Health spending as a share of GDP is lower than in countries with similar income levels

Per capita spending on health in Kazakhstan amounted to US\$ 1114 in 2021 (adjusted for purchasing power parity), which was higher than the average for Central Asia (US\$ 680) but lower than the average for the upper middle-income countries (UMICs) of the WHO European Region (US\$ 1646) and the WHO European Region overall (US\$ 3841). While spending per capita was lower than in countries with similar income levels, the share of public spending was higher (Fig. 1). When measured as a percentage of gross domestic product (GDP), overall spending on health in Kazakhstan was only 3.9% in 2021 (the latest year for which internationally comparable data are available), the second lowest level in the WHO European Region.

#### Kazakhstan has increased the share of overall public spending that goes to health

Spending on health from public sources (65.3% in 2021) is higher than in Central Asian countries on average (39.6%), but despite increasing in 2020 and 2021 – due to the COVID-19 pandemic and a government commitment to increase public spending on health – was still much lower than its peak of 75.9% in 2009. Yet there was a marked increase in the share of overall government spending going to health, from 8.3% in 2019 to 11.6% in 2021, the highest share in Central Asian countries but below the average of the WHO European Region of 13.9%.

The increase in public spending on health is reflected in terms of its share of GDP – from 1.7% in 2019 to 2.6% in 2021 (**Fig. 2**). While this exceeded the Central Asian average (2.3%), it was still much lower than public spending as a share of GDP in countries of similar income levels (4.2%) and the WHO European Region as a whole (5.9%). In terms of public spending per capita, this increased in Kazakhstan from US\$ 453 in 2019 to US\$ 728 (adjusted for purchasing power). Concerns have been raised about the sustainability of the SHI system in Kazakhstan in view of these rapid rates of growth.

## The share of OOP spending has declined since 2016

00P spending dropped from 35.7% of overall health spending in 2016 to 25.0% in 2021 (Fig. 3). This was below the averages of the WHO European Region (26.6%), the UMICs in the WHO European Region (39.8%) and

#### Fig.1

Kazakhstan spends less on health than countries with similar income levels, but the public share of health spending is greater



Source: WHO, 2024a.

**Notes:** 2021 data. Public refers to transfers from government budgets and social health insurance contributions. Other compulsory pre-payment refers to premiums for mandatory health insurance schemes in Belgium, Finland, France, Germany, the Netherlands (Kingdom of the) and Switzerland. Other spending includes external funding and some other marginal spending. PPP: purchasing power parity.

#### Fig.2

Public spending on health increased markedly in 2020 and 2021, the years of the COVID-19 pandemic

Public spending on health as a share of GDP (%)



Source: WHO, 2024a.

The share of OOP spending in Kazakhstan is below the average for the region





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#### Fig.4

The response to the COVID-19 pandemic resulted in a much larger increase in hospital beds than in other countries



Central Asia (53.6%). The decrease in the share of OOP spending in Kazakhstan occurred despite a drop in public funding as a share of GDP in 2016–2019 (Fig. 2) and a decline in public spending per capita from US\$ 476 in 2016 to US\$ 453 in 2019 (adjusted for purchasing power), but has accelerated since 2020. This is likely due to an increase in public spending on health since 2020, which coincided with the COVID-19 pandemic and the introduction of the SHI system. Public spending on health as a share of overall government spending stood at 11.6% in 2021, lower than the average in the WHO European Region of 13.9%, but higher than in any of the other Central Asian countries.

#### Inpatient care accounted for the largest part of overall health spending in 2021

In terms of health spending by health care functions, inpatient care dominated in 2021, accounting for 35.0% of spending on health, followed by outpatient care (31.6%), medical goods (19.5%) and preventive care (2.6%). However, there has been substantial fluctuation in spending by health care functions in recent years. which may be related to the COVID-19 pandemic, but also to changes in data collection. The share of health spending that went to inpatient care was much higher in 2021 than in previous years, and the share devoted to general outpatient care declined from 22.1% in 2019 to only 12.3% in 2021. Spending on primary health care according to WHO definitions (including general outpatient curative care, dental outpatient curative care, preventive care and health promotion activities, outpatient or home-based long-term health care, 80% of spending on medical goods, and 80% of spending on health system administration and governance) declined from 49.8% in 2019 to 34.0% in 2021 (WHO, 2024), possibly due to increased funding for specialized services following the introduction of the SHI system in 2020.

## Little is known about the effects of OOP spending on households

As in other countries of the region, outpatient pharmaceuticals are a major driver of OOP spending, and are not fully included in the publicly paid benefits packages (see Section 1) (WHO Regional Office for Europe, 2023b; Bukatov & Gimranova 2023). However, there is currently a lack of more detailed information on how well the health system ensures financial protection from impoverishing or catastrophic health spending. While information on Kazakhstan is not available, given a share of OOP spending of well over 30% of health spending before the COVID-19 pandemic, it can be assumed that OOP spending resulted in a substantial degree of financial hardship, as in countries with comparable shares of OOP spending.

### 3 GENERATING RESOURCES, PROVIDING SERVICES AND ENSURING ACCESS

## Despite overall reductions in hospital beds since 2000, there was a large increase in 2020

The number of hospital beds per 100 000 population decreased in Kazakhstan between 2006 (752) and 2019 (513). However, between 2019 and 2020 there was a large increase due to the response to the COVID-19 pandemic, reaching 672 hospital beds per 100 000 population in 2020, which was almost on par with the ratio of hospital beds in 2000 (**Fig. 4**). In addition to existing hospitals, some modular hospitals were built and some public buildings were temporarily turned into hospitals.

