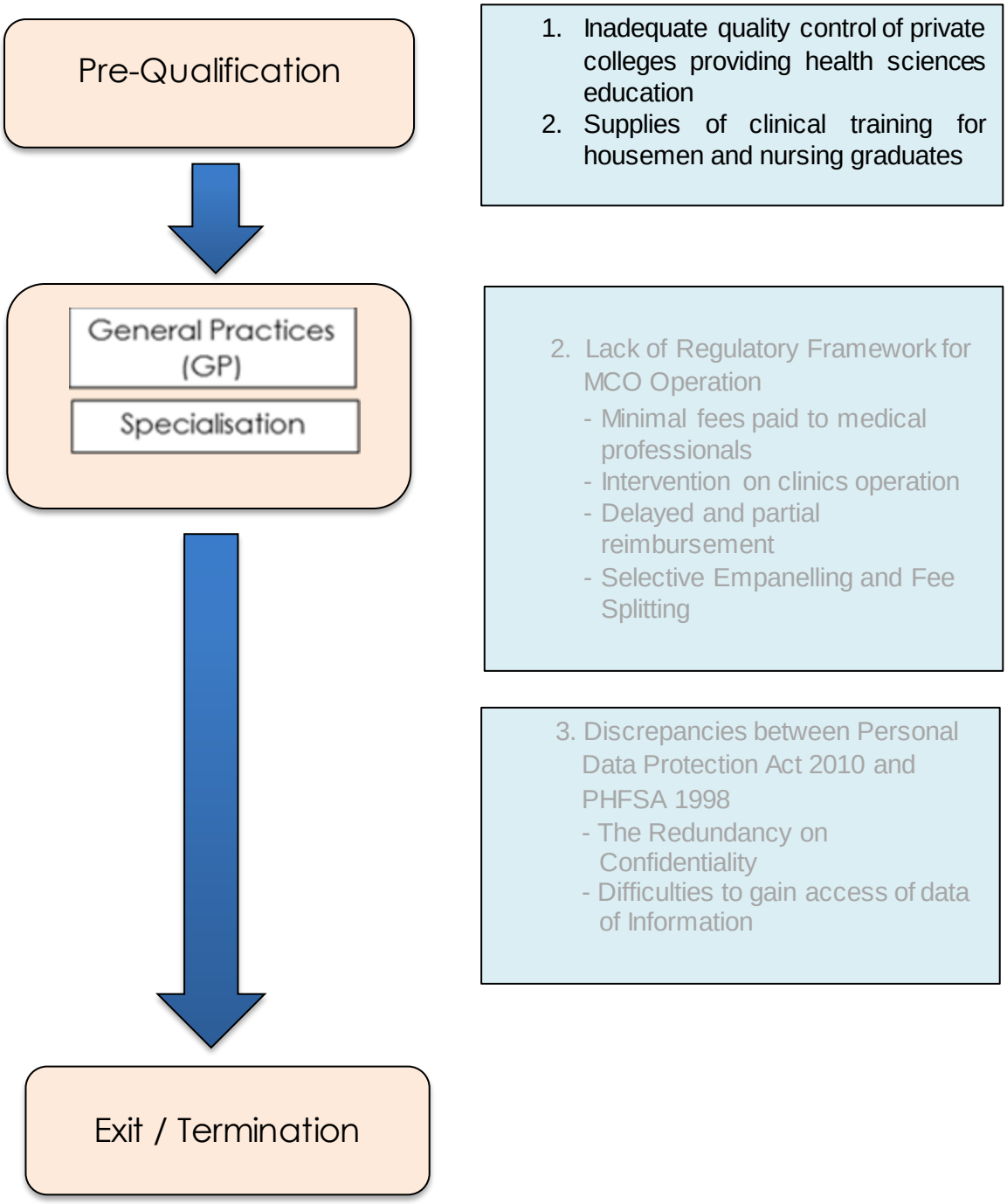
Chapter 5: Regulatory Burdens at the Pre-Qualifications and Training of Medical Professionals



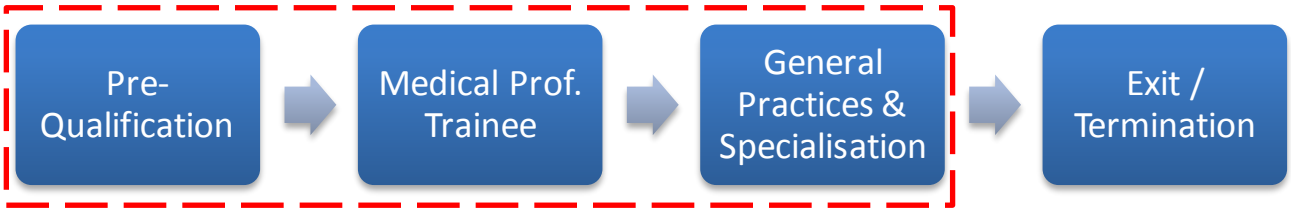
Chapter 5

5.0 Regulatory Burdens at the Pre-Qualifications and Training of Medical Professionals

As shown in Chapter 4, the scope of the review includes the stage of acquiring the first certificate to be certified and practice within the field of medicine and obtaining placement as junior practitioners. It is important for these practitioners to have the required set of academic qualifications and training requirements. While this chapter focuses on the early development of medical professionals, this stage impacts on the whole value chain. The impacts of Government policies, Acts and requirements covered in this chapter are:-

1. Questionable quality of colleges providing health sciences related education
2. Supplies of clinical training for housemen and nurses graduates in the hospitals

Figure 5.1 : The Value Chain of Medical Professionals



In 2007, there were 21 medicals schools in Malaysia, 10 public and 11 private. In 2016, the country have 28 medical schools, 20 public and 8 private, the list by Malaysian Medical Council[1] as well as 366 other institutions from 36 different countries like United Kingdom, Singapore, Indonesia, Saudi Arabia, United States of America, etc. In 2014, there were 8,157 medical students in public universities and 11, 348 in private institution while 539 others pursued their study abroad[2]. Most of these institutions cater for medical doctors, dentists and pharmacists while nurses are trained locally.

