Tuning

Asia - South East

Reference Points for the Design and Delivery of Degree Programmes in Medicine

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Reference Points are non-prescriptive indicators and general recommendations that aim to support the design, delivery and articulation of degree programmes in Medicine. Subject area group including experts from South East Asia and Europe has developed this document in consultation with different stakeholders (academics, employers, students and graduates). This publication has been prepared within Tuning Asia – South East (TA-SE) project 573760-EPP-1-2016-1-ES-EPPKA2-CBHE-JP.

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PREFACE

Internationalisation of higher education in Southeast Asia is a multidimensional process that promotes the development of an integrated higher education space in the region. In this context the ASEAN University Network (AUN) plays a crucial role, providing a platform for discussions on policy development for higher education, and strengthening existing cooperation networks among universities in Southeast Asia.

In 2016, AUN and the Tuning Academy started an Erasmus+ project with the goal of achieving cross-border collaboration, sub-regionally and regionally, in curriculum development, educational standards and quality assurance; joint structural convergence, consistency of systems, as well as compatibility, recognition and transfer of degrees in order to facilitate mobility. As a result, the Tuning TA-SE project was adopted as a possible instrument for advancing the Southeast Asian cooperation process with curriculum at the heart of the initiative.

The Tuning Asia-South East (TA-SE) project uses the *"Tuning methodology"*, which has been successfully implemented in 130 countries since 2000. It is a university-driven project which aims to offer higher education institutions and subject areas a concrete approach to implementing competency-based and student-oriented approaches. Most importantly, Tuning has served as a forum for developing reference points at subject area level. These are relevant for making programmes of studies comparable, compatible and transparent.

According to Tuning, the change from a staff-centred approach to a student-oriented approach emphasises the fact that it is the students who have to be prepared to the greatest extent possible for their future roles in society. At this moment in the global process of reforms in higher education, it is experientially clear that it is not enough just to desire change, or even to programme it at the general level, but rather it is necessary to consider processes and tools at the institutional level.

The TA-SE project has brought together a group of experts, highly qualified in their fields, from 23 reputed higher education institutions in 7 countries in Southeast Asia (Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand and Vietnam). It has provided a structured way for them to work together, both on issues regarding 3 subject areas (Civil Engineering, Medicine and Teacher Education) and on aspects relevant to the entire area of higher education. Much of Tuning's work focuses on the role of subject areas. This aspect of Tuning reflects the conviction that only those who have actual knowledge and experience in teaching and research at an advanced level can create the framework for developing new programmes and guarantee their quality, in design and delivery, in the new global context.

The TA-SE project has provided a platform for developing understanding and insight into how this can be best accomplished. In a carefully organised process of dialogue and debate, all the universities involved have reached deeper levels of understanding regarding the elements which constitute the essence of degree programmes in a national and international setting. Both common and diverse elements have been identified and formulated in wording which is commonly understood. For the last nineteen years, Tuning has proved to be an effective way of reaching international consensus while respecting –and indeed positively implementing– the rich diversity of educational traditions and the specific experience and insight of different subject areas.

In the course of its operation, the TA-SE project has developed a common language and conceptual framework. Thus, it favours dialogue between different academic traditions and facilitates mutual understanding and transparency between universities and the broader community of stakeholders –i.e. ultimately society at large. It has stimulated a process of reflection, development and innovation in higher education programmes. All of this has constituted an intense and demanding, but ultimately useful and rewarding, learning process for all involved. The TA-SE project empowered those who are responsible directly for the design and implementation of curricula. The hands-on experience gave them the know-how and confidence to roll it out for their colleagues in other degree programmes.

The three subject area groups in TA-SE (Civil Engineering, Medicine and Teacher Education), developed final documents following a similar procedure to obtain their results. Through discussion, creation of reciprocal knowledge and mapping the ways the discipline is learned and taught in the various countries, insight was gained and consensus built on what constitutes the vital core of each subject area.

This book reflects the outcomes of the work by the Medicine Subject Area Group in the TA-SE project and shows in synthesis the consensus reached after intense, prolonged and lively discussions. The outcomes are presented in the standard format, introducing the methodology developed to design and to deliver degree programmes on the basis of well identified profiles and how this can be expressed in competencies and translated into learning outcomes. In general terms, we may consider that TA-SE project developed reference points for the design and implementation of degree programmes in Southeast Asia.

In the carrying out of the TA-SE project, the collaboration of numerous academics and administrative staff from Southeast Asian countries has been essential. A remarkable degree of talent, expertise, generosity, loyalty and commitment has distinguished the TA-SE project. We owe great gratitude to all the academics involved directly and indirectly in the elaboration process. They have shown tremendous commitment and imagination, finding new solutions and ways forward in an open and constructive dialogue. They have shown that Southeast Asian academics have the calibre and the vision necessary to tackle vital issues at an international level. Today's global society requires this kind of vision and commitment.

This project would never have been possible without the dedication and wisdom of the Subject Area Coordinators (Muhamad Saiful Bahri Bin Yusoff, Ahmad Farhan Bin Mohd Sadullah and Richard Jugar). They have been the pillars of the project, not only carrying great responsibility but also channelling discussions and debate in a constructive and stimulating manner. They have shown their ability to build consensus and reach outcomes which will prove useful for Southeast Asian Higher Education institutions in general.

We also want to thank the four implementing universities (West Visayas State University, Sanata Dharma University, Universiti Sains Malaysia and University of Malaya), who through their academic and administrative staff have offered us their time, energy and support to help meet our goals, piloting a concrete Tuning experience.

We would like to thank the European Commission, which through its Erasmus+ Programme has offered us the support that has made this project possible.

We express our sincere gratitude to Julia González and Robert Wagenaar, who created and initiated Tuning in 2000 and whose commitment and recommendations were invaluably important during the implementation of the TA-SE project in the region. We also thank the eight

European experts (Emilien Azema, Diego Lo Presti, Emma Melgarejo, Riccardo Ruffoli, Jean-François Schved, Alfredo Soeiro, Anna Maria van Trigt and Maria Yarosh), who have greatly enriched the project, both with their wealth of knowledge and insight, and new questions and ideas.

This project means dreaming –imagining ways in which current practices can be transformed and improved. But it means not only dreaming of this future, but of getting down to the work of making it a reality. In doing this, we have appreciated the help of AUN Secretariat staff (Achavadee Wiroonpetch and Korn Ratanagosoom), who contributed to the organisation and success of the General Meetings and Policy Forums.

We would also like to highlight the important contribution made at each Policy Forum and plenary session by the people who spoke about their experiences and contributed and enriched the discussions. Our special thanks go to Maida Marty, Edurne Bartolomé and Jon Paul Laka, the experts in statistics from the University of Deusto who prepared consultations, analysed the data, and presented the results.

Finally, and indispensably to running the project at the University of Deusto, we would like to acknowledge the work of Ivan Dyukarev, TA-SE project manager, and Sara Goitia, project assistant, whose energy kept things moving and got the project completed on time and within budget, whose enthusiasm kept teams motivated and on track, and whose dedication ensured that the project obtained the best result possible. All members of TA-SE project highly appreciate their indispensable work. They have shown great devotion and commitment to the Tuning Asia-South East project.

We hope and believe that the material contained in this publication will be very useful for all higher education institutions wanting to implement a competency-based and student-oriented approach, and that it will help them find and use the most suitable tools for adapting or creating higher education programmes to respond to the needs of today's society.

Pablo Beneitone,
Director of Deusto International Tuning Academy and

Choltis Dhirathiti,
Executive Director of ASEAN University Network

Bilbao and Bangkok, July 2019

CHAPTER 1: Introduction

Remi Charlene Salvilla,
Muhamad Saiful Bahri Yusoff,
Riccardo Ruffoli

The ASEAN Economic Community (AEC) is the realisation of the end goal of economic integration as espoused in Vision 2020, which is based on a convergence of interests of ASEAN Member Countries to deepen and broaden economic integration through existing and new initiatives. In establishing the AEC, ASEAN shall act in accordance with the principles of an open, outward-looking, inclusive, and market-driven economy consistent with multilateral rules, as well as adherence to rules-based systems for effective compliance and implementation of economic commitments. The challenge ASEAN member states face is threefold. First, the complexity of the qualifications recognition process essentially discourages professionals who move within the region from having their professional and academic credentials assessed and recognised. Second, professionals face restricted access to the ASEAN labour market due to national-level barriers. Finally, many professionals themselves have limited interest in moving within the region due to perceived cultural, language, and socioeconomic differences.

The Tuning academy project was timely and a collaboration was set up with AUN as a part of an EU-funded ERASMUS project to improve education and programme management in Southeast Asia in order to recognise qualifications within the region for professional and academic credentialing. The Tuning Asia – South East (TA-SE) Project has the objective of modernising higher education in the Southeast Asia region. Curricula design and delivery, employability of graduates, recognition of the degree programmes, quality of higher education, and staff training are the lines that the project has taken into consideration.

Tuning is a methodology for designing and implementing degree programmes on the basis of diversity and autonomy. The Tuning project has developed a methodology and a common language, which can serve as a common basis, and links with the development of an overarching European framework of qualifications.

The Tuning Asia – South East (TA-SE) Project is focused on curricular reform in three subject areas, namely Teacher Education, Medicine and Civil Engineering. The project aims to institutionalise the use of the Tuning methodology in the practice of higher education institutions in Southeast Asia through the building of a framework of comparable, compatible and transparent programmes of studies in universities and to develop reference points in the three subject areas. The development, implementation, monitoring and improvement of degree programmes for the first cycle in the three subject group areas are among the main results of the project. Specifically, this project is designed to promote regional and international cooperation between Southeast Asia and EU universities.

