POLICY BRIEF

ASEAN mutual recognition arrangements for doctors, dentists and nurses

(With brief case studies from Cambodia and Thailand)

Cha-aim Pachanee
Vannarath Te
Yumiko Miyashita
Kristy Law
Anon Khunakorncharatphong
Peter S Hill
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Associate Professor Peter Hill and Dr Claire Brolan (SPH UQ) conceived this project, with the Association of Southeast Asian Nations (ASEAN) and Thai connections further developed by Dr Cha-aim Pachanee (IHPP).

The systematic review was led by Vannarath Te, Kristy Law and Dr Peter Hill (SPH UQ), building on an earlier analysis by Rachel Griffiths and Peter Annear (Nossal Institute for Global Health, The University of Melbourne). Dr Cha-aim Pachanee, Yumiko Miyashita and Anon Khunakorncharatphong (IHPP) supplemented this with literature from the ASEAN Secretariat and the Thai Ministry of Public Health.

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Acronyms and abbreviations

ACC  Accreditation Committee of Cambodia
AEC  ASEAN Economic Community
AFAS  ASEAN Framework Agreement on Services
AJCC  ASEAN Joint Coordinating Committee
AJCCD  ASEAN Joint Coordinating Committee Dentistry
AJCCM  ASEAN Joint Coordinating Committee Medicine
AJCCN  ASEAN Joint Coordinating Committee Nursing
AMS  ASEAN Member State
AQF  ASEAN Qualification Framework
ASEAN  Association of Southeast Asian Nations
CCN  Cambodian Council of Nurses
CCS  Coordinating Committee on Services
CMC  Cambodian Midwives Council
CPD  continuing professional development
HSSWG  Healthcare Services Sectoral Working Group
IHPP  International Health Policy Program
JICA  Japan International Cooperation Agency
MCC  Medical Council of Cambodia
MoEYS  Ministry of Education, Youth and Sports (Cambodia)
MoH  Ministry of Health (Cambodia)
MoPH  Ministry of Public Health (Thailand)
MRA  mutual recognition arrangement
NCD  noncommunicable disease
OECD  Organisation for Economic Co-operation and Development
SPH UQ  School of Public Health at the University of Queensland
UHC  universal health coverage
WHO  World Health Organization
1. Policy brief

Mutual recognition arrangements (MRAs) facilitate trade in services by mutual recognition of authorization, licensing or certification of professional service suppliers obtained in one Association of Southeast Asian Nations (ASEAN) Member State (AMS) by another. MRAs across a range of professional services were originally proposed at the Seventh ASEAN Summit in Brunei Darussalam in November 2001 with the aim of facilitating the flow of professional services within ASEAN. Despite some delays, MRAs for health professionals were established in nursing in 2006 and medicine and dentistry in 2009. This was long before the establishment of an ASEAN Economic Community (AEC) in 2015, similar in concept and intent to the European Economic Community (ASEAN, 2017).

Medicine, dentistry and nursing are occupations where easier mobility, agreement on standards and qualifications and the promotion of best practices are crucial to regional development. Each health discipline has established an ASEAN Joint Coordinating Committee (AJCC), with biannual reporting by representatives of AMSs of progress against the MRA standards in health professional education, registration and licensing, and provisions to recognize the health professionals of other AMSs.

1.1 What is the problem?

While structural progress has been evident for each health discipline with the establishment of functioning AJCCs, health has chosen not to follow other professions in developing regional mechanisms such as a professional registry or secretariat. With governance essentially retained at state level, change is driven by domestic rather than regional perspectives, with varying progress in different states and professional disciplines (Sugiyarto & Agunias, 2014).
The implicit decision to not develop a more centralized governance structure with greater regional authority reflects some ambivalence between the desire to improve regional standards of health professional education and enhance registration and licensing processes in each AMS vis-à-vis the risks associated with the potential mobility of personnel. On the one hand, those AMSs whose education systems are still progressing to regional standards express concern that reaching those standards may trigger significant “brain drain” towards states with more advanced economies and better professional conditions and opportunities. On the other, more advanced AMSs wish to ensure that national professional standards are not compromised by more open recognition of foreign graduates. The forces contributing to these positions are a complex mix of unequal educational development, issues with standards governed by the health and education sectors and professional protectionism within AMSs.

Despite the potential significance of the ASEAN MRAs, there is limited literature available to provide critical analysis of the MRA process and progress (Te et al., 2018). The focus on mobility of health personnel within ASEAN also does not reflect the more significant problem of mobility beyond ASEAN to the United States of America (USA), Europe, the Middle East and Japan. The absence of any centralized facility to monitor health worker numbers, shortages and distribution within and across AMSs has limited the development of a regional workforce perspective that would complement national perspectives and inform ASEAN mechanisms in managing workforce issues (Arunanondchai & Fink, 2006).

1.2 What do we know (and not know) about viable options to address the problem?

Data collection and analysis from an ASEAN regional perspective

The primary concern is the lack of comprehensive knowledge that synthesizes ASEAN data and presents it in a regional framework. For health, the World Health Organization (WHO) Regional Offices for South-East Asia and the Western Pacific both aggregate human resources data from their regions, but neither cover ASEAN in its entirety, nor do they have the economic mandate that underpins ASEAN’s MRA commitments.
The ASEAN Healthcare Services website, officially launched in 2018 provides a first step in collation of human resources for health data from the AMSs for the region, and a base from which the development of an analytical facility serving ASEAN needs could proceed.

In the context of the Sustainable Development Goals (SDGs), with their commitment to both the implementation of universal health coverage (UHC) (SDG 3.8) and the recruitment, development and training of the health workforce (SDG 3.9), governments, professional councils and research funders have a shared responsibility to promote and fund focused research that provides better data on regional health workforces and their distribution.

Regional educational standards

The AJCCs have provided an important forum for the sharing of curricula content and competencies. There are clear differences across the disciplines in the level and nature of progress.

- The AJCC Dentistry (AJCCD) established ASEAN Dental Practice Standards in 2017. The minimum competency standards for dental undergraduate education and the accreditation standard for dental schools are projected for 2020. These are essential steps to free mobility.
- Under the AJCC Nursing (AJCCN), five AMSs have completed the review of their national competencies for nurses against the agreed five ASEAN nursing common core competencies, harmonizing their national competencies and encouraging the remaining members to complete this process (Healthcare Services Sectoral Working Group [HSSWG] Work Plan 2016–2025).
- For the AJCC Medicine (AJCCM), progress is less prescriptive, with national interests constraining progress on the part of AMSs, but for a range of different reasons. Although core regional competencies have not been proposed, the desire for enhanced educational standards across the region is shared by all AMSs.

Registration, licensing and mobility

With enhanced mobility being the ultimate end-point of the MRA process, the very limited current use of MRA mechanisms to enable registration of professionals moving between AMSs is of concern. Two issues compound this: first, the major trajectory for health professionals – particularly for
nurses, but also for doctors – is beyond AMSs to the USA, Europe, the Middle East and Japan. ASEAN MRAs are unlikely to influence this trend significantly. Second, while internal mobility within ASEAN is still relatively limited, a range of informal arrangements are the primary mechanisms employed, such as direct institution-to-institution arrangements, employment by external agencies, reclassification of nursing and medical positions as coordinating staff, or positions below their registered status in their countries of origin.