[1] List of Medical Institution in Malaysia by Malaysia Medical Council (MMC), available at : http://www.mmc.gov.my/v1/index.php/list-of-medical-institution2?resetfilters=0&clearordering=0&clearfilters=0

[2] TheStar (28 April 2016) Restriction on new medical courses to ensure quality of junior doctors, The Star Online, see: http://www.thestar.com.my/news/nation/2016/04/28/freeze-extended-by-five-years-restriction-on-new-medical-courses-to-ensure-quality-of-junior-doctors/

The rapid increase in the number of medical schools in the country has given rise to some concern especially on the excess of doctors and the challenge of ensuring quality. The situation has called for government to announce the moratorium to freeze new medical courses in local institutions for the next five years effective from 1st May 2016 to 30th April 2021. This is to ensure that there is a balance between the supply offered and the industry demand, and the marketability of graduates[3]. Despite the moratorium, the supply of medical students continues to rise as students decided to seek education from affordable medical school in other countries such as Egypt, Indonesia and Taiwan. Interviews with students and parents have shown that the cost to study medicine in Egypt ranges between RM200, 000 - RM300,000 for the whole duration of studies compared to over RM500,000 for a medical degree in a private college in Malaysia, making foreign medical education a more attractive hub. With this trend, Malaysia will continue to have a significant addition of new doctor every year despite the moratorium.

This study is directed towards addressing the issue of quality. Therefore, more emphasis is paid on findings related to the quality of medical professionals and the contributing causes as discussed below:

i. Establishment of the key quality assurance agencies[4]

One of the causes that affect the quality of medical professionals is the compromised quality of medical training offered by private colleges in Malaysia. To manage this problem, the Malaysian government through the Ministry of Education has established the Malaysian Qualifications Agency (MQA) in 2005, to replace Lembaga Akreditasi Negara (LAN) or 'National Accreditation Board'. Its role is to oversee the quality assurance of universities and colleges. The universalisation of basic education gradually increased the demand for tertiary education. Several forces served to revolutionise access to and the provision of higher education. The policy of restructuring the economy to shift from production-based to knowledge-based, which required skilled manpower, also drives the growth in private higher education institutions as existing public education system was insufficiently equipped and staffed to meet demand. The on-going university

[3] TheStar (28 April 2016) Restriction on new medical courses to ensure quality of junior doctors, The Star Online, see: http://www.thestar.com.my/news/nation/2016/04/28/freeze-extended-by-five-years-restriction-on-new-medical-courses-to-ensure-quality-of-junior-doctors/

[4] HC Chai (2007) in an article 'The Business of Higher Education in Malaysia, Commonwealth Education Online', Available at: http://www.cedol.org/wp-content/uploads/2012/02/114-118-2007.pdf (Accessed on 20 April 2015)

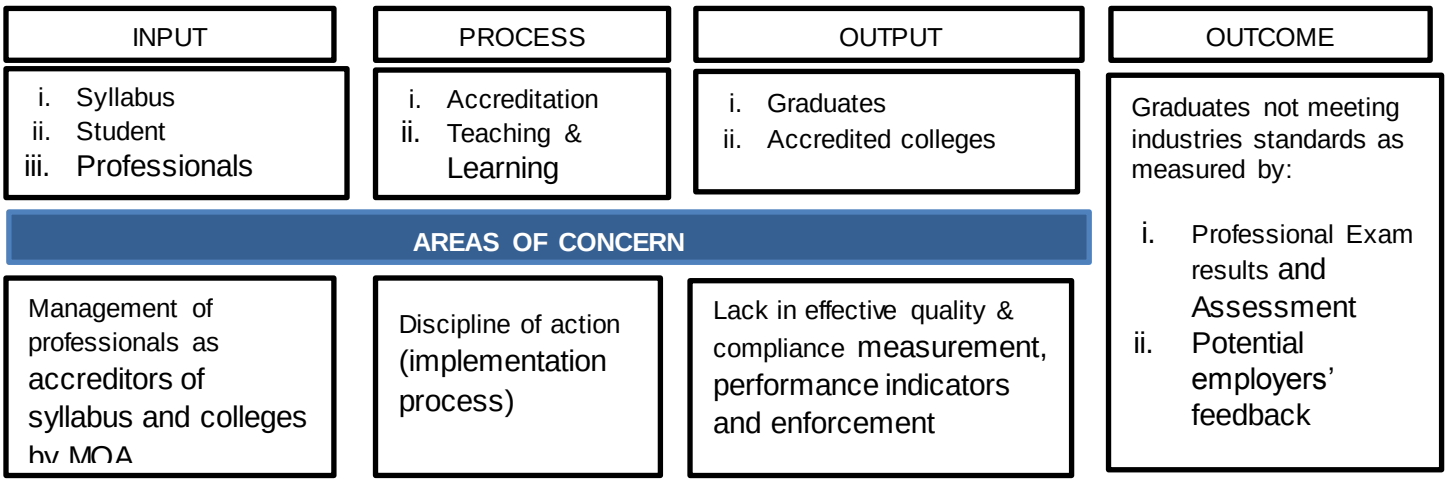
academic 'twinning' programmes provide a perfect solution: parents and the Government can save money, and students studying in Malaysia can gain academic and professional qualifications conferred by prestigious universities from Europe, Australia and North America, while the local private HEIs could profit from the increasing demand for higher education. Hence, the relevance of MQA as a quality assurance body.

MQA[5] is established to :

i. To implement MQF as a reference point for Malaysian qualifications;
ii. To develop standards and credits and all other relevant instruments as national references for the conferment of awards with the cooperation of stakeholders;
iii. To quality assure higher education institutions and programmes;
iv. To accredit courses that fulfil the set criteria and standards;
v. To facilitate the recognition and articulation of qualifications; and
vi. To maintain the Malaysian Qualifications Register (MQR)

Despite the above, many medical professionals interviewed expressed their concerns over the supply and quality of graduates in the Healthcare Industry particularly doctors and nurses. Figure 5.2 summarizes the framework of the chapter which outlines the process of accreditation of private colleges by MQA and the areas of concern. Inputs are the main resources involved in the accreditation process. Whilst outputs are the result of the accreditation process. Outcomes are measured based on the performance and quality of graduates.