#### The number of physicians is comparatively high, but less than 20% work in rural areas

The health workforce in Kazakhstan is characterized by a slightly higher number of physicians compared to the average in the WHO European Region (Fig. 5). In 2020, there were 403 physicians per 100 000 population. Despite this relatively high number, 82.8% of all physicians work in urban areas, while only 17.2% work in rural areas (WHO Regional Office for Europe, 2022a). The number of nurses increased from 566 per 100 000 population in 2000 to 747 in 2012, but has since decreased to 651 per 100 000 population in 2021 (the latest year for which there are internationally available data). According to national data, the number of nurses per 100 000 population increased to 741 in 2022 (Bureau of National Statistics, 2024b). The rate of nurses per 100 000 population is higher than in Central Asian countries overall but lower than the WHO European Region and the EU. After years of reform, currently nurses' education is offered at bachelor's level and the country also offers master and PhD degrees in nursing.

Over the years numerous initiatives have been introduced to attract health professionals to work in rural and remote areas. These include start-off funds for transportation, housing and land. Young doctors are also required to work in their assigned health facility for three years after graduation, if their studies were fully covered by the government (which applies to about 70% of students). Despite these initiatives, retention of young health professionals in rural areas is low. There are multiple reasons for workforce migration, and they are not all financial. The absence of infrastructure for their families – such as job opportunities, childcare facilities and extracurricular activities – poses a significant obstacle for working in rural and remote areas (WHO Regional Office for Europe, 2023a).

## The health system comprises an extensive network of secondary and tertiary care facilities

Secondary and tertiary care is provided in more than 522 public (482 hospitals under the Ministry of Healthcare and 40 hospitals under other ministries)

#### Fig.5



The rates of physicians and nurses in Kazakhstan are higher than in Central Asian countries overall

Source: WHO, 2024c

Note: Densities were multiplied by 10 to calculate the density per 100 000 population.

and 316 private hospitals across the country, including national centres, research institutes, university clinics, regional (oblast) hospitals, city hospitals and district (rural) hospitals.

Overall, the hospital sector comprises 34 different types of hospital, which differ, among other things, in the services they provide, the categories of the population they serve and their locations (for example, urban vs. rural). The majority of hospitals focus on a single specialty. The Ministry of Healthcare is addressing this fragmentation by concentrating such institutions into multidisciplinary hospitals with the aim of improving efficiency (WHO Regional Office for Europe, 2022a).

#### Health reforms aim to strengthen PHC in rural areas by introducing multidisciplinary teams

The health system has gradually moved towards multidisciplinary teams in PHC, consisting of GPs, PHC nurses, social workers and psychologists (WHO Regional Office for Europe, 2023a) (see Section 1). Furthermore, a national policy on strengthening the role of nurses has tripled the number of nurses in PHC teams to include three nurses per family doctor (WHO Regional Office for Europe, 2021).

The Ministry of Healthcare is committed to improving access to PHC services in rural areas through capacity development (see Box 1). The latest health reform also sought to achieve this by investing in mobile care units to improve service delivery in rural areas. Mobile PHC teams were crucial in relieving the hospital burden during the COVID-19 peak. Telemedicine services were expanded for remote consultations during COVID-19-related isolation measures (WHO Regional Office for Europe, 2023a).

## Health trains are used to reach Kazakhstan's remote communities

In Kazakhstan three trains equipped with modern diagnostic and treatment equipment, such as ultrasound and fluorography, counselling facilities, a small operating room, a laboratory and communication facilities follow scheduled routes every year. The trains provide remote populations with free examination and treatment by qualified medical specialists, such as therapists, dentists, ophthalmologists, otolaryngologists (ENTs), surgeons, urologists, mammologists and paediatricians (Densaulyk, 2024).

Between 2010 and 2019, their teams of health care professionals examined 488 880 inhabitants in remote areas of Kazakhstan, including 101 614 children (WHO European Centre for Primary Health Care, 2023). In 2024 it is planned that the trains will bring 40 health care professions, including narrow specialists, to 140 remote localities to provide health care services to over 90 000 people.

## Kazakhstan continues to improve coverage for HIV/AIDS diagnosis and treatment

In 2022, the percentage of individuals who knew their HIV status increased to 89% (up from 81% in 2020). Of these, more people were receiving antiretroviral treatment (ART): 84% in 2022, compared with 79% in 2020. In 2022, 85% of people on ART achieved viral suppression, the same level as in 2020 (**Fig. 6**).

#### Box 1

Plans to improve access to PHC services in rural areas are under way

The Ministry of Healthcare is currently implementing a roadmap for developing the health system until 2025. For PHC, the roadmap gives priority to:

- increasing the number of PHC facilities in rural areas;
- increasing coverage with services in remote and rural areas, including with mobile care units;
- improving physical infrastructure (medical devices) in health care and feldscherambulatory units in remote and rural areas;
- increasing the percentage of health services provided at the outpatient level and the total

volume of health services offered in the stateguaranteed benefits and SHI packages;

- increasing the coverage of pregnant women with individual and multidisciplinary antenatal care;
- improving the indicators stimulating the quality of observation of pregnant women at the PHC level;
- implementing the health passport for married couples;
- early active detection of pregnancy up to 10 weeks by health professionals; and
- increasing the coverage of children younger than one year with proactive surveillance and screening.