Formal bilateral agreements may also circumvent the requirement of the MRAs. The result is a significant underestimation of the total migrant workforce and the extent of current regional mobility.

For ASEAN medical professionals, however, temporary licensing provisions for the purpose of limited practice, training, research, visiting experts and humanitarian efforts have been an important step towards greater regional mobility and the monitoring of these movements (HSSWG Work Plan, 2016–2025).

1.3 Conclusions and recommendations

Data collection and analysis from an ASEAN regional perspective

- The accuracy and comprehensiveness of health workforce data is critical to both national and regional workforce management. The HSSWG should be further strengthened to allow collation and analysis of health workforce data on demand, distribution and mobility at an ASEAN regional level.

- Augmentation of the role of the HSSWG towards providing a centralized facility to monitor health worker numbers, shortages and distribution within and across AMSs would substantially enhance the contribution of ASEAN mechanisms in workforce issues.

- Given the regional benefits and risks of freer flow of health personnel, the WHO Regional Offices for South-East Asia and the Western Pacific should continue to support national data collection, and the Asia Pacific Observatory to promote further health systems and policy research on human resources for health across the region.
Setting regional educational standards

- Disparity in progress towards shared regional educational standards remains an obstacle to freer movement between AMSs. The AJCCs should continue to provide support towards achieving core competencies and shared curricular content through the strengthening of university networks, information-sharing and promotion of curricula initiatives at a regional level.
- English is the established language for accessing current research as well as the language for ASEAN regional and international communication. The continued teaching of English in the education of health professionals is crucial to enhance regional research and communication.

Registration, licensing and mobility

- With the concern on limited current utilization of the MRAs for the purposes of enhancing mobility across ASEAN, a deeper exploration is required of why MRA processes are not being used to enable this movement, together with a critical examination of mobility beyond the provisions of the MRAs. This needs to occur at both the national and regional levels, identifying the range of formal and informal mechanisms being utilized, and the reasons why they are sustained.
- Adaptation and development mechanisms to meet needs such as “temporary” licensing to allow research, education and professional observational exchanges should be continued, taking into consideration the impact of these initiatives on the continued implementation of the MRAs.
In 1997, AMSs championed an ASEAN Vision 2020, envisaging an ASEAN Economic Community (AEC) as a goal for the free flow of goods, services and investments within the region. With the AEC launched in 2015, Member countries have been participating in progressive trade liberalization.

The vision was shaped around a single market, allowing ASEAN states to compete equitably in the global economy. Despite the economic diversity across ASEAN, free flow of trade in services and skilled labour was identified as being ultimately integral to this development. To enable the economic integration of services, the ASEAN Economic Ministers signed an ASEAN Framework Agreement on Services (AFAS) on 15 December 1995, with the aim of achieving a free trade area in services by the year 2020. The AFAS also encourages ASEAN members to enter into agreements or arrangements to recognize education or experience requirements, or licenses that are granted, met or obtained in another ASEAN country.

Negotiations for trade in services under AFAS are conducted through the ASEAN Coordinating Committee on Services (CCS), established in January 1996. The CCS covers several sectoral working groups responsible for trade negotiations. Health has been cautious in entering the negotiations, with the HSSWG being established only in July 2003, seven years after the establishment of the CCS.

At the Seventh ASEAN Summit in Brunei Darussalam in November 2001, ASEAN leaders mandated the start of negotiations on MRAs to facilitate the flow of professional services under AFAS. However, it was not until after the signing of the Declaration of ASEAN Concord II (Bali Concord II) in Bali, Indonesia in October 2003 that a high-level task force was established to complete the negotiations on MRAs for major professional
services. This was aimed at assisting the freer movement of professionals, skilled labourers and talent by 2008 through the establishment of a “professional exchange” mechanism – an interim step towards the free flow of goods and services by 2020 envisaged in the Bali Concord II. For AMSs not yet ready for the implementation of the MRAs, an “ASEAN minus X” formula was devised to enable participation at a later stage. Under this principle, two or more countries may proceed with the agreed service sector liberalization without having to extend the concessions to non-participating countries.

Building on these broader political commitments for freer trade under AFAS, as mentioned above, health sectors of ASEAN member countries have also been interested in liberalization of trade in health services. Consequently, the sixth meeting of the HSSWG, held on 29 March – 1 April 2005 in Malaysia, concluded that the target for trade in health services among ASEAN countries should be for free flow for Mode 1 (cross-border supply) and Mode 2 (consumption abroad), and that Mode 3 (commercial presence) and Mode 4 (movement of natural persons) should be liberalized progressively to achieve free or freer flow of trade in services by 2010.

**ASEAN MRAs in health**

MRAs facilitate trade in services by mutual recognition of authorization, licensing or certification of professional service suppliers obtained in one AMS by other AMSs. The goal of the MRAs is to facilitate the flow of foreign professionals, taking into account relevant domestic regulations and market demand conditions. MRAs have been established in nursing (2006) and medicine and dentistry (2009) – occupations where easier mobility, agreement on standards and qualifications and the promotion of best practice were crucial to regional development. Enhanced linkages that would build capacity and continuing professional education are essential to these changes (Mendoza & Sugiyarto, 2017).

Some progress has been made, with each health discipline having established an AJCC. These are overseen and coordinated by the HSSWG under the ASEAN CCS (The ASEAN Secretariat, 2015). However, health has not developed the regional mechanisms that other professions have created to promote regional initiatives, such as a professional registry or secretariat, as noted by Mendoza and Sugiyarto (2017) (Table 1). Governance has essentially been retained at state level, with progress on the MRAs varying by states and professions (Sugiyarto & Agunias, 2014).
Recognition of foreign trained health professionals does not discriminate between ASEAN applicants and those from other nationalities (Tangcharoensathien et al., 2017). While AJCCs have been established to implement these MRAs, no substantial movement of health professionals under the MRAs has been reported. While mobility between ASEAN states is anecdotally reported – particularly for nurses – and mobility beyond ASEAN is substantial, there are no regionally available data on this activity beyond the MRAs. In general, there is limited peer-reviewed literature on the ASEAN MRAs, despite their potential significance (Te et al., 2018).

This working paper seeks to explore to what extent the MRAs for doctors, dentists and nurses are achieving their intended outcomes, and to identify the constraints to more rapid progress towards equitable regional development.

**Table 1: MRA implementing bodies and offices, by occupational grouping**

<table>
<thead>
<tr>
<th>Offices and bodies</th>
<th>MRAs on dental, medical and nursing services</th>
<th>MRAs on architectural and engineering services</th>
<th>MRAs on accountancy services</th>
<th>MRAs on tourism services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint coordinating committee or body</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Professional registry</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Secretariat</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>National level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory authority/certification board</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Monitoring committee/body</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Government central authority</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*Key: MRA – mutual recognition arrangement*  
*Source: Mendoza & Sugiyarto, 2017: p.7*
Health challenges across ASEAN

Despite disparate levels of development, AMSs are together facing the challenges of ageing populations and an increasing burden of noncommunicable and chronic diseases. During 1990–2016, ASEAN has seen an increasing trend of noncommunicable diseases (NCDs). In 2016, NCDs caused 9.1 and 11.9 million deaths in the WHO South-East Asia and Western Pacific Regions, respectively. The current health systems therefore need to adapt the structures that have enabled them to respond to the acute demands of communicable diseases to these chronic challenges (Chongsuvivatwong et al., 2011; Tan et al., 2018).