Figure 5.2: Framework of Accreditation Process



[5] MQA's website at: http://www.mqa.gov.my/

5.1 Issue 5.1 – Inadequate quality control of private colleges providing health sciences education

5.1.1 The Issues

There are two ministries overseeing the education system of medical professions: the Ministry of Education (MOE) through MQA and Ministry of Health (MOH). While the roles of these two ministries differ, respected agencies from these two ministries regularly work hand-in-hand to produce good education programmes and materials to ensure that the supply side (MOE's medical education system) is able to produce talented professionals who can meet the needs of the demand side (MOH).

Examination on MOHE Act 1996 (Act 555) shows that the MOHE is responsible for the approval or dismissal of application to establish new private institution in Malaysia. The institution which is granted with the approval must register with MOHE within five years from the date of approval. This provides the institution ample time to prepare itself for registration. However, the Act does not specify any obligation by the institution to acquire MQA accreditation prior to its registration with MOHE. Such situation may result in weak quality control of the institution teaching, management and infrastructure maintenance as the accreditation control is not enforced.

Box 5.1 : Private Higher Educational Institution Act 1996 Amendment 2006

Part V : Registration of Private Higher Educational Institution

Section 24

(1) Every private higher educational institution shall be registered under this Part

(2) An application for registration shall be made to the Registrar General—

(a) within five years from the date of the approval for the establishment of the private higher educational institution granted under Part III;

(b) on the prescribed form and in the prescribed manner;

(c) accompanied by the prescribed fee; and

(d) together with a comprehensive fee structure to be imposed on students with respect to each course of study.

In addition to that, the Act under section 24 subsection 7 also states that the failure to obtain registration from the ministry does not jeopardise the applicant's right to submit a new application to the MOHE.

Box 5.2 : Private Higher Educational Institution Act 1996 Amendment 2006

(7) Subject to subsection (3), where additional information, particulars or documents required under subsection (4) is or are

not provided within the time specified in the requirement or an extension thereof, the application—

(a) shall be deemed to have been withdrawn; and

(b) shall not be further proceeded with, without prejudice to a fresh application being made by the private higher educational institution

In general, it is the role of the Professional boards to control the quality of courses/institutions for medical professionals, as stipulated in the professional Acts. However, in this case, it is apparent that the boards have limited control over quality as the MOHE Act allows institution to operate prior to accreditation form the accrediting body namely MQA.

Further study on the MQA revealed that there are also limitation of roles by the MQA in controlling the quality of private institution particularly those offering medical courses. This seems to be because they have limited resources and coordination. In response, the Government through various agencies imposes extra regulations to fill in the regulatory gaps.

Under the *MQA Act 2007*, programmes of higher educational institutions (HEIs) leading to professional qualifications require that accreditation be done by or in close collaboration with professional bodies. These are professional bodies established under various Acts of Parliament to regulate the profession through licensing of practitioners. The relationship between professionals with MQA forms a Joint Technical Committee whose scopes are as per clause 51 of the *MQA Act*. These programmes include medicine,

dentistry, pharmacy, architecture, engineering, nursing and several others. Generally, the accreditation provided for the programme also means recognition from the professional bodies.

Nurse training

The Professional Board of Nurses, together with the MOE (via the MQA and the Joint Technical Committees), administers the development of training faculty curricula and facilities for nurse training. However, many private institutions providing nursing education are not affiliated with any hospitals even though the Department of Public Services (JPA) expects all nurses to perform in a clinical setting, not just teaching and managing.

A local study, "Basic Nursing Competencies for Recent Diploma Graduates" by MOE revealed that student nurses from such private institutions had difficulty getting clinical experience. If the regulation of nurses training is not improved, candidates could be disadvantaged from further career opportunities. To address the possible unemployment of graduates, a scheme called SL1M (Skim Latihan 1 Malaysia) was introduced on 1st June 2011 where the private hospital and clinics would employ graduate nurses. They are subsidized by up to RM2000 per nurse per month to hire nursing graduates under this scheme, in addition to double tax deduction incentives by the Government.

However, private hospitals have revealed that these graduates are unable to meet the minimum standards established by hospitals. One hospital said that it could only employ 1 out of 80 candidates, while another hospital said that none of the candidates interviewed was competent to be employed. These observations are consistent with information provided by the MPC's review of private hospitals[6] in 2014, which states: "*There are also other non-public listed institutions in this business of medical education. The result is that we have large number of nurses which the private hospitals do not want because they found that the quality graduates are not up to their requirements*." (Chapter 6, issue no 2 of RURB Private Hospital Report).

[6] Reducing Unnecessary Regulatory Burden (RURB) Private Hospitals (2014), Malaysia Productivity Corporation (MPC)

Box 5.3 shows and extract of MQA Act 2007 which relates to accreditation process for institution by MQA as discussed in this chapter.

Box 5.3: *MQA Act 2007*

43. Provisional accreditation of professional programme or professional qualification

In the case of provisional accreditation of a local or foreign professional programme or professional qualification, the Agency shall cooperate and coordinate with the relevant professional body for the purpose of—

(a) considering an application under subsection 38(1) and granting or refusing to grant the application under section 39;

(b) conducting an institutional audit under subsection 39(3);

(c) imposing conditions under section 41; and

(d) revocation of the certificate of provisional accreditation under section 42

Chapter 2: Professional Programmes and Professional Qualifications

50. Application for accreditation

(1) An application by a higher education provider for the accreditation of its local or foreign professional programme or professional qualification which complies with the Framework shall be made to the Agency within the specified period in the certificate of provisional accreditation in such form and manner as may be prescribed.

(2) Every application shall be accompanied by such documents, information and fees as may be prescribed.