Source: WHO Regional Office for Europe, 2023a.

Kazakhstan moves closer to UNAIDS targets for the HIV treatment cascade



Source: UNAIDS, 2023.

## Efforts to strengthen TB treatment continue

The TB incidence rate in Kazakhstan has decreased markedly from 173.8 per 100 000 population in 2000 to 51.7 per 100 000 population in 2021 (a 70% reduction). However, the TB incidence rate remains well above the average of 17.9 per 100 000 population in the WHO European Region. The effective treatment coverage of TB increased from 75.1% in 2000 to 91% in 2017, well above the averages for the WHO European Region and Central Asia overall (Fig. 7). Kazakhstan has achieved significant progress in combating TB through its National Tuberculosis Programme. Key advancements include implementing a nationwide electronic surveillance system based on individual cases, which also encompasses HIV/AIDS, and introducing a national rapid diagnostic molecular testing initiative.

Despite these developments, a TB Community, Rights and Gender (CRG) assessment from 2020 highlighted various barriers to TB services in Kazakhstan. Barriers are related to accessibility (for example, the financial burden of travelling to health care facilities), availability (for example, the lack of psychosocial services and treatment options for managing side effects) and acceptability (for example, stigma and discrimination) (Stop TB Partnership, 2022).

#### Fig.7

The effective treatment coverage for TB remains well above the WHO European Region average

TB effective treatment coverage (%)



Source: WHO, 2024b.

Note: Proportion of TB cases detected and successfully treated (estimate).

## The UHC service coverage index in Kazakhstan is on a par with the WHO European Region average



**Note:** UHC service coverage index, defined as the average estimated coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health; infectious diseases; noncommunicable diseases; and service capacity and access; among the general and the most disadvantaged populations.

#### Through various policy changes, Kazakhstan has progressed towards UHC

Access to essential services in Kazakhstan – measured through the UHC service coverage index – has increased from 56% in 2000 to 80% in 2021, almost on a par with the average of the WHO European Region (81%) (Fig. 8). This improvement is due to the increased policy emphasis on extending public coverage of services and improving equitable access. For example, the list of medicines covered in the benefits package has increased significantly, from 46 conditions in 2018 to 175 conditions in 2022 (WHO Regional Office for Europe, 2023a).

## 4 IMPROVING THE HEALTH OF THE POPULATION

#### Major gender and regional disparities exist in life expectancy and mortality patterns

Life expectancy at birth increased steadily in the last two decades, from 65.7 years in 2000 to 73.3 years in 2019, although this remained lower than the WHO European Region average of 78.8 years. However, as in almost all other countries, during the COVID-19 pandemic there was a notable decline in life expectancy to 71.4 years in 2020 and a further decrease to 70.3 years in 2021. Life expectancy data for many neighbouring countries for 2021 are not yet available (Fig. 9). Following two years of the pandemic and a significant drop in life expectancy, the gender gap decreased from 8.5 years in 2019 (pre-pandemic) to 7.6 years in 2021, with life expectancy for females dropping to 74 years and for males to 66.4 years.

The persisting gender gap reflects the fact that male mortality rates are much higher than female mortality rates. According to estimates from the Global Burden of Disease study for 2021, mortality due to injuries was almost four times higher among males (91 deaths per 100 000 population) compared to females (24 per 100 000 population) (IHME, 2024). Similarly, in 2022, the overall mortality rate from acute myocardial infarction was 9.3 per 100 000 population, but this declined to 6.7 among females (Bureau of National Statistics, 2024a).

There are also substantial discrepancies in mortality between regions and between urban and rural areas. For instance, 4.2 women per 100 000 population were dying from acute myocardial infarction in rural settings in 2022 compared to almost twice as many (8.2) in urban areas (Bureau of National Statistics, 2024a).

The recent "Concept of healthcare development of the Republic of Kazakhstan until 2026" includes the government's goal of achieving a life expectancy of 75 years by 2025 as a key indicator. To reach this target, a comprehensive set of actions has been outlined, with a focus on preventing noncommunicable diseases (NCDs) and improving health care. These actions address both behavioural and environmental risk factors and include measures to promote healthy nutrition, prevent tobacco and alcohol use, and enhance environmental standards by addressing air and water pollution. Additionally, efforts are directed towards establishing a healthy environment in public buildings, particularly for children (Adilet, 2022).

#### Cardiovascular diseases remain the leading cause of death, although deaths have fallen markedly

In 2021, NCDs were the leading cause of death in Kazakhstan, with cardiovascular diseases alone accounting for over 23% of all deaths. Neuropsychiatric conditions and noncommunicable respiratory diseases also ranked among the top three causes of NCD mortality (**Fig. 10**). With a change in mortality coding in 2013, a share of deaths that were previously reported as circulatory has shifted to "other neuropsychiatric disorders", leading to the abnormally high share of neuropsychiatric conditions in total mortality in 2021.

According to national statistics, overall mortality – and, in particular, mortality from cardiovascular diseases – was elevated in the COVID-19 pandemic years of 2020 and 2021 but declined markedly in 2022. For example, mortality from cardiovascular diseases was 154 per 100 000 population in 2022, a historically low figure. Among these conditions, ischaemic heart disease caused the most deaths, at 52 per 100 000 population in 2022, closely followed by cerebrovascular disease at 51 per 100 000 population (Bureau of National Statistics, 2024b).