The attention of AMSs is increasingly focused on responses that will achieve the SDGs (United Nations, 2015) with health targets integral to that success. The target of UHC (SDG 3.8) is currently marked by different levels of progress among ASEAN states, with successes in Malaysia, Singapore, and Thailand informing developments in countries such as Cambodia and Lao People’s Democratic Republic (Van Minh et al., 2014). That recognized excellence in health care – particularly surgical care provided in Malaysia, Singapore and Thailand – is driving international demand for treatment through medical tourism at much lower costs than in other developed countries. This has brought some increased mobility for regional health workers who can provide a cultural and linguistic interface for services to international patients (Arunanondchai & Fink, 2006; Chongsuvivatwong et al., 2011; Kanchanachitra et al., 2011; Lunt, Horsfall & Hanefeld, 2016; McCall, 2014).

Estimations for Thailand suggest that currently, despite growing medical tourism, it is increasing domestic demand that is driving internal – rather than international – medical migration. However, other popular destinations of medical tourism in ASEAN, namely Singapore and Malaysia, are proactively recruiting foreign doctors to make up for the shortage of local doctors. According to the Singapore Medical Council (2013) 1716 foreign-trained foreign medical practitioners were conditionally registered under provisions that do not require passing the national licensing examination. This represented close to 13% of Singapore’s 13,478 doctors (Suphanchaimat et al., 2013). Under bilateral agreements, Singapore has reciprocal arrangements to allow up to 30 Japanese doctors to practise with Japanese patients in Singapore, with equivalent arrangements in Japan. In Malaysia, 387 (out of 7327) medical officers and 238 (out of 1321) specialists were contracted from several countries in 2005 (Wibulpolprasert & Pengpaibon, 2003).
With ageing global populations combining with medical tourism and the export of personnel and services, the impact of health workforce migration and trade in health services is being experienced across ASEAN states (Dambisya et al., 2013; Dhillon, Clark & Kapp, 2010; Lautier, 2014). The Philippines, long an exporter of nursing staff, is now facing a shortage of skilled nurses and the resultant closure of some domestic facilities (Lorenzo et al., 2007; Masselink & Lee, 2013). Along with higher salaries, better standards of living and more rewarding working conditions and opportunities, increasing mobility through initiatives such as the MRAs have also recognized attendant risks, for both the countries of origin and their destinations (Dodani & LaPorte, 2005; Misau, Al-Sadat & Gerei, 2010; Mullan, 2005; Pylypa, 2013). In an increasingly globalized world, these changes have implications for human resources for health at national, regional and global levels, and ASEAN’s contribution to regional economic growth through the MRAs is increasingly significant.
This study has primarily used qualitative research methods to explore the ASEAN MRAs – a systematic narrative literature review, documentary analysis and key informant interviews to gain insight into the current application of the MRAs for doctors, dentists and nurses in ASEAN states, with particular attention to experience gained in Cambodia and Thailand.

**Systematic narrative review**

The systematic narrative review followed the RAMESES guidelines (Wong et al., 2013), informed by other qualitative research approaches applied to international health and development policy analyses (Mays, Pope & Popay, 2005; Snilstveit, Oliver & Vojtkova, 2012; Thomas & Harden, 2008). The review was undertaken in April 2017 and examined English language articles published between 2005 and 2016. Eight databases were searched (EMBASE; PubMed; Web of Science; Research Library in ProQuest; Econlit, CINAHL and Medline in EBSCOhost; and Scopus) using key search terms linked to the ASEAN MRAs, workforce, and mobility. These search terms and the search results are detailed in Appendix 1. This was complemented by a search of the grey literature, focusing on ASEAN and health ministry websites for the region. The search strategy for the systematic review has been further detailed in a recent publication in *Health Policy and Planning* (Te et al., 2018).

**Country case studies**

Case studies in Cambodia and Thailand were used to provide more concrete insights into the current implementation of the ASEAN MRAs. Cambodia was selected because of its socioeconomic challenges and its steep trajectory in re-establishing its education sector and developing registration systems for its health professionals. Thailand presents a
contrasting scenario, with established systems and processes for health professional registration and its engagement with medical tourism driving issues around health professional mobility. With shared borders and a history of development collaboration, relationships between health and education in these two ASEAN states also provide current relevant insights. In Cambodia, 16 interviews were undertaken with participants from the public and private health and education sectors and international consultants directly involved in the education or registration of doctors, dentists and nurses. In Thailand, data were obtained from a review of the published peer-reviewed literature and documentary analysis of policy and regulations, reports and communications identified from websites of the health professional councils, and informed by participant observation at the AJCC and the HSSWG meeting in January 2018 in Bangkok.

Data analysis

i. Systematic review

Narrative synthesis, consistent with the RAMESES guidelines (Wong et al., 2013), was used as the framework for review of the data and structuring of the narrative presentation. Of the 306 English language documents identified, 24 documents (12 peer-reviewed articles and 12 reports) were selected for review and analysis, and are listed in Appendix 2. These 24 papers were coded into descriptive themes following Thomas and Harden (2008).

Four main themes emerged from the systematic review for the presentation of the results:

- the role of the MRAs under the AEC;
- progress of the implementation of health-related MRAs;
- impact of the MRAs on domestic health systems and human resources for health; and
- barriers and challenges to the implementation of health-related MRAs.

The systematic review from which these findings have been drawn has been published (Te et al., 2018) but for this working paper the findings have been supplemented by literature reviews targeting the specific country case studies.
ii. Qualitative analysis

Key informant interviews were conducted for the country case studies in Cambodia and Thailand, and with representatives of the ASEAN MRA Secretariat. For each study, informants were purposively selected from the health and education sectors (both public and private), professional bodies and technical consultants with direct links to the MRA process. Interviews were semi-structured but followed a question guide developed for each study. Following informed consent, interviews were recorded, transcribed and manually coded, with a priori themes identified from the literature and emergent themes added to the frame (Thomas & Harden, 2008).

iii. Research ethics approval

For the Cambodian case study, ethics approval was obtained from the University of Queensland School of Public Health Research Ethics Committee (KL10012017) and from the Research Ethics Committee of the Cambodian Ministry of Health (F20942916). The Thai case study used policy data available in the public domain, and as such did not require an ethics approval process.
This section of the Working Paper explores the key findings identified through the systematic review, focusing on the MRAs at a regional level and framing the more granular exploration of the issues identified within the country case studies of Cambodia and Thailand.

**Key findings identified from the systematic review**

The findings from the systematic review have been presented under four themes, exploring their role under the AEC, progress on implementation of the health-related MRAs, their domestic impact in terms of systems and human resources for health, and the remaining barriers and challenges being faced (Te et al., 2018).

i. **The role of the MRAs under the ASEAN Economic Community**

The AEC combines free trade and economic agreements, but these do not currently comprise full economic integration. Unlike the European Economic Area, the AEC does not ensure “free” flow of skilled labour, but it does make labour movement within the region possible, while protecting AMS’ needs (Aungsuroch & Gunawan, 2015; Sugiyarto & Agunias, 2014; Wangchuk & Supanatsetakul, 2015).