(3) The form, manner, documents and fees required under subsections (1) and (2) may differ as between different professional programmes or professional qualifications.

(4) At any time after receiving an application for accreditation and before it is determined, the Agency, in consultation with the Joint Technical Committee established

under section 51, may by written notice require the higher education provider to provide additional documents and information within a specified period.

(5) Where the additional documents and information required under subsection (4) are not provided by the higher education provider within the specified period or any such extended period as may be allowed by the Agency, the application shall be deemed to be withdrawn and shall not be further proceeded with, without prejudice to the right of the higher education provider to submit a fresh application**.**

(6) The Agency shall refer an application under this section to the Joint Technical Committee which shall then make recommendation to the relevant professional body under subsection 52(1) for the purposes of accreditation.

51. Joint Technical Committee

(1) A Joint Technical Committee consisting of representatives of the relevant professional body, an officer of the Agency and such other persons as may be deemed necessary by the relevant professional body shall be established by the relevant professional body for the purpose of—

(a) considering an application for accreditation under subsection 50(1);

(b) making recommendations to grant or refuse the application for accreditation under subsection 52(1);

(c) making recommendations for imposing conditions under section 54;

(d) entering and conducting an institutional audit under subsection 52(3); and

(e) making recommendations for the revocation of accreditation under section 55.

(2) The representatives of the relevant professional body and the officer of the Agency in the Joint Technical Committee established under subsection (1) may differ as between different professional programmes or professional qualifications.

52. Power to grant or refuse accreditation

(1) After having considered the recommendation of the Joint Technical Committee under section 51, the relevant professional body may—

(a) approve the granting of accreditation; or

(b) refuse the granting of accreditation, stating the grounds for refusal.

(2) Where accreditation is granted under paragraph (1) (a), the Agency shall issue a certificate of accreditation to the higher education provider upon payment of the prescribed fees and shall enter the particulars of the certificate into the Register.

(3) For the purpose of considering an application under subsection 50(1), any officer of the professional body and the Agency may conduct an institutional audit.

Quality issues faced by medical graduates could be attributed to accreditation processes and quality compliance audits by the JTC, formed by MQA. The weakness persists at the point of coordination management between the professionals and MQA which escalates into quality control during the pre- and post- accreditation processes.

One example of weak administration appeared in the case of Allianze University College of Medical Sciences (AUCMS), where graduates' grievances - on the noncompliance of AUCMS' facilities and some lectures, staff not being paid, students not receiving their certificates long after completing a programme and other complaints such as misleading advertising - were not addressed.[7] The college was allowed to continue its operation despite not meeting the quality standards until it had to cease operation due to financial problems in 2012. By then it had implicated the education and future of over 2,000 students and 500 staff.

In Malaysia, more than 54% of the private nursing diploma graduates could not find a job three to four months after graduating in 2010 compared to 21.7% in 2008. Government statistics also show that despite the increase in the number of graduates who took the Nursing Board Examinations (7,665 in 2010 compared to 4,025 in 2008) the pass percentage had fallen from 86.5% to 70.1% during the same period. Those studying in public institutions had a higher pass rate of between 94% and 99% as compared to graduates from private institutions[8]. This phenomenon is alarming not only to the industry

[7] University World News (November 20, 2014) in an article 'Medical College Closure after London Campus Financing Problems'. Available at : http://www.universityworldnews.com/article.php?story=20141120095240372

[8] The Star Online (2012) in an article 'Nursing job woes cut deep', Available at : http://www.thestar.com.my/News/Nation/2012/02/03/Nursing-job-woes-cut-deep/

but also to the graduates and the Government who have invested an average of RM 50,000 per student in grants and loans to finance the study of nursing. Hospitals have cited low quality of training and poor attitudes for some nurses as being unemployable.

Concerns are also being raised about the quality of young doctors in Malaysia, with the country's biggest doctors' association raising the red flag on foreign medical colleges and also experts' warning of substandard local training. There is evidence that private medical colleges impose much lower minimum entry requirements - five Bs at the equivalent of the O levels, or one A and two Bs at the equivalent of the A levels compared to public universities which maintain high entry requirement of four As in the Malaysian equivalent of A levels[9]. The Malaysian Medical Association (MMA), the main representative body for all doctors in the country, has called on the Government to review its list of recognized foreign medical colleges. MMA believes that private colleges that have failed to meet the government's mandatory standards should have their accreditation withdrawn.

Based on the information discussed, it is apparent that both Act governing the registration and accreditation of private institution in Malaysia could be improved by examining the following aspects :

- Study a requirement for accreditation between the period of approval and registration of the institution in MOHE Act 1996 (amendment 2009) in clause 24 subsection 2 and 7 :
- Study improvements opportunities for the following in the MQA Act 2007

i. coordination among the responsible bodies
ii. management of JTC by the MQA
iii. resourcing of JTC or the MQA and professional boards
iv. consultation and other feedback mechanisms by MQA with the students, hospitals and other stakeholders
v. management of complaints and feedbacks by public/stakeholders

[9] New Straits Time (November 26, 2013) in an article 'Experts worry over quality of young doctors in Malaysia'. Available at: http://www.thejakartapost.com/news/2013/11/26/experts-worry-over-quality-young-doctors-malaysia.html

5.1.2 Objective of MOHE Act 1996

An Act to provide for the establishment, registration, management and supervision of, and the control of the quality of education provided by, private higher educational institutions and for matters connected therewith.

5.1.3 Objective of MQA Act 2007

An Act to achieve the following objectives:

(a) To establish the Malaysian Qualifications Agency as the national body to implement the Malaysian Qualifications Framework,

(b) To accredit higher educational programmes and qualifications,

(c) To supervise and regulate the quality and standard of higher education Providers

(d) To establish and maintain the Malaysian Qualifications Register and to provide for related matters

5.1.4 Options to resolve the issues

1. Status quo

   If the status quo is maintained the costs will be high to public and private hospitals, medical students, patients and the reputation of Malaysia's health system with adverse consequences for health tourism.