Large life expectancy gains were observed in Kazakhstan before the COVID-19 pandemic

Life expectancy at birth (years)



Source: Eurostat, 2024, for EU/EEA countries, Albania, Montenegro, North Macedonia, Serbia, Armenia, Azerbaijan, Georgia and Türkiye; WHO Regional Office for Europe, 2024b, for all others.

Notes: \* averages are based on years with data available. The South-Eastern Europe Health Network (SEEHN) includes Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, North Macedonia, the Republic of Moldova, Romania and Serbia.

#### Fig.10

Cardiovascular diseases accounted for over 23% of all deaths in 2021



Note: Overview of the distribution of causes of total deaths grouped by category. Data refer to 2021.

Excess mortality per 100 000 population

#### Fig.11

Kazakhstan had a higher excess mortality associated with COVID-19 than the regional average



#### Source: WHO, 2023.

**Notes:** Excess mortality from all causes of death, defined as the difference between the total number of deaths and the number that would have been expected in the absence of a crisis (for example, the COVID-19 pandemic). This difference is assumed to include deaths attributable directly to COVID-19 as well as deaths indirectly associated with COVID-19 through impacts on health systems and society.

#### Fig.12

## Premature mortality due to NCDs in Kazakhstan was falling sharply before the COVID-19 pandemic



Source: WHO Regional Office for Europe, 2024b.

**Notes:** Premature mortality among those aged 30–69 years from four major NCDs (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases).

In the context of cardiovascular disease prevention, the country emphasized tertiary prevention and has invested significantly in hospital facilities and staff for interventional treatments. Opportunities for secondary prevention are limited, with only two biennial screening programmes for people aged 40–70 years: one for hypertension and the other for ischaemic heart disease (Glushkova et al., 2023b). Primary prevention guidelines remain largely undeveloped but are anticipated to be developed according to the "Concept of healthcare development until 2026". Furthermore, WHO continues its support to NCD prevention activities, including through fostering a multisectoral engagement and "Health In All Policies" approach (see Section 6).

## The COVID-19 pandemic had a profound effect on mortality

The cumulative number of officially recorded COVID-19-related deaths in Kazakhstan reached 102 per 100 000 population by 2024. However, the actual number may be higher due to potential under-reporting. As in most other countries in the WHO European Region, the pandemic impacted all-cause mortality, with excess mortality in Kazakhstan estimated at 274 per 100 000 population in 2021, above the regional average of 207 per 100 000 population (Fig. 11). The pandemic disrupted essential health services and had a major impact on all aspects of life, with a sharp increase in maternal mortality and a heavy toll on the prevalence of mental illness in all population groups (Box 2).

#### Premature mortality in Kazakhstan is also driven by cardiovascular conditions

NCDs are a major cause of premature mortality among people aged 30–69 years. In 2021, four NCDs (cardiovascular diseases, cancers, diabetes mellitus and chronic respiratory diseases) accounted for 492 premature deaths per 100 000 population (Fig. 12). Men had a much higher rate (696 deaths per 100 000 population) than women (331). Cardiovascular diseases were the leading cause of death in this age group, highlighting the need to prioritize health promotion and primary prevention efforts for these conditions.

#### Cardiovascular diseases and COVID-19 were the largest contributors to the burden of disease in 2021

Measuring the burden of disease in terms of disabilityadjusted life years (DALYs) helps to estimate not only the causes of premature mortality but also the years lived with disability from common diseases, with one DALY corresponding to the loss of one year in full health. In 2021, cardiovascular diseases resulted in 7229 DALYs per 100 000 population from ischaemic heart disease, stroke and cardiomyopathy combined. In addition, COVID-19 alone was a major contributor to the

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disease burden in Kazakhstan, accounting for more than 5400 DALYs per 100 000 population (Fig. 13).

Kazakhstan is addressing the high burden of neonatal disorders, which accounted for 954 DALYs per 100 000 population in 2021. To tackle this issue, the Ministry of Healthcare has drafted the "Concept for the development of maternal and child health services in the Republic of Kazakhstan for 2024–2030 'Every Woman Every Child'" for adoption by the government. This comprehensive document includes measures to improve the health of mothers, children and adolescents by promoting healthy lifestyles, increasing access to quality care for girls, women and children, and promoting family planning and expanding coverage of antenatal care, focusing efforts on continuous improvement of neonatal and early life conditions (Ministry of Healthcare, 2023a).

#### Behavioural risk factors associated with ill-health in Kazakhstan include poor nutrition and smoking

Over 21% of mortality in Kazakhstan is attributable to high systolic blood pressure (Fig. 14). Modifiable risk factors for hypertension, as a metabolic risk factor, include unhealthy behaviours such as a diet high in salt and fat, tobacco and alcohol use, and physical inactivity.

Dietary risks, including high rates of salt use, were estimated to cause 12% of deaths in Kazakhstan. The average daily salt intake exceeds 17g, almost four times the WHO recommendation. Efforts are under way to reduce salt consumption through government-led policies and awareness campaigns. For example, a special working group is preparing a national strategy to reduce the consumption of salt, sugar and trans fats. The country is also taking steps to increase the level of physical activity among the population, in particular by building cycle paths and popularizing sports (WHO Regional

#### Box 2

Kazakhstan seeks to improve mental health care to address a growing burden of mental ill health

With a population of around 19 million, in 2023 Kazakhstan had an estimated 732 700 people suffering from depression, with over 198 400 people under observation for various mental and behavioural disorders. In addition, there were 13 100 new cases of mental disorders without the influence of psychoactive substances and 13 400 cases of substanceinduced disorders (Ranking.kz, 2024).