ASEAN states are well-positioned economically to take advantage of the demographic dividend – the optimal combination of a growing working age population with a minimal dependent population – and a larger pool of skilled labour across the region will be needed to take advantage of this window of opportunity (Antonio, 2015). However, while the MRAs provide a framework for minimum standards of qualifications for doctors and nurses, based on both national qualification frameworks and the ASEAN Qualification Framework (AQF) (Efendi et al., 2018; Sugiyarto
& Agunias, 2014), they do not provide a mechanism for unrestricted mobility between AMSs (Chia, 2011; Papademetriou et al., 2015; USITC, 2010). Despite progress in these areas, the quality of health professional education remains uneven across the ASEAN states, and the MRAs are not the only determinant of mobility, particularly as recruitment of foreign workers is largely driven by the private sector rather than the AMS governments (ADB & ILO, 2014; Sugiyarto & Agunias, 2014).

ii. Progress of implementation of the health-related MRAs
In terms of structural change, the establishment of AJCCs for each of the three health professions – medicine, dentistry and nursing – is a significant marker of progress. Representatives from the relevant professional regulatory authorities of each AMS meet three times a year, reporting changes in policy, procedures and practice around the registration and licensing of health professionals (Mendoza & Sugiyarto, 2017). In terms of legislative change, MRA principles are increasingly being incorporated into national legislation, most recently in Myanmar, Brunei and Singapore. However, additional requirements to the MRAs persist in a number of AMSs, particularly related to language, duration of training and requirements for licensure examinations (Mendoza & Sugiyarto, 2017) (Table 2). Core competencies and accreditation guidelines for education are also being impacted. All AMSs now have nursing curricula meeting the requirements of a Bachelor’s degree, a requirement for the Nursing MRA (SEAMEO TROPMED Network, 2016). For medicine, standards for education, registration and licensing demonstrate extensive diversity, with pre-service education ranging from five to eight years, as the ASEAN website and recent studies reflect (Kittrakulrat et al., 2014). English is increasingly becoming a regional lingua franca for medicine, with positive consequences for communication and research literacy. However, despite these formal changes, evidence to date seems to suggest that mobility within the region largely circumvents the mechanisms of the MRAs. Mendoza and Sugiyarto in 2017 indicated that no physician or dentist had migrated within ASEAN using the MRA provisions. For nursing, the situation is more explicit: some 5400 nurses from AMSs have been registered in Singapore without invoking the MRA on nursing (Fukunaga, 2015).
### Table 2: Number of ASEAN countries with additional requirements, by occupation

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Medical</th>
<th>Dental</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice limited to specialists</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Local language requirement</td>
<td>6</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>English language requirement</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Degree must be earned from a recognized or accredited institution</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minimum years of study</td>
<td>0</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Must pass national licensure exam</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

*Note: Local language requirements, both in the medical and dental fields, are applicable for Viet Nam, although the requirement is conditional and applies only if the practitioner cannot work with an interpreter.*

*Source: Mendoza & Sugiyarto, 2017: p.28*

### iii. Impact of the MRAs on domestic health systems and human resources for health

Advantages in economic gains from liberalization of health-care markets need to be balanced against other health system considerations and the need to maintain effective sectoral regulation, including for the workforce (Chongsuvivatwong et al., 2011; Dee, 2013). Both medical tourism and the exponential trade in health services, particularly in the private sector, confirm concerns around increasing health professional migration within the region (and beyond) and between the public and private sectors, with nursing a particular issue (Kanchanachitra et al., 2011; Kittrakulrat et al., 2014).

Progress on the MRAs has contributed to the drive to improve health professional education and professional registration and licensing, coupled with the commitment to continuing professional education. The potential offered by the AEC reinforces the need for education that meets regional standards, particularly where education specifically targets outmigration to international markets – as is the case of the Philippines, but increasingly in other AMSs as well (Kanchanachitra et al., 2011). Coordination of health professional graduating numbers with level and distribution of demand is also critical and the AJCCs provide one forum where this could be discussed. The MRA commitment to harmonization of curricula and the regional educational initiatives have the potential
to improve both education and health service outcomes regionally (Arunanondchai & Fink, 2006; Kittrakulrat et al., 2014; Mendoza & Sugiyarto, 2017; SEAMEO TROPMED Network, 2016).

iv. Barriers and challenges to the implementation of health-related MRAs

Despite the progress identified above, barriers and obstacles to progress persist. Individual AMSs, while accepting regional advantages of mutual recognition of health professionals, are cautious around any change that may be perceived to compromise current domestic standards. The current structure of the MRAs vests authority in the AMSs rather than centralizing responsibility in an ASEAN agency (Sugiyarto & Agunias, 2014). This is partly compensated for by the AQF, which provides a common benchmark against which to align national regulatory frameworks. While the regional advantages are clear, the implicit requirements of the AQF may be seen as threatening to some members of national professional associations (Sugiyarto & Agunias, 2014). This may be evident in protectionist responses to implementation as current members of professional bodies resist implementation (Papademetriou et al., 2015; Supakankunti & Herberholz, 2012).

The Indonesian Medical Association, for example, concerned at the potential of foreign health professionals to compete with locally trained doctors, has resisted changes to its medical curricula that would facilitate transnational recognition (McCall, 2014). Similarly, national regulation provides obstacles to most overseas trained nurses taking up positions in Indonesia (Fukunaga, 2015). With Indonesia and Malaysia using different dialects of Bahasa Melayu, which is also commonly used in Singapore, the Indonesian government is reluctant to facilitate outmigration of its most competent doctors to neighbouring AMSs (McCall, 2014). Ironically, though the Philippines consciously prepares nursing staff for emigration, and offers no constraints to medical outmigration (with institutions also retraining them as nurses to enhance their international mobility), there are clear constitutional constraints to allowing foreign doctors to fill Philippine professional posts (Aldaba, 2013; McCall, 2014).

Professional medical and nursing qualifications present specific obstacles. In addition to a medical licence from the state in which they graduate, doctors seeking to work in Thailand also require a temporary or permanent medical licence from the Medical Council of Thailand, with competence in the Thai language necessary to pass the National Medical
License Examination (Wangchuk & Supanatsetakul, 2015). Although English is the working language of ASEAN, it is not sufficiently used in common communication to displace local language dominance in both practice and licensing requirements (Gough, 2013; Mendoza & Sugiyarto, 2017).

Many categories of nurses in AMSs fail to meet the current bachelor’s degree ASEAN MRA requirement, disadvantaging Indonesian and Cambodian nurses, among others (Aungsuroch & Gunawan, 2015). The situation for midwives in Cambodia is a similar anomaly, with no MRA covering midwifery as distinct from nursing. As nurses and midwives in many ASEAN states are covered by the same council, it is unclear whether the Cambodian Council of Midwives could be represented in the AJCCN (Kanchanachitra et al., 2011), or what mechanism would be appropriate to recognize midwives from ASEAN states seeking to migrate to Cambodia.