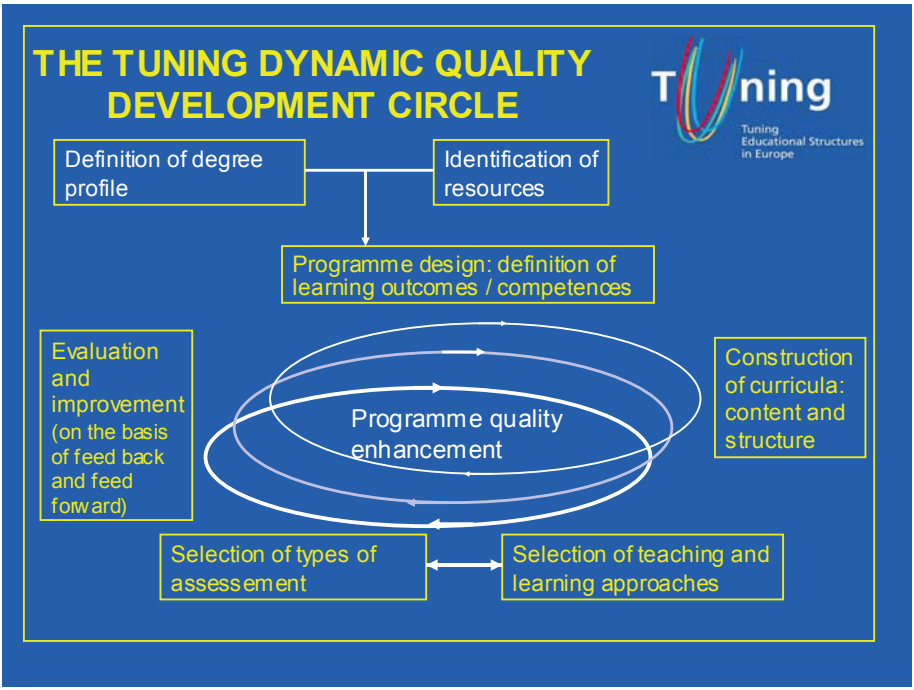

Figure 1.1: The Tuning methodology

The TASE Medicine SAG comprises representatives of medical schools from Cambodia, Indonesia, Malaysia, Myanmar, Philippines and Vietnam, and is facilitated by experts from France, the Netherlands and Italy.

MEMBER UNIVERSITIES

Universiti Sains Malaysia, Malaysia (www.usm.my)

Established as the second university in the country in 1969, Universiti Sains Malaysia (USM) was first known as Universiti Pulau Pinang. In 1971, USM moved from its temporary premises at the Malayan Teachers' Training College, Bukit Gelugor to the present 416.6-hectare site at Minden, approximately 9.7 km from Georgetown.

USM offers courses ranging from Natural Sciences, Applied Sciences, Medical and Health Sciences, Pharmaceutical Sciences to Building Science and Technology, Social Sciences, Humanities, and Education. USM also has 17 dedicated research centres for a wide range of specialisations which include archaeology, medicine and dentistry, molecular medicine, science and technology, Islamic development and management studies, and policy research and international studies. It also provides consultancy, testing, and advisory services to the industry under the ambit of USAINS Holdings SdnBhd, the University's commercial arm.

Universiti Malaya, Malaysia

University of Malaya was established in 1949 by the merger of King Edward VII College of Medicine and Raffles College to serve the needs of Singapore and the Federation of Malaya. The University was reconstituted on 15 January 1959 as the University of Malaya with a Court, a Central Council, a Guild of Graduates, a Chancellor, Pro-Chancellors, and a Vice-Chancellor with two equal and autonomous Divisions, one in Singapore and the other in Kuala Lumpur. The two local Governments had already indicated in 1960 their intention to have the Divisions become national universities of the respective countries in 1962. The Singapore Division became the University of Singapore (becoming the existing National University of Singapore or "NUS" in 1980 after merging with Nanyang University).

The Kuala Lumpur Division retained the name of University of Malaya or "Universiti Malaya" in Bahasa Malaysia or "UM" in short for both names. Due to the shortage of medical doctors in Malaya, the Kuala Lumpur Divisional Senate set up a Board of Studies in May 1960 to look into the feasibility of establishing a second medical school in Kuala Lumpur. The existing Faculty of Medicine was established by University Statute in September 1962.

UM sees itself as an internationally renowned institution of higher learning in research, innovation, publication and teaching. It aims to advance knowledge and learning through quality research and education for the nation and for humanity.

University of Medicine Mandalay, Myanmar

The University of Medicine, Mandalay was founded in 1954 as a branch of the faculty of medicine affiliated to the University of Yangon. The university sees itself as an academic institution that will produce basic doctors and highly qualified post-graduate clinicians and academicians, fostering innovation through collaboration with international research institutions, and serving the community through a patient-centred curriculum instilling cultural competence and providing community-oriented comprehensive health services.

University of Medicine and Pharmacy Ho Chi Minh, Vietnam

With professionalism, excellence, dynamics and innovation as its core values, the University aims to be a leading health science university in Vietnam and in the region, training high quality health professionals, undertaking advanced research and applying modern technology in order to protect, care for, and promote health for all people.

Universitas Padjadjaran, Indonesia

Padjadjaran University (UNPAD) is an institution of higher learning located in Bandung, which is the provincial capital of West Java, Indonesia. It was established on 11 September 1957.

Upon founding, the university had four departments: Law, Economics, Medicine, Mathematics and Natural Sciences. These have now developed into 16 faculties and several postgraduate programmes, 44 undergraduate programmes (Strata 1/S1), two specialist programmes, nine doctoral programmes (Strata 3/S3), 19 master's degree programmes (Strata 2/S2), five professional programmes, one four-year diploma programme (D4), and 32 three-year diploma programmes (D3).

University of Health Sciences, Cambodia

The University of Health Sciences (UHS) was first established in June 1946 as the School for Medical Officers, following which it became the Cambodian Royal School of Medicine in 1953, then the Faculty of

Medicine and Pharmacy in 1962. In 1967, the Faculty of Pharmacy was moved to the University of Phnom Penh. In late 2001, the university became a public administrative institution comprising the Faculty of Medicine, the Faculty of Pharmacy, the Faculty of Dentistry, and the Technical School for Medical Care.

The UHS aims to be recognised as the nation's leading higher educational institution in the field of health sciences in which the students, teachers and staff strive for excellence in teaching and learning, research and public services.

Ateneo de Manila University, Philippines

The Ateneo School of Medicine and Public Health (ASMPH) was opened in 2007, and pioneered an innovative curriculum to form outstanding clinicians, dynamic leaders and social catalysts. ASMPH seeks to form, educate, train, and field physician-leaders who will actively catalyse and take charge of the process of affecting and effecting systemic changes in society through the health sector, with its faculty and students animated by the Jesuit, Catholic, and Filipino character of the Ateneo de Manila University.

ASMPH aims to build doctors who are outstanding clinicians with mastery of clinical skills and compassion to care for the health needs of the individual; dynamic leaders with the expertise to bring systems and resources together to enable the clinician to practice his craft; and social catalysts with the leadership competencies to systematically solve the systemic problems of ill-health and poverty and make quality healthcare available and working for all.

University of San Agustin, Philippines

The University of San Agustin is a private Catholic university in Iloilo City, Philippines. It was established in 1904 by the Spanish Catholic missionaries under the oldest religious Roman Catholic order in the Philippines during the American colonial period, the Order of Saint Augustine (San Agustin). In March 1953, San Agustin attained university status, making it the first and only Augustinian university in the Asia Pacific Region. As a premier academic community of lifelong learners working with one mind and heart to search for, discover, and share the truth for the promotion of authentic human and societal development, the University of San Agustin is committed to forming the members of its academic community in virtue and science to serve the Philippines and the world.

West Visayas State University, Philippines

West Visayas State University (WVSU) is a public normal research university (a university system) located in La Paz, Iloilo City. It was established formally in 1924 as Iloilo Normal School under the Philippine normal school system during the American colonial period in the Philippines under the tutelage of the Thomasites, but its founding dates back to 22 years earlier when the university's College of Education was founded in 1902. It later became West Visayas State College in 1965 and gained university status, changing its name to West Visayas State University in 1986.

The university is one of the accredited Philippine Universities of the University Mobility in Asia and the Pacific and one of the most prominent institutions in the Visayas in the field of Teacher Education, Nursing and Medicine.

The West Visayas State University (WVSU) is a university system composed of different separate campuses and the West Visayas State University Medical Center. The main campus is comprised of nine schools and colleges and one institute. The Philippine Commission on Higher Education has also designated the university through its main campus as the Center of Excellence in Teacher Education and Center of Development in Nursing, while the Lambunao Campus houses the Centers of Development for the Agriculture and Forestry programmes.

University of Groningen, Netherlands

The University of Groningen has a rich academic tradition dating back to 1614. From this tradition arose the first female student and the first female lecturer in the Netherlands, the first Dutch astronaut and the first president of the European Central Bank. Geographically, the University is rooted in the Northern part of the Netherlands, a region very close to its heart.

The University of Groningen is an international academic community in which disciplinary and cross-disciplinary research leads to scientific breakthroughs and societal innovation, and in which talented students are trained as innovators who will contribute to a sustainable society. Its research and education are driven by intrinsic curiosity and interaction with global society. As a result, research, education and processes that have a societal impact are closely intertwined at the University.

Montpellier University, France
(https://www.umontpellier.fr/en/about-us/why-choose-us)

The Montpellier University (French: Université de Montpellier) is a French public research university in Montpellier in the southeast of France. Established in 1289, the University of Montpellier is one of the oldest universities in the world.

One of the most innovative higher education institutions in the world, the University of Montpellier (UM), is one of the leading universities in France (6th French university). It holds a very strong position in the main world rankings: The University of Montpellier was first in the world in Ecology in the 2018 Shanghai ranking, first most innovative French university in Reuters' ranking, 5th in France in Leiden's ranking for the quality of its scientific publications.

The University of Montpellier is actively involved in numerous cooperation exchange programmes all over the world. The purpose of these agreements is to promote academic mobility and strengthen pedagogical and scientific cooperation. Like its open and cosmopolitan territory, the University of Montpellier participates in intercultural dialogue and dissemination of knowledge by hosting many international students, who represent nearly 16% of its student body.

