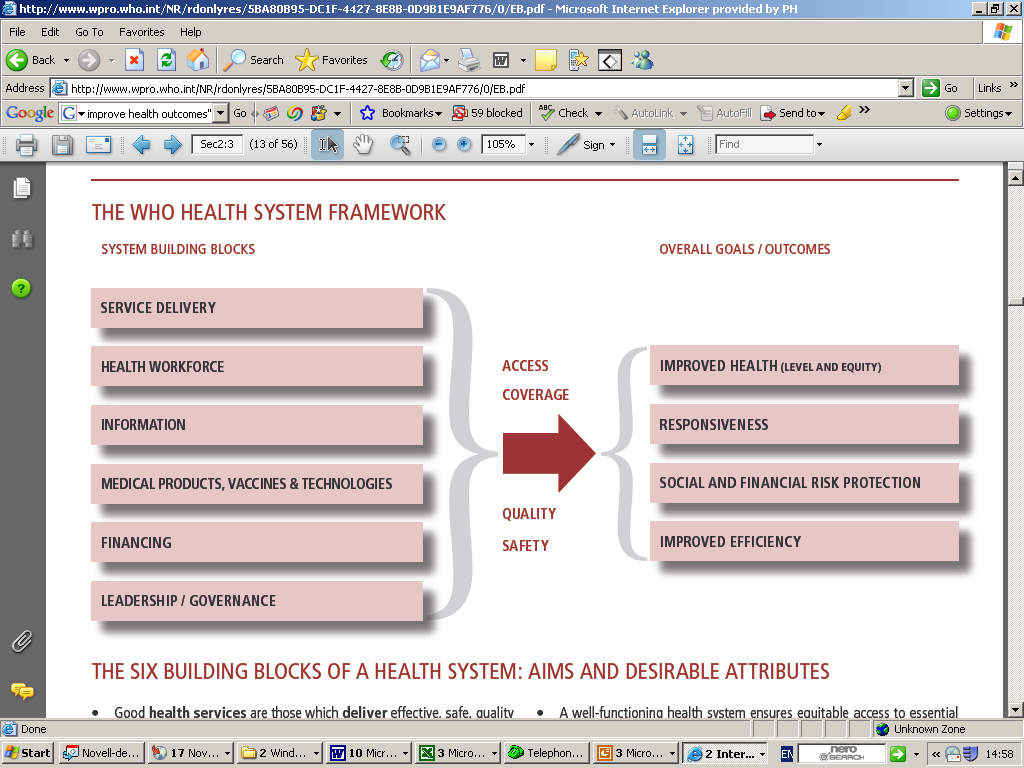
# Figures and tables

**Box 1: Domains of integration**, drawing on (Shigayeva and Coker, 2015, Groene and Garcia-Barbero, 2001, Briggs and Garner, 2006, Atun et al., 2010b, WHO, 2008, Atun et al., 2010a)

|  |
| --- |
| * + Integration across disease programmes (clinically related diseases)   + Integration across disease programmes (clinically different diseases), for example:     - Integration across high burden conditions (e.g. HIV, malaria, TB) to reduce impact of co-infections   + Integration between vertical (disease-specific) and horizontal (system-wide) programmes, which may involve:     - Integration of interventions within a ‘building block’ of the health system (e.g. integrated staff training, financial and organisational management etc.)     - Integration across one or more building blocks of the health system (e.g. human resource policies and governance initiatives)     - Integration across ‘service functions’: of inputs, of different levels of service delivery, of management and operational decisions and technology   + Integration across public health programmes and health service interventions, for example:     - integration between MNCH, family planning, through trained community health workers, and health promotion.   + Integration across activities in the health systems and other sectors (e.g. treatment combined with educational interventions and community mobilisation) |

**Figure 1: Health systems ‘building block’ framework**



Source: **(WHO, 2007)**

**Figure 2. Study flow diagram**

**Included**

**Eligibility**

**Screening**

**Identification**

**11,057** Records identified through data base searching

Number of duplicates removed 3,441

7,616 Records screened by title and abstract

Records excluded

(n=7,276)

Full-text articles assessed for eligibility

(n=340)

Studies included in the review (n=**153, in 150 papers**)

Full-text articles excluded (n=185)