To address the high burden of mental ill health, which was amplified during the COVID-19 pandemic, Kazakhstan has continued to integrate mental health services into PHC. Psychosocial services have been expanded since 2015, and standards of care for mental health services in PHC were defined in 2016. Integration efforts have also extended to secondary services, with psychiatrists and addiction specialists joining PHC staff to improve access to outpatient mental health and addiction care. These changes aim to address stigma and discrimination, with early results showing a 10% increase in service utilization for borderline mental disorders by 2018. Kazakhstan's approach has redistributed roles, provided training opportunities, developed multidisciplinary teams, revised legal structures and increased the number of GPs trained to deliver mental health care effectively in PHC, reducing the burden of both physical and mental health conditions at this level.

#### Fig.13

COVID-19 was the leading cause of the disease burden in Kazakhstan during the pandemic



#### Top 10 causes of DALYs

#### Source: IHME, 2024.

Note: Top 10 causes of DALYs per 100 000 population for both sexes and all ages. Data refer to 2021.

One in five deaths can be attributed to high blood pressure

Top 10 risk factors as a share of all deaths



#### Source: IHME, 2024.

**Note:** LDL: low-density lipoprotein. Percentage of all deaths attributable to risk factors for both sexes and all ages. Shares overlap and therefore add up to more than 100%.

#### Box 3

#### The Government of Kazakhstan has banned sales of vaping products

In 2006, Kazakhstan ratified the WHO Framework Convention on Tobacco Control, strengthening its tobacco control policies. These measures include a ban on smoking in public places, strict enforcement of smoke-free environments, restrictions on tobacco advertising and increased cigarette prices through higher excise taxes. In addition, to address the growing use of alternative tobacco products, particularly among young people, Kazakhstan passed a law in 2024 prohibiting the sale, distribution and advertising of smokeless tobacco products, vaping devices, flavourings and liquids, with criminal liability introduced as an enforcement measure.

Smoking cessation interventions are available in some PHC settings, including health clinics, and are fully covered by the state. However, over-the-counter nicotine replacement therapy and cessation support provided at other levels of the health system are only partially covered by the benefits packages or not covered at all. Office for Europe, 2023c), to tackle the high prevalence of overweight (with a body mass index (BMI) above 25kg/m2) among adults (53.6% in 2016) and children, where in 2020, 20.6% of 6–9 year olds were overweight or obese (WHO Regional Office for Europe, 2022b).

In 2021, tobacco use was estimated to account for 8.3% of all deaths in Kazakhstan (IHME, 2024). The prevalence of smoking in the country has been gradually decreasing: in 2015, about 25% of people aged 15 years were estimated to be smokers, decreasing to 23% in 2020 and further to 21.6% in 2023, indicating some progress in ongoing efforts to strengthen tobacco control policies. However, reports suggest that the involvement of health professionals in smoking prevention is still limited (Glushkova et al., 2023a). The country has implemented swift measures to control the use of alternative tobacco products, such as vaping and e-cigarettes (Box 3).

## The effect of environmental determinants of health is profound

According to the Global Burden of Disease study, environmental factors such as air pollution and nonoptimal temperatures were estimated to contribute to 10.8% of deaths in Kazakhstan in 2021 (IHME, 2024). The country has embarked on closely studying the impact of environmental factors on health, with an increasing number of publicly funded studies being conducted. For example, elevated concentrations of PM2.5 particles in cities, particularly in industrial centres such as Balkhash, Temirtau and Zhezkazgan, have been linked to significantly higher mortality rates (Oladejo et al., 2023).

In addition, Kazakhstan and other Central Asian republics have experienced more frequent heat waves, highlighting the urgent need to further develop climate change adaptation and mitigation policies and adapt the health system to respond to these threats. To address air pollution, Kazakhstan is working to reduce greenhouse gas emissions through initiatives outlined in the Concept for the Development of the Fuel and Energy Sector of Kazakhstan by 2030. In addition, the recent "Concept of healthcare development until 2026" places particular emphasis on monitoring and controlling air quality in residential areas and emissions of harmful substances into the environment (including drinking water and soil) in accordance with international standards.

## 5 SPOTLIGHT ON HEALTH WORKFORCE TRENDS

## The rate of doctors per population has increased

The density of doctors in Kazakhstan has slightly increased from 388 doctors per 100 000 population in 2013 to 403 in 2020. This exceeded the WHO European Region average of 387 doctors per 100 000 population and that of neighbouring countries Turkmenistan, Kyrgyzstan and Uzbekistan. By contrast, the density of nurses in Kazakhstan decreased, from 733 nurses per 100 000 population in 2013 to 651 in 2020, falling further below the WHO European Region average of 803 nurses per 100 000 population (Fig. 15).

## The number of medical and nursing graduates in Kazakhstan is on the rise

When assessing the density of doctors and nurses in Kazakhstan, it is important to consider the number of graduates. As seen above, the density of doctors increased between 2015 and 2020, coinciding with a 33.9% increase in the absolute number of medical graduates, from 5228 in 2015 to 7909 in 2020. Conversely, while the density of nurses declined from 2012 to 2021, the number of nursing graduates rose by 35.3%, from 4313 in 2012 to 6662 in 2020.