University of Pisa, Italy

UNIPI, founded in 1343, is one of the most ancient and prestigious universities in Europe. It is a public HEI deeply rooted in its territory and fully integrated in the international scientific community. It has twenty Departments, covering all the main areas of teaching and research. It offers 58 undergraduate, 74 graduate and 28 doctoral programmes, 68 third-cycle specialisation programmes, and about 80 shorter programmes. It has over 52,000 students, 2,900 professors and researchers, and 1,467 technical and administrative staff members. UNIPI has teaching and research buildings, laboratories, museums and 17 libraries.

The pursuit of the three fundamental missions of the University: research, teaching, dissemination of knowledge and their synergistic use, is realised by having as a primary objective the interest of the university community as a whole, as well as that of civil society as a whole. UNIPI extends and deepens the work already done to incorporate the findings into its programmes and to share them with its partners.

According to the most recent Academic Ranking of World Universities (ARWU 2018) released by the Shanghai Jao Tong University, UNIPI ranks among the eight top Italian Universities and among the top 300 universities in the world. It has high-level research centres, among others, in agriculture, astrophysics, computer science, engineering, medicine and veterinary medicine.

THE LIST OF TASE MEDICINE SAG MEMBERS

The following are the members of TASE Medicine group:

1. Muhamad Saiful Bahri Yusoff (Coordinator) – Universiti Sains Malaysia, Malaysia
2. Anna Van Trigt (Facilitator) – University of Groningen, Netherlands
3. Riccardo Ruffoli (Facilitator) – University of Pisa, Italy
4. Jean-Francois Schved (Facilitator) – Montpellier University, France
5. Nor Azwany Yaacob – Universiti Sains Malaysia, Malaysia
6. Nik Ahmad Zuky Nik Lah – Universiti Sains Malaysia, Malaysia
7. Muhd Al-Aarifin Ismail – Universiti Sains Malaysia, Malaysia
8. Jamuna Vadivelu – Universiti Malaya, Malaysia
9. Hong Wei-Han – Universiti Malaya, Malaysia
10. Foong Chan Choong – Universiti Malaya, Malaysia
11. Vinod Pallath – Universiti Malaya, Malaysia
12. Manuel M. Dayrit – Ateneo de Manila University, Philippines
13. Lynette Alcala – West Visayas State University, Philippines
14. Remi Charlene Salvilla – University of San Agustin, Philippines
15. Bounchan Youttiroung – University of Health Sciences, Cambodia
16. Hla Moe – University of Medicine Mandalay, Myanmar
17. Yuni Susanti Pratiwi – Universitas Padjadjaran, Indonesia
18. Minh Hong Pham – The University of Medicine and Pharmacy, Vietnam
19. Hoai Phong Nguyen – The University of Medicine and Pharmacy, Vietnam

The TA-SE project is co-funded by the Erasmus+ Programme of the European Union. In Southeast Asia, the project is supported by the Asian University Network.

Erasmus+ is the European Union programme for education, training, youth and sport, which runs from 2014 to 2020. It aims to modernise education, training and youth work across Europe. Through it, the youth can study, volunteer, and gain work experience abroad; staff development are made possible; and UK organisations can collaborate with international partners to drive innovation, share best practices and offer new opportunities to young people.

The TA-SE Project is a Tuning Academy project carried out under the direction of the University of Deusto (Spain) and the University of Groningen (The Netherlands).

The ASEAN University Network (AUN) is an Asian university association founded in November 1995 by ASEAN member countries. It aims to strengthen the existing network of cooperation among universities in ASEAN and beyond; promote collaborative study, research and educational programmes in the priority areas identified by ASEAN; promote cooperation and solidarity among scholars, academicians and researchers in the ASEAN Member States; and serve as the policy-oriented body in higher education in the ASEAN region.

This report will describe the results of the TA-SE project for the Subject Area Group in Medicine. The first meeting was held in Bilbao in May 2017 and the project will end in October 2019. During this period, representatives of all the participants met five times in different countries in Southeast Asia and Europe. During the first meeting, the medical programmes of the participants were presented in the context of the national frameworks. After this comparison, a list of generic and specific competencies was generated (see chapter 2). Between the first and second meeting, four different groups of stakeholders were consulted and the results of this were discussed during the second meeting, creating a meta-profile (see chapter 3 and 4). The meta-profile was critically reviewed and appraised by faculty members of the participating institutions to look at the similarities and differences between the degree profiles and the meta-profile. The results of this exercise were discussed and this led to a revised meta-profile in the third meeting (see chapter 5). Between the third and fourth meeting, each participating institution distributed a student workload survey among their students and academics to estimate the student workload at the respective institutions. The student workload results were discussed in the fourth meeting to inform the needs for redesigning the degree programme (see chapter 6). The examples of the revised or new programme were reported in chapter 7, and two case

studies of implementing universities were described in chapter 8. This whole process not only provided the results as described in the next chapters but also created a (learning) community of experts in the field of medical education. Several recommendations were proposed to ensure the sustainability of the Tuning Methodology in the ASEAN region (see chapter 9).

BIBLIOGRAPHY:

1. Association of Southeast Asia Nations. ASEAN Economic Community Blueprint. ASEAN secretariat. January 2008
2. Papademetriou, Sugiyarto, Mendoza and Salant. Achieving Skill Mobility in the ASEAN Economic Community: Challenges, Opportunities and Implementations. Asian Development Bank. 2015
3. https://tuningasia-southeast.org/
4. http://www.tuningacademy.org

CHAPTER 2: Definition of generic and specific competencies – a thematic perspective

Yuni Susanti Pratiwi
Lynette Alcala
Jamuna Vadivelu
Anna Van Trigt

INTRODUCTION

In the formation of the ASEAN Economic Community (AEC), one of the challenges faced is recognition of professional qualifications and academic credentialing within the region. The Tuning Academy in collaboration with the AUN set out to initiate this gap by identifying graduate generic and specific competencies as part of an EU-funded ERASMUS project. The aim was to identify common regional competencies by consensus and to develop human resource capacity that can dissipate this approach to all areas of study within the region. The process and the outcome of deriving these competencies is described in this chapter.

One of the key objectives of the Tuning academy project for Southeast Asia was to contribute to the development of common goals within the region in human resource capacity, in curriculum development, and implementation. In order to design a curriculum that is relevant, state-of-the-art and all-encompassing, the Tuning Academy proposes two essential competencies, which include generic and specific competencies. Competencies represent a dynamic combination of cognitive and metacognitive skills, demonstration of knowledge and understanding, interpersonal, intellectual and practical skills, and ethical values.

Competencies include:

1. Generic competencies – these include shared attributes which are common to any degree programme, such as the capacity to learn, decision-making, project design and management skills (3). Generic competencies are not related to any specific degree programme, but are relevant for the expression of subject-specific competencies within the professional and public context. They are defined as a combination of transferable and multifunctional knowledge, abilities and attitudes, which is necessary for a successful job search, work-

ing activities and careers. Generic competencies are steadily becoming relevant in students preparation for future roles in society especially in terms of employability and citizenship.

2. Subject-specific competencies – related competencies that are fundamental for a particular degree programme and refer to the specific attributes of fields of study. Subject-specific competencies are defined as knowledge, abilities and skills related to a particular specialty.

Competencies are developed by consensus of faculty and specialty governing bodies for all course units and achievements are assessed at different stages of the programmes (4). One thing to bear in mind is that competencies are not finite and can be progressively improved over time through different cycles of the learning process and through lifelong learning. The process of identifying the generic and specific competencies in SAG Medicine was first initiated in 1st TASE inaugural meeting held in Bilbao during May 2017. The group consisted of members from Malaysia, Philippines, Cambodia, Myanmar, Vietnam, Indonesia, and facilitators from the EU as listed:

The first step in the identification of generic competencies involved the discussion of competencies from each member institution. It was realised that all schools had competencies developed based on national competencies mandated by policies dictated by the professional, national and qualification agencies of the respective countries. Based on the discussion, Figure 1 represents the competencies for each school and the alignment among the members of the SAG medicine.

Figure 2.1. Comparison of medical programme outcomes at respective institution.

UM (Malaysia)	USM (Malaysia)	UMM (Myanmar)	UHS (Cambodia)	UMP (Vietnam)	WVSUCM & AdMU (Philippines)	UNPAD (Indonesia)
• **Knowledge** • **Practical Skills** • **Social Skills and Responsibility** • **Values, Attitudes & Professionalism** • **Communication**, Leadership and **Team Skills** • **Problem Solving and Scientific Skills** • **Information Management (evidence-based)** & **Lifelong Learning Skills** • Managerial and Entrepreneurial Skills • **Patient-centred**	• **Knowledge** • **Practical Skills** • **Social Skills and Responsibility** • **Values, Attitudes & Professionalism** • **Communication**, Leadership and **Team Skills** • **Problem Solving and Scientific Skills** • **Information Management (evidence-based)** & **Lifelong Learning Skills** • Managerial and Entrepreneurial Skills • **Safe clinical decision and management** • **Standard clinical skills** • **Compassionate professional**	• **Knowledge** • **Attitude** • **Clinical skills** • **Cultural competence** • **Research skills** • **Collaborators** • **Holistic approach medical care** • **Social responsibility** • Educators • **Community-oriented healthcare provider** • **Communication skills**	• **Knowledge** • **Clinical care** • **Patient management** • **Diagnostic skills** • **Therapeutic procedures** • **Holistic patient care** • **Professional and Legal/Ethical Practice** • **Collaboration and Team Working** • **Professional competence** • **Safe medical practice** • **Critical Analysis, Research** and Education • **Communication skills** • **Colleagues (interprofessional)**	• **Medical knowledge** • **Clinical skills** • **Lifelong learning** • **Teamwork** • **Critical thinking skills** • **Medical ethics and professionalism** • **Diagnostic and therapeutic skills** • **Patient care** • **Interpersonal & communication skills** • Practice-based learning & improvement • Utilise healthcare system-based approach (**social accountability**)	• **Knowledge** • **Clinical competence** • **Communication skills** • **Lead & Manage Healthcare Teams** • **Engage in research activities** • **Interprofessional** • Utilise healthcare system based–approach • **Engage in Continuing professional development** • **Adherence ethical, professional and legal standards** • Nationalism (commitment to country) • **Social Accountability** • **Community-oriented healthcare provider**	• **Professionalism** • **Common sense (values)** and **self-development** • **Effective communication** • **Information management (evidence-based)** • **The scientific support of medical science** • **Clinical Skills** • **Management of health problems** • **Interpersonal, teamwork** & leadership • **Medical knowledge**