There is also persistent disparity among the regulatory processes within AMSs. Some lack institutional capacity, with limited funding and intersectoral agreement impacting on data collection, institutional memory and stability of core staff dealing with MRAs (Mendoza & Sugiyarto, 2017). Local legislative response to MRA issues is often slow, given the limited political motivation to respond, limited stewardship capacity and a lack of civil society pressure for change (Sugiyarto & Agunias, 2014).

Finally, health workforce data are suboptimal in many AMSs and gaps are particularly evident in Cambodia, Lao People’s Democratic Republic, Myanmar and Viet Nam, creating challenges for policy-making and planning. Data from private educational and health facilities are often not available, and this combines with workforce data limitations to constrain the monitoring of MRA impact on either workforces or health status. Augmentation of the role of the AJCCs to provide a centralized facility to monitor health worker numbers, shortages and distribution within and across AMSs would substantially enhance the contribution of ASEAN mechanisms to workforce issues (Arunanondchai & Fink, 2006).

Key findings identified from country case studies

i. Cambodia

The health sector in Cambodia has seen exponential changes since the 1991 Paris Peace Accords brought an end to the destruction under the Khmer Rouge and more than a decade of United Nations’ sanctions. The health
sector reforms of the mid-1990s extended health coverage to most of the population. The Cambodian Ministry of Health has worked to develop a competent workforce and enhance essential and complementary health services across the country.

The Third Health Workforce Development Plan 2015–2020 (MoH Cambodia, 2016) deals with key issues covered by the MRA – educational standards, the quality of education and whether clinical exposure is sufficient and appropriate, and the challenges of an expanding and diverse health workforce, particularly in terms of registration and regulation. In exploring these issues, however, the Plan does not refer specifically to ASEAN or the MRA processes; the issues may be shared across the region, but the “ownership” of these problems, and their solution, is framed locally. In key informant interviews, however, it is clear that ASEAN states, in particular Thailand, Viet Nam and the Philippines, are seen as frames of reference.

**Registration in Cambodia and the MRAs**

With introduction of the law on Regulation of Health Practitioners (2016), registration is a shared responsibility between the Ministry of Education, Youth and Sport (MoEYS) and the Ministry of Health (MoH). The universities – both public and private – that provide education for health professionals are accountable to the same combined authority, the Accreditation Committee of Cambodia (ACC). The Medical Council of Cambodia (MCC), Dental Council of Cambodia, Cambodian Midwives Council (CMC), Cambodian Council of Nurses (CCN) and the Pharmacy Council of Cambodia define the scope and competencies required for their professions (Amaro, 2016; WPRO, 2014), though their simultaneous commitment to represent the interests of their members creates some conflicts of interest. The capacity of councils to implement their roles also varies (Clarke et al., 2016).

Consistent with the MRAs, registration is now a requirement for all doctors, dentists and nurses, with a requirement for continuing professional development (CPD) – prospectively intended to be linked to renewal of licenses. Fines for failure to comply are substantial, though the capacity to monitor implementation and enforce the law is limited (Amaro, 2016). The synergies between CPD and registration, with the former seen as a tangible immediate benefit of the latter, have engaged a range of professional bodies, with implications for ongoing maintenance of standards (Ven, 2016).
Health professional education in Cambodia and the MRAs

The major institutions educating doctors and dentists and providing degree courses for nurses are concentrated in Phnom Penh. Training for all disciplines requires substantial clinical exposure, with a strong hospital focus for medical and nursing students, and dental clinic opportunities for dental students. Limited clinical placements were reported for all, with some concerns around the quality of clinical teaching in some sites. The MoH has sought to ensure clinical standards through several mechanisms, including retaining a longer curriculum duration for medicine and dentistry than their ASEAN counterparts, and driving the introduction of national entry and exit examinations for medicine, dentistry and degree students in nursing. The National Examination Committee manages the National Exit Examination. The committee combines representatives of the MoH, MoEYS, ACC and public and private education providers, chaired by the Council of Ministers. The approach to reform of curricula is conservative, and there is some tension between the public and private education sectors. For dentistry, the private universities are exploring curriculum options with international networks; for nursing, bilateral development agencies have supported curriculum review and development of a Bachelor’s degree course, with the Japanese International Cooperation Agency (JICA) funding 30 senior nurses to complete their Bachelor’s degree in Thailand.

Although midwifery education is a focus area for successful national strategies to reduce maternal and neonatal mortality (Ir et al., 2015), midwifery in Cambodia finds itself in a difficult position in relation to the MRAs, as the CMC is distinct from the CCN. With the MRAs covering nursing, and other AMS’ models of midwifery training locating midwifery as a specific component of nursing, it is unclear how the CMC might be represented into the AJCCN, and what the role of the CMC would be for midwives wishing to enter Cambodia under the MRA. In 2014, the AJCCN determined that it would not separately address midwifery at this time.

Cambodian health professionals, the MRAs and mobility

There is currently no record of Cambodian physicians or dentists migrating under the MRA provisions, though informants were aware of limited numbers of Cambodian graduates working internationally. Temporary work and educational experiences for doctors and medical students are reported as relatively easily arranged on an institution-to-institution basis, but without any documented recourse to the MRA.
The qualifications of 30 nurses now trained with JICA support would be recognized in the MRAs, though Thai language requirements may still represent an obstacle to Thai registration. Mobility of nurses within ASEAN is reported as relatively common, but given that their Cambodian qualifications do not meet ASEAN standards, the nurses do not provide direct professional care, but function as nursing assistants. With the growing presence of international health facilities in Cambodia, an increasing number of doctors and nurses are entering the country, but compliance with registration requirements has not been consistent. Enforcement of the new law may change this.

ii. Thailand

**Health system in Thailand**

The health system in Thailand has provided comprehensive primary health care across the country, linked to a network of referral hospitals and advanced tertiary institutions. The enactment of the National Health Act, B.E. 2550 (2007) was a major turning point in the Thai health system, expanding health goals to all sectors under the “All for Health” and “Health for All” approach (Thailand Health Profile, 2008–2010).

There are ten components of the health system under this Act:

1. Health policy and strategy system
2. Health promotion system
3. System for prevention and control of diseases and health hazards
4. System of public health services and quality control
5. System for promotion, support, utilization and development of local health wisdom, including Thai traditional, indigenous and other alternative medicine
6. Consumer protection system
7. Health knowledge generation and dissemination
8. Health information dissemination system
9. System for production and development of public health personnel
10. Health financing system

The Ministry of Public Health (MoPH) is the principal governance mechanism for the Thai national health system, with public health agencies at all levels across the country. Other ministries and offices, including the National Economic and Social Development Board, Ministry of Interior, Ministry of Education, Ministry of Social Development and Human Security and Ministry of Labour also play their roles in health-
related activities. In addition, there are other independent mechanisms taking part in public health activities. These include:

- the Thai Health Promotion Foundation (ThaiHealth), responsible for management of the Health Promotion Fund to support health promotion activities in all dimensions;
- the National Health Security Office, responsible for the management of the National Health Security Fund to provide essential health services to the people;
- the Health Systems Research Institute, responsible for the management of funds for knowledge generation and management;
- the Healthcare Accreditation Institute, responsible for the promotion and support of health service quality development in hospitals and other health facilities; and
- the Office of the National Health Commission, responsible for making recommendations on health policies and strategies to the government and all sectors of society.