## Ageing of the workforce is not a major concern

As of 1 January 2024, the average age of a doctor in the country was 44 years and the average age of a nurse was 41 years. Doctors aged 60 years and older made up 14% of the total number of doctors and nurses aged 60 years and older made up 5% of the total number of nurses. In 2020, 48.4% of the doctors were female. Gender disaggregated data for nurses are not available in international databases.

## There is a shortage of generalist medical practitioners in Kazakhstan

In 2012, 8% of all physicians in Kazakhstan worked as generalist medical practitioners. By 2014 (the most recent year available in international databases), the share had increased slightly to 8.2% (Fig. 16). According to national data, the share of PHC doctors (GPs, district internists for adults and paediatricians for children) in 2022 was somewhat higher, but still comparatively low, standing at 11.6% (Ministry of Healthcare, 2023b).

#### Kazakhstan continues to have a large internal migration of health workers from rural to urban areas

Recognizing the gravity of health workforce shortages in rural areas, Kazakhstan initiated two national projects between 2008 and 2016: the "Construction of 350 Family Medicine Centres, Feldsher-Midwife Health Posts, and Polyclinics" and the "Construction of 100 Schools, 100 Hospitals". These initiatives aimed to boost the number of health facilities in rural areas by establishing modern Family Medicine Centres (FMCs), Feldsher-Midwife Health Posts (FHPs), polyclinics and hospitals. However, even with nine medical schools, rural health workforce shortages persist due to graduates' reluctance to pursue careers in rural areas (Jobalayeva et al., 2024). Reliable and up-to-date international data on other aspects of the health workforce in Kazakhstan are currently unavailable. This includes issues such as the gender composition of the nursing workforce and the proportion of doctors and nurses who migrate abroad.

## EUROPEAN PROGRAMME OF WORK (EPW)

#### Moving towards UHC

Kazakhstan has made important progress towards UHC, placing this goal high on the political agenda. WHO collaborates with the country through policy advice, technical support and capacity building, focusing on specific programmes, such as mother and child care, mental health, antimicrobial resistance, TB and HIV. Since 2022, WHO has increased its engagement in national mental health and digital health agendas, which are among the EPW flagship initiatives. Starting in 2024, WHO is expanding the country portfolio to include support for health financing, financial protection and human resources for health.

## Protecting the population against health emergencies

During the COVID-19 pandemic, WHO focused on strengthening critical response pillars, including infection prevention and control, laboratories, epidemiological surveillance, essential health services and risk communication. This has involved building capacity, contributing to the national health policy response and promoting evidence-based decision-making. WHO is now working to transform these achievements into sustainable systemic changes. In 2023, WHO joined forces with the Ministry of Healthcare of Kazakhstan to successfully apply for the Pandemic Fund grant. The grant aims at strengthening epidemiological surveillance, laboratory systems and workforce capacity for pandemic preparedness and response.

## Promoting the health and wellbeing of the population

WHO actively engages with both public and nongovernmental actors within the health system and various sectors to enable comprehensive governmental and societal approaches addressing behavioural and environmental risk factors. WHO contributed to changes in the national policy on tobacco taxation to address health determinants. Other initiatives include facilitating cross-sectoral action to create a healthy environment in schools and cities, promoting a healthy diet and coordinating national and international partners to implement a multisectoral One Health approach.

The density of nurses in Kazakhstan has decreased over the last decade



Source: WHO, 2024c.

Note: Nearest year for Kazakhstan is 2020. The number of nurses plotted for Austria has to be treated with caution, due to breaks in the time series and switching between "licensed to practise" and "practising" workforce numbers.

Kazakhstan has one of the lowest shares of generalist medical practitioners in the WHO European Region

Percentage of generalist medical practitioners



Source: WHO Regional Office for Europe, 2024c.

**Notes:** Generalist medical practitioners (ISCO-08 code: 2211) are physicians who do not limit their practice to certain disease categories or methods of treatment and may assume responsibility for the provision of continuing and comprehensive medical care to individuals, families and communities. They include general practitioners, district medical doctors, therapists, family medical practitioners, PHC physicians, medical doctors (general), medical officers (general) and medical interns or residents specializing in general practice or without any area of specialization yet. Although in some countries "general practice" and "family medicine" may be considered as medical specializations, these occupations are also classified here. The data for Ireland should be treated with caution due to a break in series.

### COUNTRY DATA SUMMARY

	Kazakhstan	Central Asia	WHO European Region	European Union
Life expectancy at birth, both sexes combined (years)	<b>70.3</b> (2021)	72.5 <sup>ª</sup>	78.2ª	79.9 <sup>ª</sup>
Estimated maternal mortality per 100 000 live births (2020)	13.4	24.3	12.6	6.4
Estimated infant mortality per 1 000 live births (2021)	9.1	15.5	6.3	3.2
Population size, in millions (2022)	19.1	77.1	929.1	512.7
GDP per capita, PPP\$ (2021)	28600	13 327	38 936	48 615
Poverty rate at national poverty lines, % of population	<b>5.2</b> <sup>b</sup> (2022)	<b>14.1</b> (2017)	<b>14.9</b> (2018)	<b>17.0</b> (2018)

Sources: WHO Regional Office for Europe, 2024b;

a Eurostat, 2024, for EU/EEA countries, Albania, Montenegro, North Macedonia, Serbia, Armenia, Azerbaijan, Georgia and Türkiye; b World Bank, 2024.