UM = Universiti Malaya; USM = Universiti Sains Malaysia; UMM = University of Medicine, Mandalay; UHS = University of Health Sciences; UMP = University of Medicine & Pharmacy; WVSUCM = West Visayas State University, College of Medicine; AdMU = Ateneo de Manila University; UNPAD = Faculty of Medicine Universitas Padjadjaran

The alignment among the schools in SAG medicine, is indicated through the colour code. A list of 10 essential generic competencies were identified which included:

1. Professionalism
   a. Respect:
      i. Patient confidentiality
      ii. Colleagues and subordinates
      iii. Patient autonomy
   b. Be sensitive to ethnic, cultural, gender, social and religious diversity (altruism)
   c. Practice with empathy
   d. Adhere to professional codes of conduct
   e. Acknowledge self-limitations
   f. Acknowledge and rectify errors and professional misconduct
   g. Promote equity in healthcare access for all
   h. Reflect and improve on personal professional development
2. Problem solving, critical thinking skills and scientific skills
   a. Identify and analyse problems, formulate possible solutions and make decisions
   b. Apply the principles, skills and knowledge of evidence-based medicine
   c. Use medical information cogently in identification and solution of problems
3. Ability to apply knowledge
a. Translate and integrate basic medical sciences into clinical practice
4. Communication skills
   a. Communicate effectively (verbal and non-verbal) with patients, family, colleagues, peers and administrators.
   b. Practice effective and appropriate communication across various media – scientific meetings, social media, broadcast, print, etc.
5. Teamwork skills and collaborator
   a. Work effectively with healthcare team members
   b. Respect diversity of opinions in multidisciplinary teams
   c. Collaborate with colleagues to establish and achieve common goals
6. Lifelong learning and continuous personal development

   a. Recognise the needs for, and the ability to engage in life-long learning
   b. To keep updated with scientific development, technology advances, health system and socio-economic changes related to healthcare
7. Social skills, responsibility and accountability
   a. Demonstrate awareness pertaining to social responsibility and accountability
8. Leadership skills
   a. Ability to listen, make decisions and communicate effectively
   b. Articulate the vision and inspire others towards common goals
9. Management skills
   a. Ability to initiate, plan, organise, implement and evaluate courses of action
10. Research skills
   a. Ability to identify research needs
   b. Formulate appropriate research questions and methodology
   c. Collect and analyse data, draw conclusions and report the result
   d. Apply research findings into practice

The process of arriving at specific competencies followed the same process as outlined for the generic competencies. A list of 10 essential specific competencies were identified which included:

1. Clinical practice
   a. Perform patient management according to good clinical practice (GCP) in various clinical settings
   b. Perform consultation with empathy
   c. Appropriately perform history taking, physical examination, diagnostic investigation and management
   d. Ensure & maintain patient safety
2. Health advocacy
   a. Promote and educate healthy lifestyles in individual, family, community and population
   b. Recognise and address public concerns and controversial issues related to health

The generic and specific competencies were presented to other group of SAGs and further discussed and refined based on feedback by respective SAGs. Following further discussions, consultation sessions were held, and another round of focus group discussions and inter-group discussions among other SAG members were performed to finalise the generic and specific competencies for Medicine. The following finalised generic and specific competencies for Medicine, included:

GENERIC COMPETENCIES

1. Ability to work collaboratively and effectively in diverse contexts
2. Ability to use information and communication technology purposefully and responsibly
3. Ability to uphold professional, moral and ethical values
4. Ability to demonstrate responsibility and accountability towards the society and environment
5. Ability to communicate clearly and effectively
6. Ability to think critically, reflectively and innovatively
7. Ability to understand, value, and respect diversity and multiculturalism
8. Ability to carry out lifelong learning and continuous professional development
9. Demonstrate problem-solving abilities
10. Ability to initiate, plan, organise, implement and evaluate courses of action
11. Ability to conduct research
12. Ability to demonstrate leadership attributes
13. Ability to apply knowledge in practice

SPECIFIC COMPETENCIES

1. Ability to practice according to good clinical practice (GCP) in various clinical settings
2. Ability to appropriately perform history taking
3. Ability to appropriately perform physical examination
4. Ability to appropriately perform diagnostic investigation
5. Ability to integrate clinical and work-up information to make diagnosis and differential diagnosis
6. Ability to provide appropriate therapy with a biopsychosocial approach

7. Ability to explain the benefits and risks of any therapeutic options

8. Ability to perform consultation with patients and family with empathy

9. Ability to manage medical records appropriately

10. Ability to ensure and maintain patient safety

11. Ability to promote health and preventive medicine

12. Ability to recognise and address public concerns and controversial issues related to health

13. Ability to demonstrate a balanced dedication to serve the interest of individual patients and the commitment to social justice and the common good

14. Ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups

This list of competencies may form the basis for competencies in medicine for representative schools in Southeast Asia, but it should not be taken as an exhaustive list. Schools that are now developing multidisciplinary curricula for medicine may wish to revise the generic and specific competencies in order to meet the outcomes of their programme.

BIBLIOGRAPHY

1. Association of Southeast Asia Nations. ASEAN Economic Community Blueprint. ASEAN secretariat. January 2008.

2. Papademetriou, Sugiyarto, Mendoza and Salant. Achieving Skill Mobility in the ASEAN Economic Community: Challenges, Opportunities and Implementations. Asian Development Bank. 2015.

3. Pilot Project – Phase 1 Tuning Educational Structures in Europe.

4. Hancocks S. Life: long learning things. Vol. Suppl, British Dental Journal. 2002, pp. 32.

CHAPTER 3: Reflection on the importance and achievement of competence

Hla Moe
Hong Wei-Han
Jean-Francois Schved

This chapter discusses the process of consultation and reflections in developing the meta-profile for TASEMed Framework based on the generic and specific competencies survey administered. For medicine, a total of 312 academics, 214 employees, 717 students, and 286 graduates responded to the survey held over a period of 2 months from May 2017 to July 2017 (Figure 3.1).

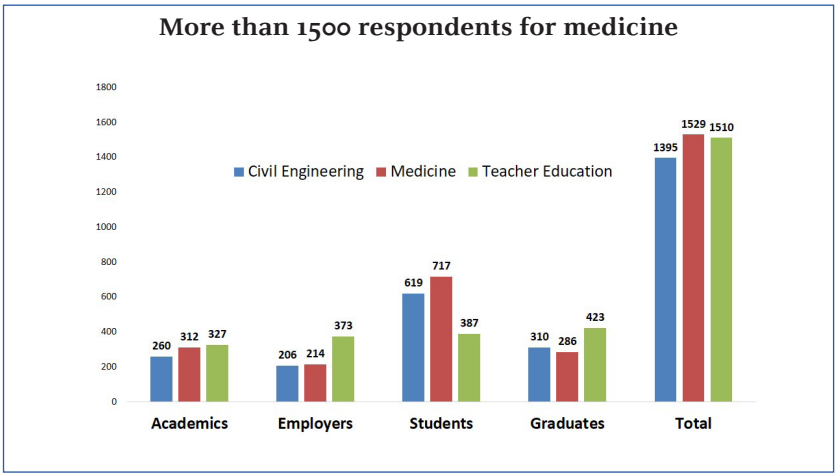

Figure 3.1: The total number of respondents by the stakeholders and subjects.

Two types of competencies were selected using the Tuning methodology; Generic and Subject-specific competencies. For subject area medicine (SAG), there were 13 generic competencies and 14 subject-specific competencies which were determined through consensus by members of the TA-SE project and SAG Medicine group, respectively.

Each competency was also rated in terms of importance and achievement; hence, there were two results for each competency. The rating of each competency is measured on a scale of 1 to 4, where 1=none, 2=weak, 3=considerable, 4=strong. The maximum value for mean was 4 and the minimum was 1. The five most important competencies were ranked in the questionnaire. The process of analysing the ranking was done by assigning points to the chosen competencies. For example, the competency which was deemed most important was assigned 5 points, the second was assigned 4 points and so on for the five most important competencies ranked. For competencies which were not chosen, 0 points were awarded. The consultation on competencies was carried out with four groups of respondents: academics, employers, students and graduates. The analysis of data on competencies (generic and subject-specific) was done in relation to four groups of respondents (academics, employers, students and graduates) and also in relation to three variables (importance, achievement and top five ranked).

The data obtained was shared during the second General Meeting where the generic and specific competencies were appraised reflectively based on importance, achievement and ranking. The correlation of agreement between the four stakeholders was very high – 0.93-0.98 (Figure 3.2). Thematic and relative gap analyses were carried out during the discussion. As a result, the following agreement was made collectively among group members:

- Each competency was perceived as important (3.3 – 3.8 on a scale of 4) by the four groups of stakeholders – academics, employers, students and graduates.
- Achievement scores were consistently lower than importance scores by approximately 20% (17% – 22%).
- All 27 generic and specific competencies were mapped onto the six domains; 1) Patient Care, 2) Family, Community & Population Care, 3) Ethics & Professionalism, 4) Knowledge & Skills, 5) Communication, and 6) Quality Assurance. Patient care emerged as the centre of TASEMed Framework. Each domain will be elaborated on in chapter 4. Some competencies were found to overlap in more than one domain. Details are summarised in the next chapter (Figure 4).