2. Government to reexamine the MOHE Act 1996 and the enforcement of *MQA Act*

   This is to ensure the quality of syllabi, training facilities and consultants, and the availability of clinical training provided by private colleges for medical undergraduates meet the quality standards thus produces graduates who meet the industry standards.

   The Government is also suggested to review the cases of private colleges, for example AUCMS, Masterskills and others, to discover factors of failures and lessons that could be applied in the future. The MOHE should strengthen its control over application from institution who have failed to comply with the requirement set by the Ministry and accreditation body. Currently, the MOHE Act under clause 24 subsection 7 does not address such control measure.

   Concerns of the students, staffs and other stakeholders should be taken into account from time to time in order to find out the actual satisfactory level of these people and whether the private colleges are not abusing their power. It is suggested here that the enforcement by MQA should not only refer to the documentation prepared by the colleges, it should also include consultation procedures with other stakeholders as stated in the MQA Act Section 6 Function of the agency subsection 2 as below:

   (b) To accredit programmes, qualifications and higher education providers;
   (c) To conduct institutional audit and review of programmes, qualifications and higher education providers;
   (d) To establish and maintain a register to register programmes, qualifications and higher education providers;
   (e) To conduct courses, training programmes and to provide consultancy and advisory services relating to quality assurance;

3. Benchmark International accreditation

This option suggests that MQA to obtain accreditation from the Programme for Recognition of Accrediting Agency[10]. The programme was established in 2010 by the World Federation for Medical Education (WFME) in collaboration with Foundation for the Advancement of International Medical Education and Research (FAIMER). This Recognition Programme[11] is a robust and transparent process that uses globally acceptable criteria to evaluate and recognize the agencies worldwide that accredit medical schools.

With the increase of private colleges offering medical-related programmes as well as increase in number of foreign students in Malaysia, having international recognition will bring added value to various stakeholders. The students from medical schools that are recognized by accreditation bodies under the Programme would be able to sit for the Educational Commission for Foreign Medical Graduates (ECFMG)[12] examination. ECFMG through its program of certification assesses whether physicians graduating from these schools are ready to enter programmes of graduate medical education for example residency and fellowship in the United States. This is also in compliance to the requirement set by the Commission that beginning in 2023, ECFMG will require physicians applying for ECFMG Certification to graduate from a medical school that has been appropriately accredited. MQA, with active collaboration at national and international levels on accreditation and standards setting will be able to ensure that that the country maintain its education credibility and at the same time promotes the country as a trusted educational hub at the international level.

[10] MMA (2016) Medical Education in Malaysia, see: http://www.mma.org.my/images/pdfs/President_Message/PM-Feb-16.pdf

[11] WFME (2016) FAIMER®: Foundation for Advancement of International Medical Education and Research: Programme for Recognition of Accrediting Agencies, see: http://wfme.org/about/other-wfme-partners/faimer

[12] ECFMG (2016) About ECFMG Certification, see: http://www.ecfmg.org/certification/index.html

4. Synchronising the list of approved medical school

This option suggests to synchronize the list of approved medical school (Second Schedule) between the Ministry of Higher Education (MOHE), Ministry of Health (MOH) and scholarship providers. By doing this, the government could prevent the students from entering medical universities or colleges that are not up to the required standard. The list should be reviewed form time to time in order to ensure it reflects the current and future requirement in healthcare industry.

5.1.5 Recommended option

Option 2 & 4:

2. Government to improve the enforcement of MQA Act

4. Synchronising the list of approved medical school

5.2 Issue 5.2 - Supplies of clinical training for housemen and nursing graduates in the hospitals are not sufficient to meet the requirements of the Act

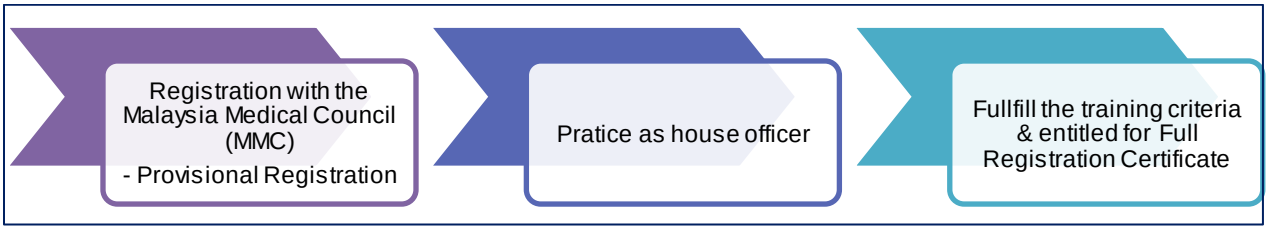
5.2.1 The issues

Internship for all fields of medical practice makes an important part of every medical professional's training as stipulated in Section 13 of the Medical Act 1971 (Experience which a provisionally registered person shall be required to obtain). It is based on this spirit that the internship training is developed, to provide fresh medical graduates with sound experience that professionalises them with appropriate knowledge, skills, experience and attitudes before awarding them the Provisional Registration. Under the *Medical Act 1971*, the Medical Qualifying Board consisting of Director General of the Ministry of Health (MOH) and equal number of representatives from Faculty of Medicine of the universities established under the *Universities and University Colleges Act 1971* was established to look into matters pertaining to houseman training. This includes:

- Evaluate and approve hospitals as housemen training centers
- To decide on standards and criteria of housemen training module; and
- Approve application for full registration[13] based on training experience.

Figure 5.4 illustrates houseman or clinical training as the bridging avenue between a partial registration of medical professionals and full registration with the Council.

Figure 5.4: Statutory Requirement



Houseman or clinical training has been classified as a compulsory requirement in the *Medical Act 1971* (Section 13),Which is also a standard requirement for medical professionals in other parts of the world including in countries like Australia, UK, Ireland,

[13] Fully registered means fully registered under the *Medical Act 1971*

USA and the Middle East [14]. However the way the overall program of academic and practical medical training is structured may differ in each case.