**Note:** Life expectancy averages refer to latest available years.

#### References

Adilet (2022). On approval of the 'Concept of healthcare development of the Republic of Kazakhstan until 2026'. Decree of the Government of the Republic of Kazakhstan dated November 24, 2022 No. 945. Adilet: Information and legal system of normative legal acts of the Republic of Kazakhstan. Available at: <u>https://www.adilet.zan.kz/rus/docs/</u>P2200000945 (accessed 30 April 2024).

Bukatov Y, Gimranova G (2023). Government measures to address out-of-pocket health expense in Kazakhstan. Cogent Economics & Finance, 11(1):2164409. DOI: 10.1080/23322039.2022.2164409.

Bureau of National Statistics (2024a). Gender statistics. Astana: Agency for Strategic planning and reforms of the Republic of Kazakhstan. Available at: <u>https://gender.stat.gov.kz/</u> (accessed 30 April 2024).

Bureau of National Statistics (2024b). Database. Astana: Agency for Strategic planning and reforms of the Republic of Kazakhstan. Available at: <u>https://stat.gov.kz</u> (accessed 30 April 2024).

Densaulyk (2024). Salamatty Kazakhstan – medical train. Project description. Available at: <u>https://medpoezd.kz/</u> (accessed 22 May 2024).

Eurostat (2024). EU statistics on income and living conditions [EU-SILC]. European Commission. Available at: <u>https://</u> ec.europa.eu/eurostat/web/microdata/european-unionstatistics-on-income-and-living-conditions</u> (accessed 29 July 2024).

Glushkova N et al. (2023a). Prevalence of Smoking Various Tobacco Types in the Kazakhstani Adult Population in 2021: A Cross-Sectional Study. International Journal of Environmental Research and Public Health, 20(2):1509. <u>https://doi.</u> org/10.3390/ijerph20021509.

Glushkova N et al. (2023b). Examining disparities in cardiovascular disease prevention strategies and incidence rates between urban and rural populations: insights from Kazakhstan. Scientific Reports, 13:20917. <u>https://doi.org/10.1038/s41598-023-47899-8</u>.

Government of Kazakhstan (2020). Law on Health and the Healthcare System, adopted on 7 July 2020. Available at: https://adilet.zan.kz/eng/docs/K2000000360/info (accessed 10 April 2024).

IHME (2024). Global Burden of Disease 2021: Findings from the GBD 2021 Study. Seattle, WA: Institute for Health Metrics and Evaluation. Available at: <u>https://www.healthdata.org/research-analysis/library/global-burden-disease-2021-findings-gbd-2021-study (accessed 30 May 2024).</u>

Jobalayeva B et al. (2024). The impact of incentive schemes on rural healthcare workforce availability: a case study of Kazakhstan. Human Resources for Health, 22:23. <u>https://doi.</u> org/10.1186/s12960-024-00905-0. Ministry of Healthcare (2023a). Concept for the Development of Maternal and Child Health Services in the Republic of Kazakhstan for 2024–2030 'Every Woman – Every Child'. Available at: <u>https://legalacts.egov.kz/npa/</u> view?id=14710520 (accessed 30 April 2024).

Ministry of Healthcare (2023b). Statistical report 'Health of the Population of the Republic of Kazakhstan and Activities of Health Care Organizations in 2022'. Available at: <u>https://nrchd.kz/</u> <u>files/новое%202023/Сборник\_за 2021-2022%20гг. ок..pdf</u> (accessed 22 May 2024).

Oladejo TO et al. (2023). Climate change in Kazakhstan: implications to population health. Bulletin of the National Research Centre 47:144. <u>https://doi.org/10.1186/s42269-023-</u> 01122-w.

Ranking.kz (2024). The prevalence of depression in Kazakhstan exceeded the world average. Available at: <u>https://</u>ranking.kz/reviews/world/rasprostranyonnost-depressii-vkazahstane-prevysila-srednemirovoy-pokazatel.html (accessed 30 April 2024).

SHIF (2024). Social Health Insurance Fund. Website: https://fms. kz (accessed 10 April 2024).

Stop TB Partnership (2022). Kazakhstan. Community, Rights and Gender Country Profile. Working Document. Available at: https://www.stoptb.org/sites/default/files/country\_profile\_ kazakhstan\_0623.pdf (accessed 25 April 2024).

UNAIDS (2023). Joint United Nations Programme on HIV/AIDS. Available at: <u>https://www.unaids.org/en/regionscountries/</u> countries (accessed 1 August 2024).

WHO (2023). Global excess deaths associated with COVID-19 (modelled estimates). Geneva: World Health Organization. Available at: https://www.who.int/data/sets/globalexcess-deaths-associated-with-covid-19-modelled-estimates (accessed 10 April 2024).

WHO (2024a). Global Health Expenditure database. Geneva: World Health Organization. Available at: https://apps.who.int/ nha/database/ (accessed 12 April 2024).

WHO (2024b). Global Health Observatory database. Geneva: World Health Organization. Available at: <u>https://www.who.int/</u> data/gho/ (accessed 22 April 2024).

WHO (2024c). National Health Workforce Accounts database. Geneva: World Health Organization. Available at: <u>https://apps.</u> who.int/nhwaportal/ (accessed 29 July 2024).

WHO (2024d). Mortality database. Geneva: World Health Organization. Available at: https://platform.who.int/mortality/ countries (accessed 3 April 2024).