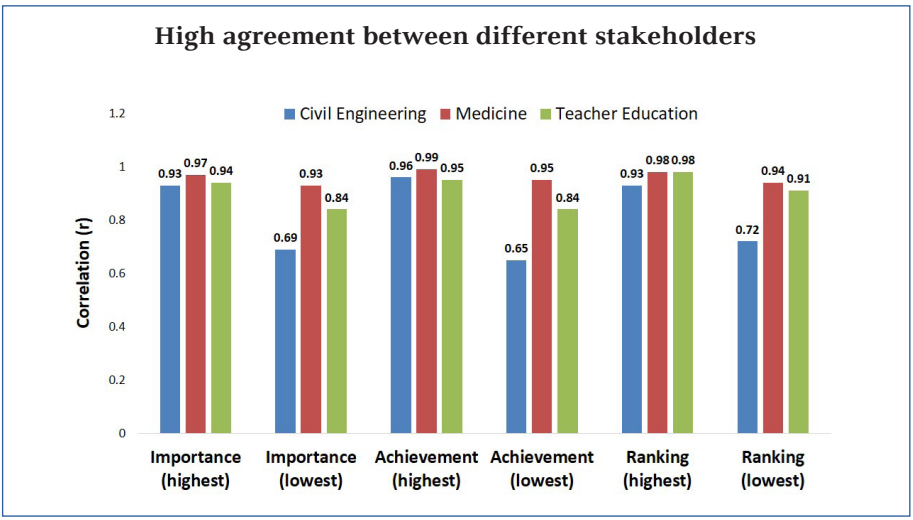

Figure 3.2: The highest and lowest correlation of agreement between stakeholders by subject.

Considering the high correlation of agreement between the four stakeholders, the following discussions are based on the overall results of generic and specific competencies.

3.2. RESULTS

3.2.1. Generic competencies between four groups of respondents

The medicine SAG group consulted with 1,613 respondents for generic competencies (comprising 330 Academics, 224 Employers, 754 Students and 305 Graduates) encompassing nine universities from seven Southeast Asian countries. The data was collected and analysed by an online system in the different levels of departments, disciplines, institutions and countries developed by the Tuning Academy.

i) Generic Competencies of Academics

All of 13 generic competencies showed more than 3 in the rating scale in terms of importance level. Of 13, there were three generic competencies which had higher (more than 3 in rating) level of achievement (Refer to Table 3.1). The three highest ranking generic competencies by academic respondents were: 3 (ability to uphold professional,

moral and ethical values), 13 (ability to apply knowledge into practice), and 6 (ability to think critically, reflectively and innovatively). The three lowest ranking generic competencies were: 11 (ability to conduct research), 7 (ability to understand, value, and respect diversity and multiculturalism), and 12 (ability to demonstrate leadership attributes), respectively.

ACADEMICS

RATING – Importance vs. Achievement

ALL competences above 3 in importance

#	Description	Importance	Achievement
3	Ability to uphold professional, moral and ethical values	3,7865	3,1007
13	Ability to apply knowledge into practice	3,7519	3,0847
8	Ability to carry out lifelong learning and continuous professional development	3,7144	2,9941
1	Ability to work collaboratively and effectively in diverse contexts	3,6864	2,9203
6	Ability to think critically, reflectively and innovatively	3,6771	2,9339
9	Demonstrate problem solving abilities	3,6751	3,0149
5	Ability to communicate clearly and effectively	3,6729	2,9845
4	Ability to demonstrate responsibility and accountability towards the society and environment	3,6284	2,8714
2	Ability to use information and communication technology purposefully and responsibly	3,5997	2,8968
10	Ability to initiate, plan, organise, implement and evaluate course of actions	3,5534	2,8401
7	Ability to understand, value, and respect diversity and multiculturalism	3,4329	2,8172
11	Ability to conduct research	3,4162	2,7808
12	Ability to demonstrate leadership attributes	3,3857	2,7397

3 competences over 3

Table 3.1: Generic Competencies rated in terms of importance and achievement by academics

ii) Generic Competencies of Employers

All of 13 generic competencies were regarded as important (rated above 3) by employers. There were six competencies (3, 13, 8, 1, 5, and 9) which were rated as high level of achievement (rated over 3), as shown in Table 3.2. The three highest ranking generic competencies by employer respondents were: 3 (ability to uphold professional, moral and ethical values), 13 (ability to apply knowledge into practice), and 1 (ability to work collaboratively and effectively in diverse contexts). The three lowest ranking generic competencies were:11 (ability to conduct research), 7 (ability to understand, value, and re-

spect diversity and multiculturalism), and 12 (ability to demonstrate leadership attributes), respectively, coinciding with the responses given by academic respondents.

EMPLOYERS

RATING – Importance vs. Achievement

13 competences over 3

#	Description	Importance	Achievement
3	Ability to uphold professional, moral and ethical values	3,7812	3,1805
13	Ability to apply knowledge into practice	3,7510	3,1332
8	Ability to carry out lifelong learning and continuous professional development	3,6806	3,0439
1	Ability to work collaboratively and effectively in diverse contexts	3,6739	3,0218
6	Ability to think critically, reflectively and innovatively	3,6712	2,9791
5	Ability to communicate clearly and effectively	3,6626	3,0401
9	Demonstrate problem solving abilities	3,6422	3,0462
4	Ability to demonstrate responsibility and accountability towards the society and environment	3,6119	2,9871
10	Ability to initiate, plan, organise, implement and evaluate course of actions	3,5960	2,9339
2	Ability to use information and communication technology purposefully and responsibly	3,5292	2,9584
12	Ability to demonstrate leadership attributes	3,4362	2,8394
7	Ability to understand, value, and respect diversity and multiculturalism	3,4246	2,9270
11	Ability to conduct research	3,3185	2,8367

7 competences above 3 in achievement

Table 3.2: Generic Competencies rated in terms of importance and achievement by employers

iii) Generic Competencies of Students

The students also regarded all 13 generic competencies as important (rated above 3) and scored high level (rated above 3) in six generic competencies, as shown in Table 3.3. The three highest ranking generic competencies by students were: 3 (ability to uphold professional, moral and ethical values), 13 (ability to apply knowledge into practice), and 6 (ability to think critically, reflectively and innovatively), coinciding with the responses given by academic respondents. The three lowest ranking generic competencies were: 2 (ability to use information and communication technology purposefully and responsibly), 11 (ability to conduct research), and 12 (ability to demonstrate leadership attributes), respectively.

STUDENTS

RATING – Importance vs. Achievement

ALL competences over 3

#	Description	Importance	Achievement
13	Ability to apply knowledge into practice	3,7282	3,0949
3	Ability to uphold professional, moral and ethical values	3,6641	3,1688
6	Ability to think critically, reflectively and innovatively	3,6101	3,0233
9	Demonstrate problem solving abilities	3,5940	3,0330
5	Ability to communicate clearly and effectively	3,5934	3,0245
8	Ability to carry out lifelong learning and continuous professional development	3,5802	3,0298
1	Ability to work collaboratively and effectively in diverse contexts	3,5547	2,9814
4	Ability to demonstrate responsibility and accountability towards the society and environment	3,5084	2,9697
2	Ability to use information and communication technology purposefully and responsibly	3,4971	2,9350
10	Ability to initiate, plan, organise, implement and evaluate course of actions	3,4741	2,9355
7	Ability to understand, value, and respect diversity and multiculturalism	3,4517	2,9854
12	Ability to demonstrate leadership attributes	3,3746	2,8469
11	Ability to conduct research	3,2884	2,8260

7 competences above 3 in achievement

Table 3.3: Generic Competencies rated in terms of importance and achievement by students

iv) Generic Competencies of Graduates

The graduates also regarded all 13 generic competencies as important (rated above 3) and 11 out of 13 generic competencies (rated above 3), shown in Table 3.4. It is important to note that there was a significant difference in results of employers and graduates in terms of importance versus achievement data in generic competencies. The three highest ranking generic competencies were: items 3 (ability to uphold professional, moral and ethical values), 13 (ability to apply knowledge into practice), and 1 (ability to think critically, reflectively and innovatively). The three lowest ranking generic competencies were: 7 (ability to understand, value, and respect diversity and multiculturalism), 11 (ability to conduct research) and 12 (ability to demonstrate leadership attributes), respectively, as follows:

GRADUATES

RATING – Importance vs. Achievement

13 competences over 3

#	Description	Importance	Achievement
3	Ability to uphold professional, moral and ethical values	3,6647	3,2606
13	Ability to apply knowledge into practice	3,6328	3,1669
5	Ability to communicate clearly and effectively	3,6149	3,1412
8	Ability to carry out lifelong learning and continuous professional development	3,6042	3,1744
9	Demonstrate problem solving abilities	3,5971	3,1204
1	Ability to work collaboratively and effectively in diverse contexts	3,5742	3,0951
6	Ability to think critically, reflectively and innovatively	3,5658	3,1185
4	Ability to demonstrate responsibility and accountability towards the society and environment	3,5361	3,0688
10	Ability to initiate, plan, organise, implement and evaluate course of actions	3,4887	3,0786
2	Ability to use information and communication technology purposefully and responsibly	3,4798	3,0201
7	Ability to understand, value, and respect diversity and multiculturalism	3,3901	3,0311
12	Ability to demonstrate leadership attributes	3,3683	2,9476
11	Ability to conduct research	3,2599	2,9510

2 competences below 3

Table 3.4: Generic Competencies rated in terms of importance and achievement by graduates

3.2.2. Subject-Specific Competencies Between Four Groups of Respondents

The consultation results on the medicine SAG group for subject-specific competencies were collected from 1,529 respondents (comprising 312 Academics, 214 Employers, 717 Students and 286 Graduates) encompassing nine universities from seven Southeast Asian countries. The data were collected and analysed by an online system in the different levels of department, disciplines, institutions and countries developed by the Tuning Academy.

i) Subject-Specific Competencies of Academics

All of the 14 subject-specific competencies rated above 3 in terms of importance level (Table 3.5). The top five in terms of achievement were: 2 (ability to appropriately perform history taking), 5 (ability to integrate clinical and work-up information to make diagnosis and differential diagnosis), 3 (ability to appropriately perform physical examination), 10 (ability to ensure and maintain patient safety), and 4

(ability to appropriately perform diagnostic investigation). There were four subject-specific competencies which were ranked high in terms of achievement (rating above 3).