In 2002, the Thai government introduced its UHC scheme covering the entire population and largely financed from general taxation paid through three major public health insurance schemes (Thaiprayoon & Wibulpolprasert, 2017). However, the relatively low quality of services, lengthy waiting times due to an increasing number of patients – now including all residents of Thailand – and the shortage of health-care workers remain as challenges. With a growing economy in a pluralist health-care system, private health services provide an alternative for those who are prepared to pay or covered by private health insurance, particularly for secondary health care. There are now over 300 private hospitals in Thailand. While many private hospitals join the UHC scheme (especially the Social Security Scheme for employees in the private and public sectors), some private hospitals – particularly “5 star” hospitals targeting the wealthy, who can afford technologically advanced and high-quality health care – remain independent of the public scheme. The expansion of this private sector, as a directly funded alternative to the UHC safety net, has implications for the health workforce both with internal public–private migration and potential migration to meet international demand.

**Medical tourism**

For more than 15 years, the Thai government has promoted medical tourism as a national economic strategy to obtain foreign currency.
Coupled with the efforts of private hospitals to develop a new customer base, this has successfully propelled Thailand as a top medical hub in Asia, with 53 Joint Commission International (JCI)-accredited hospitals and 2.35 million foreign patients in 2014 (Board of Investment, 2016). The market value of Thai medical tourism was estimated at US$ 3 billion in 2015 (Board of Investment, 2017). Under the Thailand 4.0 development plan and new Medical Hub Policy 2016–2025, medical tourism has been further promoted as one of the 10 key strategic growth engines.

The benefit to Thailand is not only in the acquisition of foreign currency, but also in generating increasing employment for health personnel, which staves off the financial incentives for brain drain. In fact, the number and percentage of Thai doctors who emigrated to Organisation for Economic Co-operation and Development (OECD) countries decreased from 2145 (14.4%) in 1991 to 1709 (6.1%) in 2010–2011 (OECD, 2015). The international market, with its premium (local) pricing, does create a potential risk for internal brain drain of specialist doctors from the public to the private sector, increasing the cost of treatment both in private and public hospitals and leading to the development of a two-tier health-care system (NaRanong & NaRanong, 2011; Pocock, 2011).

There is no hard evidence on the impact of foreign patients on internal brain drain of doctors. Pachanee and Wibulpolprasert (2006) estimated that 176 – 303 additional doctors in the private sector would be required to service foreign patients by 2015, while servicing Thai patients in general would need an additional 1891 – 2175 doctors, of which around 40% (756 – 870) would be used to meet the increased demand from Thai patients in the private sector. This suggested that the major contributing factor to the internal brain drain of doctors was not the demand from foreign patients, but increasing demand from Thai patients. However, NaRanong and NaRanong (2011) suggested that this underestimated the workplace demand for foreign patients, given that doctors needed to spend more time for consultations with foreign patients than with Thai patients. Suggestions have been made that certified foreign doctors provide medical services to foreign patients without having to take a medical certification exam, with its requirement for competence in the Thai language. This has not been adopted, though temporary registration may provide an alternative.

From a business perspective, private hospitals also have a growing demand for foreign doctors and nurses who understand the culture and language of their foreign patients. Anecdotally, there has been an increase
in foreign nurses and doctors working in private hospitals in Thailand; the registration issues have been circumvented by limiting their roles to coordination. Nurses act as coordinators or interpreters in collaboration with Thai registered nurses, with foreign doctors filling similar coordination roles (Wongboonsin, Aungsuroch & Hatsukano, 2017). The lack of a requirement for registration means there are no data available for this category of health staff in terms of numbers or profiles, nationality, specialty, years in Thailand and the reason they came to Thailand.

**Supply and demand of health professionals in Thailand**

The population density of doctors, nurses and midwives in Thailand reached 2.76 per 1000 population in 2015 (WHO, 2017), achieving the threshold of 2.28 per 1000 population that has been defined as adequate, but still below the SDG index threshold of 4.45 per 1000 population (WHO, 2016). The ratio of doctors per 1000 population was 0.47 in 2015, while Singapore, Brunei, Malaysia, and the Philippines exceeded 1.0 (WHO, 2018). The average for OECD countries is 3.2 doctors per 1000 population (OECD, 2015).

Currently, Thailand produces around 1900 doctors annually through 18 public medical schools and one private medical school. In 2013, Suphanchaimat et al. estimated that the number of doctors in active clinical service would rise from around 33 500 in 2012 to around 47 000 by 2020, when the national goals of 0.67 doctors to 1000 population proposed by the Seventh National Conference on Medical Education would be achieved. By 2028, this was expected to reach 60 000, an estimated 0.82 doctors per 1000 population. Geographical maldistribution remains another substantive issue, with the MoPH survey finding the physician density at 1:565 in Bangkok, where one third of doctors worked, but only 1:2870 in the poorest served region in the North-East (Faramnuayphol, Ekachampaka & Wattanamano, 2011). Internal shifts between the public and private sectors are increasingly important – arguably more than internationally – but are clearly sensitive to economic drivers. The proportion of doctors in the public sector declined from 93.2% in 1971 to 82.9% in 2009, while that in private sector rose from 6.7% to 17.1% during the same period. The proportion of nurses in the public versus private sector also sustained the same shift as for doctors, and in 2009 settled at 89.3% in the public sector compared to 10.7% in the private sector (Faramnuayphol, Ekachampaka & Wattanamano, 2011).
In 2012, there were 52 public and 26 private nursing schools that maintain an annual production capacity of 9000–10 000 nurses and estimated to reach the national target of 2.5 nurses to 1000 population by 2017 (Jongudomsuk et al., 2015). The ageing nursing workforce, high turnover rate and low number of new entry-level nurses continue to be factors that work against this growth (Sawaengdee et al., 2016). While Thailand has not developed a policy of nursing education that targets outmigration, the increasing introduction of the English language in private nursing schools is strategic in developing the number of nurses who can seek employment in foreign countries, as well as working with international patients in Thailand (Matsuno, 2009; Tangcharoensathien et al., 2017).

**Registration and licensing of foreign doctors in Thailand**

In 1987, the Thai Medical Council (TMC) required foreign doctors to pass the national exams to secure their registration and license to practice. The fact that the examination was in the Thai language resulted in a dramatic reduction in the number of registered foreign doctors (Wibulpolprasert et al., 2004). In 2015, a decision was taken to frame almost all questions in the written exams in English, with the exception of questions associated with Thai law or forensic medicine. The clinical skill test – given that it tests communication with and examination of Thai patients – continues to be conducted in the Thai language (Wangchuk & Supanatsetakul, 2015). Under the TMC, the process of acquiring full registration for foreign doctors requires them to register as a member of the TMC, have graduated from a medical school recognized by the TMC and hold a valid license to practise from their country of origin. As of November 2018, the TMC recognizes only 13 medical schools in ASEAN countries – nine in the Philippines and four in Malaysia. No medical schools in Singapore have yet been recognized (The Medical Council of Thailand, 2018).