**Table 1: Cross-cutting themes: “+” = facilitator, “-“ = barrier**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cross-cutting theme | Subtheme | +/- | Generalisability | Illustrative references | Recommendations |
| **Collaboration/ coordination/ relationships/ links** | Strong relationships between providers and stakeholders | +- | Strong: range of settings and programmes | (Dodds et al., 2004, Odafe et al., 2013, UNAIDS, 2011) | Programme design and staffing should allow sufficient opportunity to build formal and informal linkages and ensure patients well informed: named coordinators may be beneficial in certain circumstances and for complex needs |
|  | Strong links, communication and collaboration between providers. | +- | Strong: range of settings and programmes | (Andersen et al., 2003, Bouis et al., 2007, Feingold and Slammon, 1993) |
|  | Coordination and case management of individual’s care – including coordination/navigation of care by an identified person (coordinator/advocate/nurse practitioner) | +- | Moderate: Particularly for complex needs around mental health or substance abuse, high income settings | (Feingold and Slammon, 1993, Finkelstein et al., 2011) |
|  | Information sharing between staff/providers – including regulatory barriers to info sharing | +- | Moderate: several papers, | (Lombard et al., 2009, Inouye et al., 2011, Mwanahamuntu et al., 2011) |
|  | Information for patients (including accounting for cultural issues) | +- | Strong: range of settings and programmes | (Odafe et al., 2013, Khozaim et al., 2014, Ibrahim et al., 2009) |
| **Health workers: trained, available, multidisciplinary, motivated, incentivised** | Availability of human resources including specialist staff | +- | Strong: range of settings and programmes | (Egan et al., 2011, Edwards et al., 2015, Kumakech et al., 2015, Wood, 2008), | Resourcing should ensure adequate staff from the necessary disciplines, plus training and support as appropriate |
|  | Staff education, training, expertise, skills and experience including ongoing support, supervision and training | +- | Strong: range of settings and programmes | (Altice et al., 2004, Anderson et al., 2015, Hasin et al., 2013, Horo et al., 2012, Huchko et al., 2011, Ibrahim et al., 2009, Khozaim et al., 2014, Kieran et al., 2011, Martin et al., 2014, Moon et al., 2012, Nyabera et al., 2011, Odafe et al., 2013, Ramogola-Masire et al., 2012, Clanon et al., 2005, Kotwani et al., 2014) |
|  | Multidisciplinary teams | + | Strong: range of settings and programmes | (Edwards et al., 2015, Kumakech et al., 2015, Wood, 2008) |
|  | Staff culture, interest, awareness, enthusiasm – ie whether or not the staff are motivated and want to engage | +- | Moderate: several papers, mostly US Substance Abuse | (Cheever et al., 2011, Curran et al., 2011) |
|  | Financial incentives to take part (adopt models and training) | + | Weak: very limited number of papers | (Mwanahamuntu et al., 2011, Turner et al., 2005, Rothman et al., 2007) |
| **Institutional structures and infrastructure including financial resources and medical supplies** | Location, setting (this includes both accessibility and appropriateness) | +- | Strong: range of settings and programmes | (Rothman et al., 2007, Kumakech et al., 2015, Dillard et al., 2010) | Careful consideration should be given to location(s), according to patient needs and circumstances |
|  | funding to set up and sustain services | +- | Moderate: range of settings and programmes but limited number of papers | (Jonsson et al., 2011, Moon et al., 2012, Stringari-Murray et al., 2003, Hennessy et al., 2007, McCarthy et al., 1992) |
|  | Financing arrangements enabling access to (rather than being a barrier to) integrated services – according to country context e.g. insurance, free care | +- | Moderate: range of programmes mainly but not exclusively US, | (Bouis et al., 2007, Finkelstein et al., 2011, Stringari-Murray et al., 2003) |
|  | Drug supply and availability;  equipment | +- | Moderate: several papers, range of settings | (Cheever et al., 2011, Finkelstein et al., 2011, Grenfell et al., 2012) |
| **Leadership/ stewardship/ Procedures / organisational culture** | Leadership, Lesson-learning and scale up, commitment and buy in from senior leaders , Buy in / acceptance of model and treatment from front line managers and staff, Resistance to change - presence or lack | +- | Strong: range of settings and programmes | (Hoffman et al., 2004, Moon et al., 2012, UNAIDS, 2011, Mwanahamuntu et al., 2011) | An important precondition for implementing integration is the presence of high level commitment from the start, effective management structures and processes that are able to adapt and buy-in from front line users.  Promoting change of organisational culture through dialogue, training, relationship building and appropriate use of knowledge and protocols will be important.  Constant adaptation and lesson learning is essential to ensure that integration policy is fit for purpose.(this can be through monitoring and evaluation, reflection or other tools for systems (rather than programme) assessment) |
|  | Structural & programme design facilitators & barriers: In/flexibility, availability, algorithms, checklists, Tools, guidelines and protocols including for referral and follow up;  treatment regimen (simple vs complex); | +- | Moderate: several papers, range of settings | (Curran et al., 2011, Rothman et al., 2007, Adeyemi et al., 2009, Clanon et al., 2005, Edwards et al., 2015, Goodroad et al., 2010, Kobayashi and Standridge, 2000, Kumakech et al., 2015, Odafe et al., 2013, UNAIDS, 2011, Adams et al., 2011) |
|  | Techniques & procedures/treatment (having or not having access to appropriate, timely, techniques) | +- | Strong: range of programmes and settings | (Turner et al., 2005, Tran et al., 2012) |
|  | Different organisational culture (e.g. “behavioural vs medical”) | - | Weak: limited number of studies, mainly from USA in regards to mental health or substance misuse | (Cheever et al., 2011) |

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