MEDICINE

IMPORTANCE vs. ACHIEVEMENT

Tuning Academy

EMPLOYERS

#	Description	Importance	Achievement
2	Ability to appropriately perform history taking	3,79	3,35
5	Ability to integrate clinical and work-up information to make diagnosis and differential diagnosis	3,75	3,14
3	Ability to appropriately perform physical examination	3,74	3,31
10	Ability to ensure and maintain patient safety	3,72	2,96
4	Ability to appropriately perform diagnostic investigation	3,64	3,22
8	Ability to perform consultation with patients and family with empathy	3,64	2,85
1	Ability to practice according to good clinical practice (GCP) in various clinical settings	3,61	2,93
7	Ability to explain the benefit and risk of any therapeutic options	3,57	2,86
11	Ability to promote health and preventive medicine	3,51	2,81
6	Ability to provide appropriate therapy with a biopsychosocial approach	3,41	2,68
13	Ability to demonstrate a balanced dedication to serve the interest of individual patient and the commitment...	3,38	2,60
9	Ability to manage medical record appropriately	3,33	2,58
14	Ability to recognize and estimate the health risks and healthcare needs of a defined population...	3,31	2,50
12	Ability to recognize and address public concerns and controversial issues related to health	3,27	2,57

Table 3.5: Subject-specific Competencies rated in terms of importance and achievement by academics

ii) Subject-Specific Competencies of Employers

All 14 subject-specific competencies were regarded as important (rated above 3) by employers (Table 3.6). There were four competencies which rated high in terms of achievement (above 3): 2 (ability to appropriately perform history taking), 5 (ability to integrate clinical and work-up information to make diagnosis and differential diagnosis), 3 (ability to appropriately perform physical examination), and 4 (ability to appropriately perform diagnostic investigation). The three low-ranking competencies in terms of achievement are: 14 (ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups), 12 (ability to recognise and address public concerns and controversial issues related to health), and 9 (and ability to manage medical record appropriately).

MEDICINE

IMPORTANCE vs. ACHIEVEMENT

EMPLOYERS

#	Description	Importance	Achievement
2	Ability to appropriately perform history taking	3,79	3,35
5	Ability to integrate clinical and work-up information to make diagnosis and differential diagnosis	3,75	3,14
3	Ability to appropriately perform physical examination	3,74	3,31
10	Ability to ensure and maintain patient safety	3,72	2,96
4	Ability to appropriately perform diagnostic investigation	3,64	3,22
8	Ability to perform consultation with patients and family with empathy	3,64	2,85
1	Ability to practice according to good clinical practice (GCP) in various clinical settings	3,61	2,93
7	Ability to explain the benefit and risk of any therapeutic options	3,57	2,86
11	Ability to promote health and preventive medicine	3,51	2,81
6	Ability to provide appropriate therapy with a biopsychosocial approach	3,41	2,68
13	Ability to demonstrate a balanced dedication to serve the interest of individual patient and the commitment...	3,38	2,60
9	Ability to manage medical record appropriately	3,33	2,58
14	Ability to recognize and estimate the health risks and healthcare needs of a defined population...	3,31	2,50
12	Ability to recognize and address public concerns and controversial issues related to health	3,27	2,57

Table 3.6: Subject-specific Competencies rated in terms of importance and achievement by employers

iii) Subject-Specific Competencies by Students

The students also regarded all 14 subject-specific competencies as important (rated above 3). There were five competencies that rated high in terms of achievement (rated above 3), these were: 3 (ability to appropriately perform physical examination), 2 (ability to appropriately perform history taking), 5 (ability to integrate clinical and work-up information to make diagnosis and differential diagnosis), 10 (ability to ensure and maintain patient safety), and 4 (ability to appropriately perform diagnostic investigation). The three lowest-ranking achievement competencies were: 12 (ability to recognise and address public concerns and controversial issues related to health), 14 (ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups), and 9 (ability to manage medical records appropriately), which are similar results as with employers (Figure 3.33).

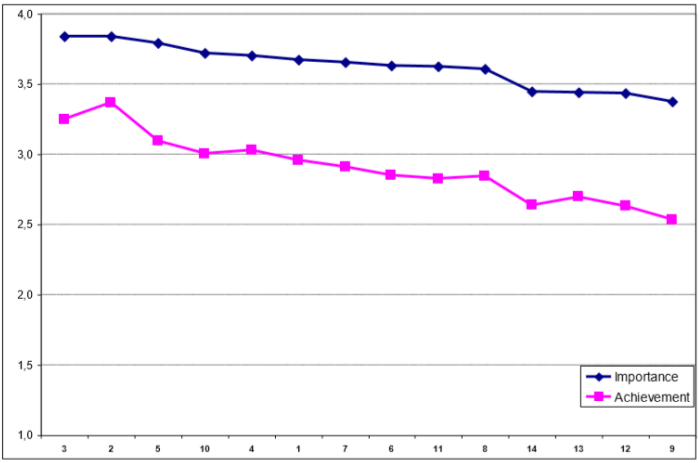

Figure 3.3: Subject-specific Competencies rated in terms of importance and achievement by students

iv) Subject-Specific Competencies of Graduates

All 14 subject-specific competencies were considered as important (rated above 3) by graduates. The top five achievement competencies (rate above 3) were: 2 (ability to appropriately perform history taking), 3 (ability to appropriately perform physical examination), 5 (ability to integrate clinical and work-up information to make diagnosis and differential diagnosis), 1 (ability to practice according to good clinical practice in various clinical settings), and 4 (ability to appropriately perform diagnostic investigation). The three lowest rated competencies in terms of achievement were: 12 (ability to recognise and address public concerns and controversial issues related to health), 9 (ability to manage medical records appropriately), and 14 (ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups) which were similar results as the achievement ratings by students and also the achievement rating by employers (Figure 3.4).

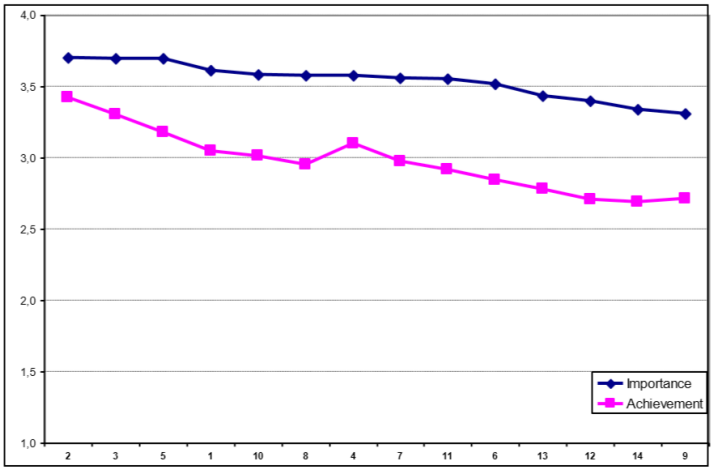

Figure 3.4: Subject-specific Competencies rated in terms of importance and achievement by graduates

3.3. CHALLENGES

There were numerous challenges faced by the Medicine SAG in analysing and interpreting the data. The group debated the domains (importance, achievement and ranking) to be prioritised in order to draft an agreed meta-profile. The items that emerged as important and had high rankings were discussed further. The group then discussed the areas to be included as the domains in the meta-profile. After the areas were identified, the group classified the relevant generic and subject-specific competencies according to the domains in the meta-profile. The group came to a consensus on the draft of the meta-profile at the end of the 2nd General Meeting.

3.4. REFLECTION AND CONCLUSION

The achievement levels were lower than the importance levels for all generic competencies for the four groups of respondents. From among the four groups of respondents, one of the largest gaps between achievement and importance –meaning high in importance but low in achievement– was generic competency 6, ability to think critically, reflectively and innovatively. All generic competencies were rated 3 and above in the four groups of respondents and the rating and ranking values showed similar results.

All subject-specific competencies were rated 3 and above in the four groups of respondents and the rating and ranking values showed similar results. From among the four groups of respondents, the three top and bottom rated items are similar in terms of both importance and achievement. The results of correlation were compatible because a high correlation was found between all four groups of respondents. The analysis of the data was used to build upon the meta-profile – the TASEMed Framework.

CHAPTER 4: Elaboration of medicine meta-profiles

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Manuel M. Dayrit,
Anna Van Trigt

The Medicine working group had representatives from various levels of academia, including early career lecturers, professors, and deans of the respective institutions. The representation was also diverse in terms of specialities: clinicians, basic medical scientists, public health specialists and medical educators. This diversity of representation provided a rich source of perspectives in meta-profile development.

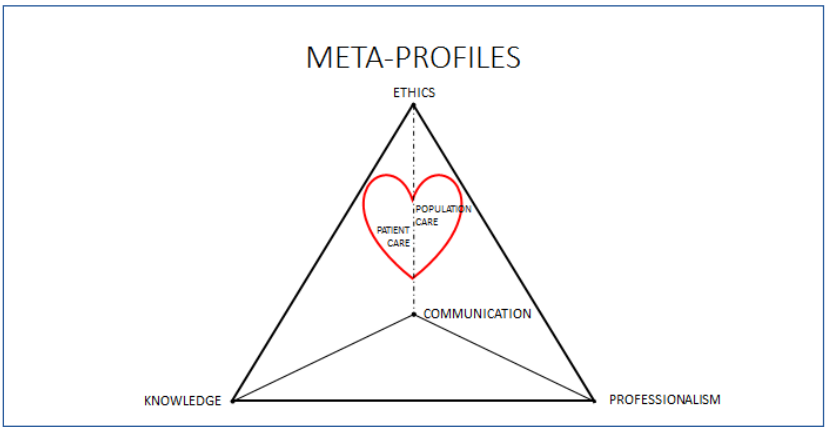
Through an iterative process which involved group discussion, proposing ways of grouping the generic competencies, and creating various graphic representations and conceptual constructs, the group agreed on six domains under which to classify the 13 generic competencies. These six domains were: 1) ethics & professionalism, 2) quality assurance, 3) knowledge & skills, 4) communication, 5) family, community & population care, and 6) patient care.