WHO European Centre for Primary Health Care (2023). The Densaulyk (health) train – bringing primary health care to Kazakhstan's remote communities. Available at: <u>https://www. who.int/romania/multi-media/details/the-densaulyk-(health)-</u> <u>train-bringing-primary-health-care-to-kazakhstan-s-remote-</u> <u>communities</u> (accessed 10 May 2024). WHO Regional Office for Europe (2021). Kazakhstan: Multidisciplinary teams for better alignment of primary health care services to meet the needs and expectations of people [Internet]. Available at: <u>https://www.who.int/docs/</u> <u>librariesprovider2/default-document-library/primary-health-care-</u> <u>kazakhstan-eng.pdf</u> (accessed 16 July 2024).

WHO Regional Office for Europe (2022a). EVIPNet Europe. Situation analysis on evidence-informed health policy-making. Kazakhstan. Copenhagen: WHO Regional Office for Europe. Licence: CC BY-NC-SA 3.0 IGO.

WHO Regional Office for Europe (2022b). Report on the fifth round of data collection, 2018–2020: WHO European Childhood Obesity Surveillance Initiative (COSI). Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO.

WHO Regional Office for Europe (2023a). Transformation of primary health care in Kazakhstan: moving towards a multidisciplinary model. Primary health care policy paper series. Copenhagen: WHO Regional Office for Europe. Licence: CC BY-NC-SA 3.0 IGO.

WHO Regional Office for Europe (2023b). Can people afford to pay for health care? Evidence on financial protection in 40 countries in Europe. WHO Regional Office for Europe. <u>https://</u> iris.who.int/handle/10665/374504 (accessed 17 May 2024). Licence: CC BY-NC-SA 3.0 IGO.

WHO Regional Office for Europe (2023c). Kazakhstan is taking measures to reduce salt consumption that do not contradict business interests. Press-release. Available at: <a href="https://www.who.int/europe/ru/news/item/17-05-2023-kazakhstan-s-moves-to-reduce-salt-intake-not-in-conflict-with-business-interests">https://www.who.int/europe/ru/news/item/17-05-2023-kazakhstan-s-moves-to-reduce-salt-intake-not-in-conflict-with-business-interests</a> (accessed 30 April 2024).

WHO Regional Office for Europe (2024a). UHC watch. Online database. Copenhagen: WHO Regional Office for Europe. Available at: <u>https://apps.who.int/dhis2/uhcwatch/#/</u> (accessed 15 May 2024).

WHO Regional Office for Europe (2024b). European Health for All database (HFA-DB). Copenhagen: WHO Regional Office for Europe. Available at: <u>https://iris.who.int/</u> <u>handle/10665/374504</u> (accessed 17 May 2024).

WHO Regional Office for Europe (2024c). European database on human and technical resources for health (HIthRes-DB). Copenhagen: WHO Regional Office for Europe. Available at: https://gateway.euro.who.int/en/datasets/european-databaseon-human-and-technical-resources-for-health/ (accessed 5 June 2024).

World Bank (2024). World Bank Poverty and Inequality Platform. Washington DC: World Bank Group. Available at: <u>https://data.</u> worldbank.org/indicator/SI.POV.NAHC?end=2023&start=2023 &view=bar (accessed 25 April 2024).

#### WHO Regional Office for Europe

WHO is the authority responsible for public health within the United Nations system. The WHO Regional Office for Europe (WHO/Europe) covers 53 countries, from the Atlantic to the Pacific oceans.

To support countries, WHO/Europe seeks to deliver a new vision for health, building a pan-European culture of health, where health and well-being goals guide public and private decision-making, and everyone can make healthy choices. WHO/ Europe aims to inspire and support all its Member States to improve the health of their populations at all ages. WHO/Europe does this by providing a roadmap for the Region's future to better health; ensuring health security in the face of emergencies and other threats to health; empowering people and increasing health behaviour insights; supporting health transformation at all levels of health systems; and by leveraging strategic partnerships for better health.

#### European Programme of Work 'United Action for Better Health in Europe'

The European Programme of Work (EPW) sets out a vision of how the WHO Regional Office for Europe can better support countries in our region in meeting citizens' expectations about health.

The social, political, economic and health landscape in the WHO European Region is changing. United action for better health is the new vision that aims to support countries in these changing times. "United", because partnership is an ethical duty and essential for success, and "action" because countries have stressed their wish to see WHO move from the "what" to the "how", exchanging knowledge to solve real problems. The WHO European Region's solidarity is a precious asset to be nurtured and preserved and, through the EPW, WHO/Europe supports countries as they work together to serve their citizens, learning from their challenges and successes.

#### The European Observatory on Health Systems and Policies

The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making so that countries can take more informed decisions to improve the health of their populations. It brings together a wide range of policymakers, academics and practitioners, drawing on their knowledge and experience to offer comprehensive and rigorous analysis of health systems in Europe. The Observatory is a partnership hosted by WHO/ Europe. Partners include the governments of Austria. Belgium, Finland, Ireland, Norway, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the Veneto Region of Italy (with Agenas); the European Commission; the French National Union of Health Insurance Funds (UNCAM), the Health Foundation; the London School of Economics and Political Science (LSE) and the London School of Hygiene & Tropical Medicine (LSHTM). The Observatory is based in Brussels with hubs in London (at LSE and LSHTM) and at the Berlin University of Technology.