While most of the AMSs require only a one-step licensing exam, foreign applicants must pass all three parts of the National Licensing Examination of Thailand (Kittrakulrat, 2014). Two of the three parts of the medical licensing examination are conducted in English: Part 1 (pre-clinical knowledge) and Part 2 (clinical knowledge). The final component, Part 3 (clinical skills), is conducted only in the Thai language. Clinical postgraduate medical training also requires a Thai medical license (Wangchuk & Supanatsetakul, 2015). Given the hurdle of Thai language acquisition, few foreign doctors or nurses have completed the requirements to secure registration in Thailand. From 1946 to date, 212 foreign doctors (166 male and 46 female) were registered from 21
countries. Ninety doctors have migrated from the USA, 37 from the United Kingdom and 24 from the Philippines. Apart from the Philippines, only one doctor from Singapore has been registered from the AMSs (Medical Council of Thailand, 2018). However, in the two decades since 1985, only seven foreign doctors were able to pass the examination (Arunanondchaisai & Fink, 2006). For nurses, all components of the examination for the nursing license, as well as the continuing education required for relicensing every five years, are conducted in Thai. No foreign nurses with foreign licenses are reported to be working as a nurse (Fukunaga, 2015; Wongboonsin, Aungsuroch & Hatsukano, 2017), and recent trainees from Cambodia who have completed Thai nursing degrees would require Thai language skills to seek registration (Wongboonsin, Aungsuroch & Hatsukano, 2017).

Temporary licensing has been devised to enable foreign doctors to engage in specific circumstances such as research, new medical technology demonstration or for humanitarian reasons, and provides supervised practice for up to one year only at a government hospital. Independent medical practice is not authorized. Ten foreign doctors were given temporary licences in 2017.
With the health MRAs now nearing 20 years since their initiation, and the AEC entering its fourth year, it is appropriate to reflect on the developments to date. The most conspicuous progress has been structural and procedural, with the creation of the AJCCs providing a locus for information-sharing and reporting of progress. The structure provides an ASEAN forum for exchanges on health professionals, but stops short of the regional mechanisms that have been devised by other professions to establish regional registries or secretariats with regional oversight, which have enhanced the consistency of educational standards and facilitated mobility. The retention of governance at member state level preserves state sovereignty but does not promote a regional vision of the health workforce, and does not have the authority to engage issues that affect the quality and distribution of that workforce across the AEC. While growth in the health sector across the AEC may currently be limited to particular areas, the economic potential for international health service provision is significant, particularly with the growth of private transnational providers and transborder demand through health tourism.

Evidence from the case studies suggests that the ASEAN MRAs provide useful benchmarks that are influencing curricula development across ASEAN, a positive contribution to regional standards. However, this process of development is not limited to the MRAs, or to ASEAN members; and international initiatives driven in the private education sector may be primarily motivated to enhance their market share, rather than meeting MRA objectives.

The issues of registration and mobility reflect the diversity in terms of social and economic development across ASEAN members. AMSs that have struggled to improve the size, quality and distribution of their health workforce are eager to enhance standards and procedures, but hesitant to reach a point where enhanced mobility promotes “brain drain” of its best qualified staff. Those AMSs whose workforce policies and regulation
have ensured the development of sufficient professionals to meet needs and the guarantee of health system quality delivery see little advantage in facilitating mobility to health staff from other ASEAN states. Informal and alternative mechanisms for health provider migration within ASEAN dominate, with the MRA processes not accounting for the bulk of known migrations. In practice, despite the energy invested in the MRA mechanisms, they are currently bypassed, and no longer retain their earlier promise of workforce control. Ironically, mobility, as it currently stands for both doctors and nurses, is directed beyond ASEAN to high-income countries, viz. the USA, Europe, the Middle East and Japan.

Despite the potential significance of the ASEAN MRAs, there is limited literature available to provide critical analyses of the MRA processes and progress (Te et al., 2018). The absence of any centralized facility to monitor health worker numbers, shortages and distribution within and across AMSs has limited the development of a regional workforce perspective that would complement national perspectives and inform ASEAN mechanisms in workforce issues (Arunanondchai & Fink, 2006).

**Data collection and analysis from an ASEAN regional perspective**

The primary concern is the lack of comprehensive knowledge that can synthesize ASEAN data and present it in a regional framework. For health, the WHO South-East Asia and Western Pacific Regional Offices both aggregate human resources data from their regions, but neither covers ASEAN in its entirety, nor do they have the economic perspective that underpins ASEAN’s MRA commitments. An ASEAN health-care services website was officially launched with a small secretariat in 2018, and data from AMSs are still being added to populate the site. It does, however, provide a first step in collation of data on human resources for health for the AMSs, and a base from which the development of an analytical facility serving ASEAN needs could proceed. With each AMS committing to a web administrator, with focal point contacts under each discipline to collect and transmit national data to the ASEAN health-care services website, support for AMSs in both formatting and collection would enhance the quality of national and regional health workforce data and enable critical analysis. In the context of the SDGs, with their commitment both to the implementation of UHC (SDG 3.8) and the recruitment, development and training of the health workforce (SDG 3.9), governments, professional councils and research funders have a shared responsibility for research that provides better data on regional health workforces and their distribution.
**Regional educational standards**

In terms of information-sharing, the AJCCs have provided an important forum for the sharing of curricula content and competencies. Across the disciplines, there are clear differences in the level and nature of progress. The AJCCD established ASEAN Dental Practice Standards in 2017; common competencies for dental undergraduate education have been developed (Chuenjitwongsa et al., 2017), and the accreditation standard of dental schools is projected for 2020, all of which are essential steps for free mobility. Under the AJCCN, five AMSs have completed the review of their national competencies for nurses against the agreed five ASEAN nursing common core competencies, harmonizing their national competencies and encouraging the remaining members to complete this process as outlined in the HSSWG Work Plan 2016–2025 (HSSWG, 2018). For the AJCCM, progress is less prescriptive, with national interests constraining progress on the part of AMSs, but for a range of different reasons. In medicine, the desire for enhanced educational standards across the region is shared by all AMSs; information-sharing is valued and regional benchmarking shapes local curriculum development; and there is clear influence but no linear link between ASEAN MRA deliberations and local outcomes.

**Registration, licensing and mobility**

With enhanced mobility, the ultimate end-point of the MRA process, the very limited use of MRA mechanisms to enable registration of professionals moving between AMSs, is of concern. Two issues compound this: firstly, the major trajectory for health professionals – particularly for nurses, but also for doctors – is beyond AMSs to the USA, Europe, the Middle East and Japan. ASEAN MRAs are unlikely to influence this trend significantly. Secondly, while internal mobility within ASEAN is still relatively limited, informal mechanisms are the primary mechanisms employed for:

- direct institution-to-institution arrangements;
- employment of professionals by an external agency, rather than within their country of operation, so that they do not appear on local records;
- reclassification of nursing and medical positions as coordinating, rather than directly clinical, roles;
- recruiting nurses to work as assistant nurses, below their registered status in their country of origin; and
- neglect or refusal to seek registration for some foreign practitioners.
Formal bilateral agreements may also circumvent the requirement of the MRAs. The Indonesia–Japan Economic Partnership Agreement provides an alternative bilateral process for mobility of nurses from Indonesia (Efendi et al., 2017). The result is a significant underestimation of the total migrant workforce, and the extent of current regional mobility.