Details of clauses on houseman under the *Medical Act 1971* are as exemplified below:

BOX 5.2 : Medical Act 1971

Clauses stating requirements for medical training for various medical professionals
Section 13 Experience which a provisionally registered person shall be required to obtain (2) The provisionally registered person shall, immediately upon being provisionally registered, engage in employment in a resident medical capacity to the satisfaction of the Medical Qualifying Board for a period of not less than one year in any hospital or institution in Malaysia which is approved by the said Board for the purpose of such employment; four months of such period shall be spent in a resident surgical post, four months in a resident medical post and four months in a resident obstetrical and gynaecological post; at the conclusion of satisfactory service, as certified by the Medical Qualifying Board, under this paragraph, the provisionally registered person shall be entitled to a certificate issued by the Council in the prescribed form as evidence thereof.

BOX 5.3 : A Guidebook for House Officer

Clauses stating requirements for medical training for various medical professionals
2.4 The Structure of Internship Training ***The Medical Qualifying Board has determined that:*** i. The Committee for the Houseman Training has the right to determine the houseman discipline placement and the duration of your extension; ii. The houseman will only be allowed to proceed to the next discipline if the supervisor is satisfied with your knowledge, skills, competency and attitude in that particular discipline;

[14] Wikipedia, http://www.amc.org.au/accreditation/prevoc-standards, https://www.medicalcouncil.ie/Registration-Applications/First-Time-Applicants/Internship-Registration.html

Clauses stating requirements for medical training for various medical professionals
iii. There should not be a gap of more than 4 (FOUR) months between postings. Otherwise the houseman may need to repeat the entire internship training; • The houseman to undertake four-monthly postings in medicine, paediatrics, surgery, orthopedic, obstetrics & gynaecology and emergency medicine • The postings in the six disciplines should provide opportunities for you to participate in: - assessment and admission of patients with acute medical problems; - management of in-patients with a range of general medical conditions; - discharge planning, including preparation of a discharge summary and other components of handover to a general practitioner or a subacute or chronic care facility; and - ambulatory care. i. You are not allowed to move to another training hospital either to complete or repeat similar discipline. Only in exceptional circumstances, you may be allowed to continue internship in a new discipline in another training hospital. ii. The total duration of each discipline should not exceed 12 (TWELVE) months; iii. The total duration of your internship training should not exceed 6 (SIX) years; iv. If you do not satisfactorily complete any or all of the internship training requirements within the stipulated period, your training shall be discontinued and you will not be eligible for full registration;

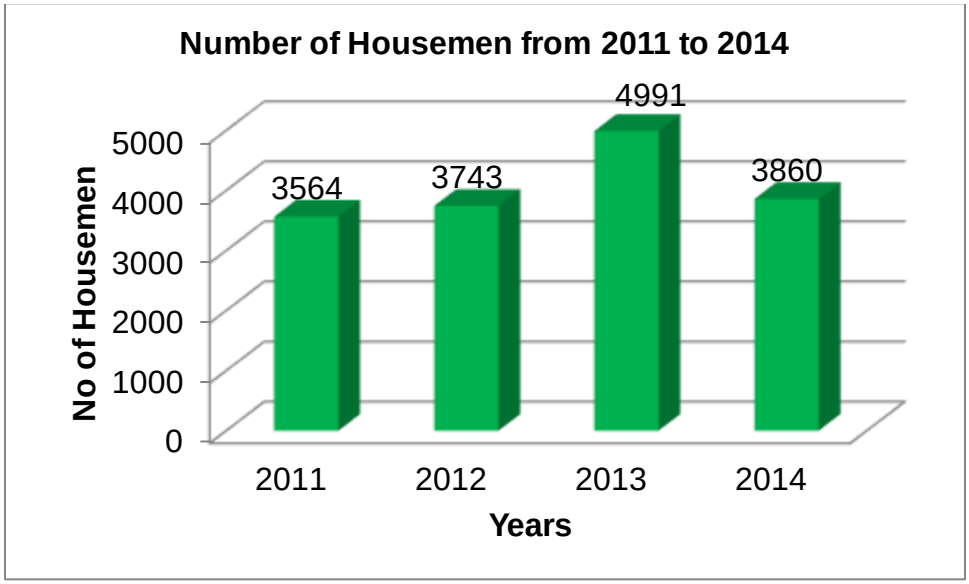
Despite the requirements stated under the Act, there is evidence that medical graduates lack the experience required. Some medical professionals considered that the problem lies with the insufficient training available to housemen in the government hospitals. This may be because of the number of graduates looking for housemen continues to surpass the growth of training hospitals. The numbers of graduates requiring training increased from 3,655 in 2013 to an estimated of 5,000 graduates in 2015 - an increase of 36%, while the number of public hospitals approved by the Medical Qualifying Board for the purpose of houseman training remain at 44 or 30% of a total of 141 public hospitals

nationwide. Due to the limited number of houseman training hospitals, fresh graduates now have to wait to up to nine months to do their houseman training in government hospitals which includes 4 months in resident surgical post, 4 months in resident medical post and 4 months in a resident obstetrical and gynaecoligy posts.[15]

Malaysian Medical Association (MMA) president, Dr. Krishna Kumar, said that with medical graduates now being given the choice to choose the hospitals to be trained in under the e-houseman system and the long waiting lists in some hospitals, the waiting time could be longer. Prior to the e-houseman system, which was introduced in 2015, the average waiting time was about six months. Dr. Krishna also added that the waiting time is getting longer especially in the more popular urban hospitals, including the Kuala Lumpur Hospital[16]. According to Health Ministry records, there were 3,564 medical graduates reporting for duty as housemen in 2011, 3,743 (2012), 4,991 (2013) and 3,860 (2014). Additionally, 30% of housemen do not finish their training in the stipulated period and need to extend their training between three to six months, depending on the hospital and taking up the posts for new intake[17]. The bottleneck is reaching a "critical stage" as graduates are required to sit for entrance exam, and at the current rate of 5,500 medical students graduating each year, all 44 training hospitals in the country will face difficulties in coping with the numbers[18].