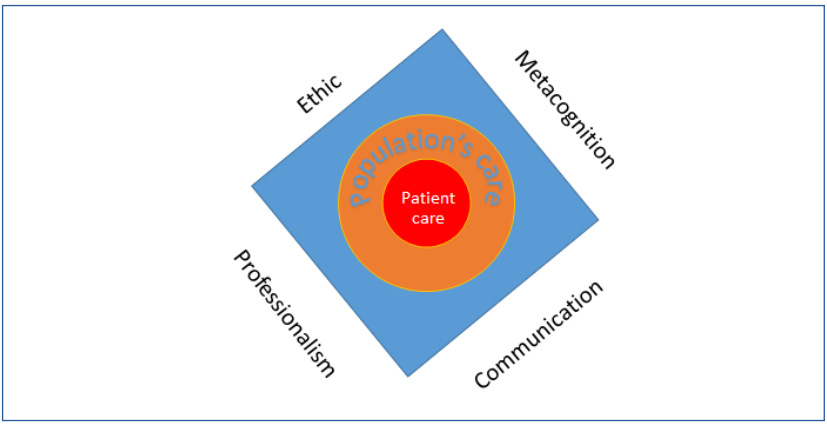
These six domains represented the collective perception about what physicians needed to be taught and learn in order to perform their job effectively. For example, there was consensus that physicians needed to be persons of integrity, duty-bound to conduct themselves with integrity, compassion, and professionalism at all times. They had to have the expertise to minister to their patients and constituencies while cognizant of their own personal limitations. They had to communicate effectively and to maintain the trust of those who sought their care and counsel.

4.1. GRAPHIC REPRESENTATION OF THE META-PROFILE

In the course of the group's discussions, there were various proposals for depicting these domains graphically. The group experimented with various geometric figures including a pyramid, interlocking triangles, stars, and circles.

Three draft diagrams of the meta-profile are shown below.


META-PROFILES
ETHICS
POPULATION CARE
PATIENT CARE
COMMUNICATION
KNOWLEDGE
PROFESSIONALISM


Ethic
Metacognition
Population's care
Patient care
Professionalism
Communication


Ethic
Population's care
Patient care
Communication
Professionalism
Metacognition

Eventually, a diagram of overlapping circles (Venn diagram) was chosen to best represent the group's collective ideas. At the centre of the figure lay the domain of "Patient Care" which the group agreed was the "heart of the meta-profile" and represented the central focus of a physician –the patient.

Around the heart was the domain of "Family, Community, and Population Care" which represented the broader scope of the physician's concern –the concern for groupings of individuals, families, communities as well as larger populations. The fields of family and community medicine, public health, and social medicine were invoked in this domain to acknowledge the reality that individuals function in social groups which determine the individual's health and well-being.

After the generic competencies were classified, the group proceeded to identify specific competencies which were unique to the roles and tasks of physicians. These specific competencies had to do with the clinical skills of diagnosis and therapeutics as well as the prevention and promotion of good health in both the clinical and public health contexts. Fourteen specific competencies were identified which were likewise classified into the 6 domains.

The domains of Ethics and Professionalism, Communication, Knowledge and Skills, and Quality Assurance contain the competencies which are instrumental to patient care as well as the care of family, community, and populations.

Figure 4: The TASE Medical Framework of Competence for Medicine SAG

Generic and specific competencies totalled 27. Some competencies were thought to belong to more than one domain; these were placed in the overlapping areas of the diagram.

See the TASEMed meta-profile below containing the 13 generic and 14 specific competencies classified into the 6 domains.

3.2. THE 6 DOMAINS OF THE META-PROFILE AND CLASSIFICATION OF COMPETENCIES

1) Patient care

Patient care is at the heart of the meta-profile. The imperative of medical education in any given context is to ensure patient safety and the quality of clinical care. Medical training may provide diverse instances of ensuring quality patient care and patient safety. For example, there are different levels of sophistication in the delivery of medical care – from primary healthcare centre to tertiary hospital. The medical curriculum should ensure that opportunities are provided for learners to assimilate this unifying competency of ensuring and maintaining patient safety. This construct depicts the idea that all the other 5 domains and all the generic and specific competencies of the meta-profile contribute to the most essential focus of patient care.

2) Family, community and population care

The care of the individual is provided within the broader context of family, community, and society. This second domain which "wraps around the heart of the meta-profile" calls attention to the social determinants of health which need to be addressed adequately. In a broader sense, medicine is not only about cure, it is about the prevention of illness and the management of risk factors which predispose to disease. This construct will be demonstrated through the following specific competencies:

- promote health and preventive medicine,
- recognise and address public concerns and controversial issues related to health, and
- recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups.

3) Ethics and professionalism

Physicians need to be ethical and professional at all times. Commitment to the concept of professionalism ensures the trustworthiness of the physician.

This domain contains the following generic competencies:

- uphold professional, moral and ethical values,
- understand, value and respect diversity and multiculturalism, and
- use information and communication technology purposefully and responsibly.

Specific competencies include:

- a balanced dedication to serve the interest of individual patient, and
- uphold the commitment to social justice and the common good.

This domain overlaps with the domain of Communication so that shared competencies include:

- demonstrate ability to work collaboratively and effectively in diverse contexts, and
- demonstrate responsibility and accountability towards the society and environment.

This domain also overlaps with Quality Assurance. Shared competencies include:

- be a lifelong learner, perform continuous professional development
- practice according to good clinical practice (GCP) in various clinical settings.

4) Knowledge and Skills

Much of the competencies in this domain refer to the clinical skills that physicians need. Thus, the medical trainee needs to demonstrate the ability to:

- demonstrate problem solving abilities, and
- apply the knowledge in practice.

Specific competencies include:

- appropriately perform history taking, physical examination, diagnostic investigations, and
- integrate information to make diagnoses and differential diagnoses.

Knowledge and Skills overlaps with Communication. Shared competencies include:

- provide appropriate therapy with a biopsychosocial approach
- demonstrate the ability to manage medical records appropriately.

Knowledge and Skills overlaps with Quality Assurance:

- initiate, plan, organise, implement and evaluate courses of action.

5) Communication

To provide effective patient-centred care, physicians need to actively listen, explore perspectives and expectations of patients and families. Competencies include:

- To communicate clearly and effectively
- explain the benefit and risk of therapeutic options, and
- perform consultation with patients and family with empathy

As already mentioned above, Communication overlaps with the domains of Ethics and Professionalism and Knowledge and Skills.

6) Quality Assurance

The healthcare professional also needs to develop and document evidence for the effectiveness of health practices for both individuals and populations. This is the essence of the construct of quality assurance which includes the generic competencies of

- think critically, reflectively and innovatively,
- conduct research, and
- demonstrate leadership attributes

As already described, Quality Assurance overlaps with the domains of Knowledge and Skills and Ethics and Professionalism.

With the development of the meta-profile, each university was assigned the task of comparing and contrasting its own degree profile with the meta-profile. The results of this undertaking are described in the next chapter.

CHAPTER 5: Analysing convergence of meta-profile and degree profile

Manuel M. Dayrit,
Foong Chan Choong,
Nik Ahmad Zuky Nik Lah

Each participating university presented the meta-profile (Figure 4) to faculty members for further consultation on the coincidence and differences between the meta-profile and the real degree profiles at the universities. The faculty members were asked to compare, discuss and scrutinise the degree profiles in relation to the meta-profile, based on the following questions:

i. Are there any coincidences between the meta-profile and degree profile?
ii. Are there any elements in the degree profile that differ from the meta-profile?
iii. What is the weight analysis of the different dominant elements?
iv. Are there any elements which are not considered in the respective medical degree profiles?
v. What are the explanations and justifications for these differences?

During the general meeting in Jakarta (March 2018), each Medicine SAG member provided a short report on their results of the meta-profile bridging with the real degree exercises. The Medicine SAG members appraised, compared and scrutinised the reports presented by all SAG members and reached several conclusions, as follows:

i. The meta-profile is transferable, in that most of the elements match up with the degree profiles across the universities.
ii. The meta-profile is well accepted by faculty members across the universities.
iii. The meta-profile is comprehensive, in that it represents the essential competencies of doctors across the universities.

iv. The meta-profile was subjected to minor revisions, in which some elements were revised to better reflect the competency constructs. The revised meta-profile was summarised in Figure 5.

The Table 5.1 below summarises the results of the reflections of nine universities on the coincidences and differences between the Southeast Asia Medicine meta-profile and their respective real degree profiles.