For ASEAN medical professionals, however, temporary licensing provisions for the purpose of limited practice, training, research, visiting experts and humanitarian efforts has been an important step towards greater regional mobility and the monitoring of these movements (HSSWG, 2018). Similar temporary licensing arrangements are available for dentists and nurses under the MRAs. Despite the evident differences with other professional groupings that have established MRAs within the AEC, these may provide templates for further integration at a regional level.

**Recommendations**

**Data collection and analysis from an ASEAN regional perspective**

The accuracy and comprehensiveness of health workforce data are critical for both national and regional workforce management. The HSSWG should be supported in its current commitment to post AMSs’ data, but needs to be further strengthened to allow collation and analysis of health workforce data on demand, distribution and mobility at an ASEAN regional level. Augmentation of the role of the HSSWG towards providing a centralized facility to monitor health worker numbers, shortages and distribution within and across AMSs would substantially enhance the contribution of ASEAN mechanisms in workforce issues.

Given the regional benefits and risks of freer flow of health personnel, the WHO Regional Offices for South-East Asia and Western Pacific continue to support national data collection, and the Asia Pacific Observatory promotes further health systems and policy research on human resources for health across the region.

**Setting regional educational standards**

Disparity in progress towards shared regional educational standards remains an obstacle to freer movement between AMSs. We recommend that the AJCCs continue to provide support for progress towards achieving core competencies and shared curricular content through the strengthening of university networks, information-sharing and promotion of curricula initiatives at a regional level.
While the use of local languages remains critical to the effective practice of the health professions, English has become an established language for ASEAN regional and international communication, and in particular, for access to current research. Therefore, the continued teaching of English in the education of health professionals is crucial to enhance research and regional communication.

**Registration, licensing and mobility**

The limited current utilization of the MRAs for the purposes of enhancing mobility across ASEAN is of concern. A deeper exploration is required of why MRA processes are not being used to enable this movement, together with a critical examination of mobility beyond the provisions of the MRAs. This needs to occur both at national and regional levels, identifying the range of mechanisms – both formal and informal – being utilized, and the reasons they are sustained.

We recommend the continued adaptation and development of mechanisms that do meet needs – “temporary” licensing to allow research, education and professional observational exchanges, taking into consideration the impact of these initiatives on the continued implementation of the MRAs.


53. Snilstveit B, Oliver S, Vojtkova M (2012). Narrative approaches


### Appendix 1: Search strategy and results

**Search string:**
(migrat* OR mobility OR movement OR "mutual recognition agreement" OR MRA OR freedom of movement OR "supply country" OR "destination country" OR trade in health services OR export of health services OR import of health services OR "ASEAN integration" OR "ASEAN economic community") AND (health staff OR health workers OR health practitioners OR doctors OR physicians OR medical practitioners OR nurses OR health services OR dentists OR dental nurses OR "health systems strengthening" OR human resources for health OR health-care services OR health workforce) AND (ASEAN OR "Brunei Darussalam" OR Cambodia OR Indonesia OR "Lao PDR" OR Malaysia OR Myanmar OR Philippines OR Singapore OR Thailand OR Vietnam OR "South East Asia" OR "Western Pacific")

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<tr>
<th>Concepts</th>
<th>Keywords used</th>
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<tr>
<td>ASEAN region</td>
<td>ASEAN OR &quot;Brunei Darussalam&quot; OR Cambodia OR Indonesia OR &quot;Lao PDR&quot; OR Malaysia OR Myanmar OR Philippines OR Singapore OR Thailand OR Vietnam OR &quot;South East Asia&quot; OR &quot;Western Pacific&quot;</td>
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<tr>
<td>Health workers</td>
<td>health staff OR health workers OR health practitioners OR doctors OR physicians OR medical practitioners OR nurses OR health services OR dentists OR &quot;health systems strengthening&quot; OR human resources for health OR health-care services OR health workforce</td>
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<tr>
<td>Mobility</td>
<td>Migrat* OR mobility OR movement OR &quot;mutual recognition agreement&quot; OR MRA OR freedom of movement OR &quot;supply country&quot; OR &quot;destination country&quot; OR trade in health services OR export of health services OR import of health services OR &quot;ASEAN integration&quot; OR &quot;ASEAN economic community&quot;</td>
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Figure 1: Search results

Records identified through database searching after limits applied to search results
\( (N = 3091^*) \)

Additional records identified through Google engine
\( (N = 5840^{**}) \)

Records after duplicates removed
\( (n = 2555) \)

Records of the first 10 pages

Records after screened by titles
\( (n = 309) \)

Records after screened by titles and duplicates removed
\( (n = 57) \)

Records excluded: 60^{***}

Records for abstract or executive summary review
\( (n = 306) \)

Records included for full-text review
\( (n = 24) \)

* In ProQuest database, after limits applied the search result was 32,342 but only 4,000 records were shown and only 1,000 references could be exported to EndNote.

** This was the approximate number of records indicated by Google engine after the search string was used; however, only the first ten pages were screened.

*** Among the 309 records, 30 were books or book sections; 8 were theses; and 22 records were not available in the UQ library database.
## Appendix 2: A list of included records for full-text review

<table>
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<th>Document type</th>
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<td>Aldaba (2013)</td>
<td>Progress on MRA implementation</td>
<td>The Philippines</td>
<td>Report</td>
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<td>2</td>
<td>Antonio (2015)</td>
<td>Optimistic prospect of AEC and MRAs from economic perspectives</td>
<td>ASEAN Member States, particularly the Philippines</td>
<td>Report</td>
</tr>
<tr>
<td>3</td>
<td>Arunanondchai and Fink (2007)</td>
<td>Advantages and disadvantages of trade policy in health services from economic perspectives</td>
<td>ASEAN Member States (seven only)</td>
<td>Peer-reviewed</td>
</tr>
<tr>
<td>4</td>
<td>ASEAN–ANU Migration Research Team (2005)</td>
<td>Policies and factors contributing to international migration of health and IT professionals within and outside the region</td>
<td>ASEAN Member States</td>
<td>Report</td>
</tr>
<tr>
<td>5</td>
<td>Aungsuroch and Gunawan (2015)</td>
<td>Importance of AEC in nursing services: challenges and opportunities</td>
<td>ASEAN Member States</td>
<td>Peer-reviewed</td>
</tr>
<tr>
<td>6</td>
<td>Chia (2011)</td>
<td>Historical overview of skilled labour mobility factors and regulatory policies of each country. Barriers to MRA implementation is one of the discussed sections.</td>
<td>ASEAN Member States</td>
<td>Report</td>
</tr>
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<td>7</td>
<td>Chongsuvivatwong et al. (2011)</td>
<td>General overview of health systems and health outcomes in the region and other affecting factors including AEC</td>
<td>ASEAN Member States</td>
<td>Peer-reviewed</td>
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### Appendix 2: A list of included records for full-text review (contd)

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<td>8</td>
<td>Clarke et al. (2016)</td>
<td>Assessing the performance of health professional regulatory bodies partly in response to MRAs</td>
<td>Cambodia</td>
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