[15] Section 13, Medical Act 1971
[16] The Star Online (March 30, 2015) in an article 'New docs have to wait a year for housemanship'. Available at http://www.thestar.com.my/News/Nation/2015/03/30/New-docs-may-have-to-wait-a-year-for-housemanship/
[17] The Malaysian Insider (July 18,2015) in an article 'Too many medical grads, too few housemanship spots'. Available at http://www.themalaysianinsider.com/malaysia/article/too-many-medical-grads-too-few-housemanship-spots#sthash.9HjFMU8W.dpuf
[18] The Star Online (March 30, 2015)in an article 'New docs have to wait a year for housemanship'. Available at http://www.thestar.com.my/News/Nation/2015/03/30/New-docs-may-have-to-wait-a-year-for-housemanship/

Figure 5.5 : Statistics of Housemen from 2011 to 2014



Source:MOH's website

Deputy Health Director General, Datuk Dr S. Jeyaindran said about 1,000 of the 5,000 housemen employed each year do not complete the two-year training stint[19]. Among the reasons include not being suitable for the profession as they were pressured to study medicine by their parents, false perception of a doctor's work life, inability to work long hours and burnout. As the housemen are hired by JPA, the termination process must follow Public Officer (Appointment, Promotions and Termination of Service) Regulation 2012. Table 5.1 below shows the process of termination and hiring as per the regulation.

The process flowchart indicates that the whole termination and hiring process could take up 180 days to more than a year, resulting in a longer waiting time for new houseman to take up the vacancy[20]. The longer waiting time is also due to the training period that vary from 2 – 6 years. The housemen are allowed to extend one discipline in the event where they are not able to satisfactorily complete the training in particular discipline (refer to Box 5.2).

[19] The Star Online (March 30, 2015) in an article 'Housemen do not complete training stint for various reasons'. Available at http://www.thestar.com.my/News/Nation/2015/03/30/One-in-five-quit-each-year-Housemen-do-not-complete-training-stint-for-various-reasons/

[20] The Star Online (March 30, 2015) in an article 'Housemen do not complete training stint for various reasons'. Available at http://www.thestar.com.my/News/Nation/2015/03/30/One-in-five-quit-each-year-Housemen-do-not-complete-training-stint-for-various-reasons/

In addition to the number of training hospitals, shortages also occur in the availability of consultants, particularly specialist doctors available to provide training. The interviewed medical practitioners expressed concerns on the ratio of consultants to housemen, which could reach a ratio of up to 1 consultant to 50 housemen. With these housemen already lacking in clinical skills and exposure to some procedures they ought to have obtained in medical schools, this ratio could adversely affect the quality of medical professionals in Malaysia. Dr. Krishna cited two examples. At the obstetrics and gynecology (O&G) department in Seremban Hospital, 65 housemen have come under the supervision of two consultants and five specialists, while the Kuala Pilah Hospital O&G unit only had one obstetrician overseeing about 30 housemen[21].

In addition to the shortage of training consultants, the increasing number of new graduates also faces lack of clinical training due to limited patient number. The previous president of Malaysian Medical Association (MMA), Datuk N.K.S Tharmaseelan,[22] stated that in the early 1980s, the ratio of housemen to patient beds was 1:20, however the ratio had decreased to 1:3 patient beds in 2013. He also said that the ratio of housemen to beds in developed countries such as Singapore and United Kingdom are 1:8 and 1:12 respectively. This suggests lack of medical cases for housemen to treat.

Training Placement for Nurses

BOX 5.4 : Nurses Act 1950

Student Nurses

Section 3 of Nurses Act 1950: Establishment and constitution of a Nursing Board

The Nursing Board Malaysia (NBM) is the body that regulates the nursing profession.

The main functions include:

1. Maintain a register of qualified nurses through nursing licensure.

[21] The Star Online (March 30, 2015)in an article 'New docs have to wait a year for housemanship'. Available at http://www.thestar.com.my/News/Nation/2015/03/30/New-docs-may-have-to-wait-a-year-for-housemanship/

[22] New Straits Times (November 17, 2013) in an article 'More Centres needed to train housemen'. Available at: http://www2.nst.com.my/nation/general/more-centres-needed-to-train-housemen-1.403124 (Accessed on 15 April 2014)

2. Set professional standards and guidelines for all levels of nursing education, nursing practices, management and research.
3. Regulate the conduct and competency of nurses.
4. Evaluate, approve and accreditate all nursing programmes offered locally by both Public and Private Educational Institutions.

The ***Guidelines on Standards & Criteria for Approval/Accreditation of Nursing Programmes*** stated that the clinical practice areas should cover all required discipline as approved to meet the learning. The required discipline for Basic Degree and Diploma are as follow:-

i.	Medical nursing	xi.	Accident and Emergency
ii.	Surgical nursing	xii.	Operation Theatre Unit
iii.	Orthopaedic	xiii.	Urology
iv.	Paediatric	xiv.	Geriatrics
v.	Obstetric	xv.	Nephrology
vi.	Gynaecology	xvi.	Community Health Nursing
vii.	Ophthalmology	xvii.	Optional discipline
viii.	Ear, Nose and Throat		a. ICU
ix.	Psychiatry		b. CCU
x.	Oncology		c. Neurology

* Note : minimum : 52 - 53 weeks of clinical placement

* Medical nursing & Surgical nursing : 60% of total disciplines

* Management practice : minimum 2 weeks

* Old folk's home and retirement home are not to be used as clinical practice area (except for social responsibility)

For clinical placement at hospital facilities;

1. At any one placement, the students: CI ratio should not exceed 1:15 and based on the number of beds in the ward and placement must correspond to the level of care taught.
2. Ratio of student to patients should be 1:4. Level of patient care must correspond with the students' required learning outcomes.
3. Number of students per shift should not be more than 10 per area/ unit/ ward at any one time regardless of institutions.
4. There must be evidence that respective health care facilities have a planned and coordinated clinical placement schedule from all institutions to prevent congestion of students at any one time in any clinical area.
5. Male students must be chaperoned by a female health personnel when attending to female clients.

For clinical placement at Community Health Centres

1. Number of students allowed per clinic should not exceed 8 at any one time.
2. Number of students per activity in the clinic should not exceed 4.
3. Staff: Student ratio must be 1:8 in clinic and 1:4 during activities.

Similarly in 2010, the Ministry of Higher Education[23] put a moratorium on private nursing colleges to prevent an oversupply of nurses. The move intended to prohibit the launch of new diploma programmes in nursing as the ministry wants existing providers to concentrate more on degree courses as well as to prevent the issue of nurse unemployment. In 2012, the Ministry of Human Resource announced that about 8,000 graduates from nursing institutions especially those from private colleges, are jobless. The same concerns were raised by the respondents[24]. The increasing number of nurses does not only affect supply for employment but also the capability to train these graduates with the required clinical skills and experience.

[23] The Star Online (2010) in an article 'No more nursing schools from July' . Available at: http://www.thestar.com.my/story/?file=%2F2010%2F4%2F27%2Fnation%2F6134707 (Accessed on 15 April 2014)

[24] The Star Online (June 8,2012)in an article ' About 8,000 graduates from nursing colleges are jobless', Available at: http://www.thestar.com.my/News/Nation/2012/10/08/About-8000-graduates-from-nursing-colleges-are-jobless/ (Accessed on 15 April 2014)

5.2.2 Options to resolve the issues

1. Status quo

   As the number of medical graduates increase, the longer it takes for the graduates to enter houseman programme thereby slowing their career development and limit their opportunities for specialisation. They are also at risk of losing their medical knowledge that they have learned in previous years.

2. New system for doctor registration

   Introduce a new system for doctor registration before qualifying them for housemanship, by introducing a national registration exam. This is similar with the requirement imposed by advanced country like US and Japan where medical graduates must show evidence of medical qualification from accredited universities, sit and pass the national qualifying exam before being placed for housemanship. This option will help to

   I. Ensure that only qualified and capable medical graduates are being placed in houseman programme hence putting some control measure into the quality of medical practitioner treating patient in the country;
   II. Control the number of houseman per hospital or being placed under supervision of specialist doctors to enhance quality of training, exposure to patient and case treatment and enable specialist doctors to better manage or supervise houseman under their care.

3. Houseman be hired based on contract basis

   To improve quality and content of houseman training, the MOH and JPA should revise the employment scheme of trainee doctors. In this option, it is recommended that houseman be hired on contract basis and will only be absorbed into the permanent JPA employment scheme upon successfully completing housemanship or upon registration as medical practitioner (RMP). This approach will ease the hiring and termination process of houseman. Thus, reducing the waiting time for hiring new trainee and providing replacement for those who failed to undergo

housemanship. In addition, 30% of housemen do not finish their training in the stipulated period and need to extend their training between three to six months, depending on the hospital and taking up the posts for new intake[25].

In Healthcare Consultative Panel dated 26th July 2016, it was mentioned that almost 50% of housemen failed to complete their training due to lack of competencies.

The option could also reduce the problem of termination. From a consultation with medical practitioner in public hospital, it has been found that there's a delay in terminating underperformed housemen. The delay may be from 6 months to up to 2 years, thus resulting to increase in backlog in the new housemen hiring pipe line. If trainees are put under temporary or contract basis, the process of termination for those who do not comply with any discipline matter should be shorten and the responsibilities should fall under the housemen training hospital.

4. Increase the availability of clinical training for houseman.

In order to resolve the shortages of houseman training facilities, MOH should look into increasing the number of houseman facilities from 44 currently to 52 by 2017 (increase by 20%). This research would like to recommend that houseman numbers be based on the number of specialist per hospital. This includes placing trainee in district or smaller hospital with qualified specialist. To manage the level of exposure to different medical cases and patient numbers, the Ministry could introduce a rotation system where houseman can be rotated among houseman centre or hospital in different facility areas. This is further supported because the size of number of patient can not reflect load of the hospital. Loading also depend on processes, speed of discharge, patient administration and staff efficiency.

Moreover, the government could also benchmark the guideline of Commonwealth Medical Internships Programme Guidelines by the Department of Health,

[25] The Malaysian Insider (July 18,2015) in an article 'Too many medical grads, too few housemanship spots'. Available at http://www.themalaysianinsider.com/malaysia/article/too-many-medical-grads-too-few-housemanship-spots#sthash.9HjFMU8W.dpuf

Australian Government[26]. The programme was initiated in August 2013 with the intention to assist private hospitals to provide internships and ultimately resolve the bottlenecks and shortages of placement in the country. The guideline covers the following aspects:-

- Background and requirement of the programme
- Roles and Responsibilities of the parties involved i.e. Department of Health, Private Hospitals and the interns
- Eligibility of both the private hospitals and interns
- Processing of applications, and
- Assessment of interns and the private hospitals.

This practice has been implemented by the Pharmacist Board Malaysia[27]. In addition to the 69 public hospitals, the Pharmacist Board Malaysia has recognized 96 private premises as training placement for the provisionally registered pharmacist (PRP) under the private programme.

5. Getting credit for voluntary participation with medical services

Qualifying students to obtain credit for participation with medical services organization such as Malaysian Medical Relief Society (MERCY Malaysia), Malaysian Medical Fellowship and etc. This would help to prevent graduates from losing medical skills and knowledge while waiting for housemen placement at a recognized hospitals which could take up to 6 months.

[26] Department of Health (2016) Commonwealth Medical Internships Programme Guidelines, Australian Government, see: http://www.health.gov.au/internet/main/publishing.nsf/Content/work-commonwealth-medical-internships-programme-guidelines

[27] Pharmaceutical Services Division (2016) Guidelines on Liberalisation of Provisionally Registered Pharmacist training on private sector for graduates of pharmacy degree programme, MOH

5.2.2 Recommended option

Option 2: New system for doctor registration

Option 3: Houseman be hired based on contract basis