Table 5.1: Coincidences and differences between the meta-profile and real degree profiles at the universities

Name of University, Country	Process of Consultation in University	Degree profile of University	Coincidences between meta-profile and degree profile	Differences between meta-profile and degree profile	Action taken after reflection
University of Health Sciences, Cambodia	7-person Committee chaired by the Dean compared competencies in the degree profile and the meta-profile	General Medical Doctor/General Practitioner (GP) Programme 8 years	Degree profile contained all competencies in meta-profile except leadership competency	Degree profile lacked competency "Ability to demonstrate leadership attributes"	Re-design curriculum. Add Leadership into programme. Also add Inter-professional education into the programme
Universitas Padjadjaran, Indonesia	Consultations with Faculty and University Rector	Indonesian medical doctor competency standard (SKDI) 6 years	Degree profile includes all competencies in meta-profile	No major differences	Re-design curriculum. SKDI implementation to be reviewed and adjustments may be made regarding "local wisdom value such as Sundanese culture and religion"
Universiti Sains Malaysia (USM), Malaysia	Focus group discussion among 8 medical educators regarding USM competencies and meta-profile	SM medical degree (MD USM) 5 years	USM competencies fit well into meta-profile except for competency on patient safety.	Patient safety not explicitly stated among USM competencies though it is actually practiced	Re-design curriculum. Make explicit mention of competency on patient safety among USM competencies
University of Malaya, Malaysia	Meta-profile shared with medical teachers who gave feedback on coincidences and differences between degree profile and meta-profile	Bachelor of Medicine and Bachelor of Surgery (MBBS) 5 years	All competencies of degree profile are found in the meta-profile	Degree profile classifies competencies into 4 themes: Basic and Clinical Sciences, Patient and Doctor, Population Medicine, Personal and Professional Development	Re-design curriculum. Decision to implement a patient safety module

Name of University, Country	Process of Consultation in University	Degree profile of University	Coincidences between meta-profile and degree profile	Differences between meta-profile and degree profile	Action taken after reflection
University of Medicine Mandalay, Myanmar	Consultations done with Rector, Pro-rector, academic persons, students and graduates. Academic persons, students, and graduates surveyed on their perceptions of coincidences and differences.	Bachelor of Medicine and Bachelor of Surgery (MBBS) 6 years + 1-year internship	Survey results among academics, students, and graduates showed >50% agreement for coincidence of all except 4 competencies	Degree profile did not contain the following competencies: 1) Ability to conduct research, 2) Ability to practice according to Good Clinical Practice, 3) Ability to demonstrate balanced dedication to serve the interest of individual patient and the commitment to social justice and the common good, 4) Ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups	Re-design curriculum. Add the following to degree profile: 1) Ability to conduct research, 2) Ability to practice according to Good Clinical Practice, 3) Ability to demonstrate balanced dedication to serve the interest of individual patient and the commitment to social justice and the common good, 4) Ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups
University of San Agustin, Philippines	Meta-profile was discussed in faculty meeting	Bachelor of Science in Pharmacy (Pre-Medicine course) 5 years	Generic competencies of degree profile are found in meta-profile. BS Pharmacy specific competencies are different from the specific competencies for medicine	Quality Assurance not explicitly described in degree profile.	Re-design curriculum. Make explicit the domain of Quality Assurance into BS pharmacy curriculum
Western Visayas State University, Philippines	Focused Group Discussion among 6 faculty members and a former Dean	Doctor of Medicine (MD) 4 years + 1-year internship	All competencies of degree profile are found in the meta-profile except for Quality Assurance	Quality Assurance domain is not explicitly stated in the degree profile	Re-design curriculum. Strengthen competencies in the domains of Quality Assurance and Ethics and Professionalism

Name of University, Country	Process of Consultation in University	Degree profile of University	Coincidences between meta-profile and degree profile	Differences between meta-profile and degree profile	Action taken after reflection
Ateneo de Manila University, Philippines	Competencies presented to senior faculty in Academic Council meeting; Curriculum Committee reviewed competencies of meta-profile and degree profile	Joint degree Doctor of Medicine (MD), Master in Business Administration (MBA) 5 years, inclusive of internship	Degree profile contained all competencies in the meta-profile	Emphasis on Ignatian values in degree profile is absent in meta-profile. Ignatian values derive from the distinctive character of the Ateneo de Manila as a Jesuit University whose patron saint is Ignatius of Loyola.	Re-analyse curriculum. Undertake curriculum mapping to inventory curricular content for each competency
University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam	8 faculty members reflected on coincidences and differences and drew up a report	Medical Doctor (MD) 6 years	Degree profiles matched up with all domains of the meta-profile except for the domain of Quality Assurance	Degree profile lacked competencies in Quality Assurance	Re-design curriculum. Introduce Quality Assurance competencies into curriculum

FINDINGS

Each university adopted a unique process for reflecting on the coincidences and differences. There was no standard methodology used. For example, two universities organised focus group discussions (FGDs) with their faculty members; one university launched a questionnaire among academic members, students and graduates, while most convened discussions with the faculty members or the curriculum committee.

From the comparison results, Universitas Padjadjaran Indonesia, Universiti Sains Malaysia, University of Malaya (Malaysia) and Ateneo de Manila University (Philippines) reported that all competencies in their degree profiles matched up with the TASEMed meta-profile.

On the other hand, some meta-profile competencies were not explicitly found in the degree profiles of University of Health Sciences (Cambodia), University of Medicine Mandalay (Myanmar), Western Visayas State University (Philippines), and University of Medicine and Pharmacy Ho Chi Minh (Vietnam).

Specifically, the following meta-profile competencies were missing in the respective degree profiles of the following universities. See Table 5.2.

Tables 5.2. Domain/competency requiring attention

Domain/competency	May need attention in
Patient safety	Universiti Sains Malaysia; University of Malaya (Malaysia)
Quality assurance	University of Medicine and Pharmacy Ho Chi Minh (Vietnam); Western Visayas State University (Philippines); University of San Agustin (Philippines)
Ability to demonstrate leadership attributes	University of Health Sciences (Cambodia)
Ability to conduct research	University of Medicine Mandalay (Myanmar);
Ability to practice according to Good Clinical Practice	University of Medicine Mandalay (Myanmar);
Ability to demonstrate balanced dedication to serve the interest of individual patients and the commitment to social justice and the common good	University of Medicine Mandalay (Myanmar);
Ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups	University of Medicine Mandalay (Myanmar);

Ateneo de Manila University (Philippines) reported that there was one competency (Ignatian values) in its degree profile which is absent in the meta-profile.

As a result of analysing the convergences between TASEMed meta-profile and degree profile, the universities have initiated actions to further analyse or re-design their curricula.

CONCLUSIONS

There are several conclusions based on the analysis of convergence between meta-profile and degree profiles.

Firstly, there is a high degree of consistency between the TASEMed meta-profile and degree profiles of each participating university. There is complete consistency in the domains of Knowledge and Skills, and Communication. However, for the three other domains –namely Ethics and Professionalism, Family, Community and Population Care, and Patient Care–, one or two competencies in the domain were identified as requiring consolidation. In total, 7 of 27 competencies in the meta-profile (26%) were perceived as needing strengthening in the respective degree profiles.

Secondly, it could be hypothesised that the TASEMed meta-profile is sufficiently robust and holistic, and hence the profile could be considered as a common tool for all medical schools in Southeast Asia to describe the competencies in their degree profiles. This is encouraging because Southeast Asia is a region with diverse cultural and social backgrounds.

Thirdly, the analysis of convergences has resulted in each university initiating a process to strengthen their respective degree profiles by re-designing or re-analysing the domains/competencies that require further attention.

Finally, as a result of this analysis, the meta-profile was further modified. See Figure 5.

Figure 5: The Revised TASE Medical Competency Framework
(Note: Statements in italics indicate that the competencies were reorganised and statements in bold indicate that the statements were revised)

CHAPTER 6: Reflection on student workload for the degree programme

Minh Hong Pham,
Nor Azwany Yaacob

6.1. STUDENT WORKLOAD SURVEY

6.1.1. Survey Methods

The student workload survey was conducted using a standardised questionnaire to estimate student workload as perceived by students and academic staff. There were 6 questions in the questionnaire: Estimation of total hours perceived by students or academic staff for a student to complete the semester. Estimation of hours needed for a student to complete various different modes of teaching and learning activity as well as independent work were also included (Appendix A and B). Standardisation of survey questions was done by discussion and training of the members on each item to achieve same understanding between participating universities. This is to ensure the same guidance will be given on questionnaire response while conducting the survey. The aim of the survey is to estimate students' workload medical programmes. Data collection was carried out from June to mid-July 2018.

Variation of contact hour definition, number of courses and weeks per semester was noted among the participating universities (Table 6.1). The pre-clinical phase was selected for the survey after considering the variation of curricular structure. The pre-clinical phase had been shown to be the most comparable in terms of teaching and learning activities and time frame for the survey to be feasible in estimating student workload. Each university thus had to decide on the time frame for the students and academic staff to use in estimating the workload, retrospectively. Mapping of curricular structure was done, and semester 2 was decided for the general time frame which is between February and May 2018. All the completed courses or modules selected within the time frame must be included and the responders must have passed the course implementation to estimate

the workload. Respondents were at least 10 students and one teacher was selected per course. The University of Malaya is non-semester-based curricular, thus all modules for the pre-clinical academic year were included. Thus, the students' workload in this survey is defined as the total contact hours and independent work that a student needs to complete all the requirements of the unit/course/module during the preclinical phase.

Table 6.1: Contact hour definition, courses and weeks number per semester from 9 participating universities used to estimate student workload

University		Contact hour definition	Number of courses	Number of weeks/ semesters
1	Universiti of Sains Malaysia	60 minutes	3	19
2	University of Malaya	60 minutes	7	46/year*
3	University of Medicine, Mandalay, Myanmar	50 minutes	3	16
4	University of Health Sciences, Cambodia	55 minutes	5	24
5	University of Medicine and Pharmacy, Ho Chi Minh city, Vietnam	50 minutes	5	20
6	University of Padjadjaran, Bandung, Indonesia	60 minutes	5	18
7	Ateneo de Manila University, Philippines	60 minutes	6	18
8	West Visayas State University, Philippines	60 minutes	5	19
9	University of San Augustin, Philippines	60 minutes	4	19

*non-semester based

6.1.2. Results and Discussion

There were 57 respondents from academics and 611 from students. This indicates that more than one academic and ten students responded to the survey per course, especially from the University of Padjadjaran, Bandung, Indonesia and Ateneo de Manila University, Philippines.

Total contact hours in the units/courses/modules

The estimated total contact hours for the pre-clinical unit, course or modules per semester are 329 hours, as perceived by the academics, and 392 hours as perceived by the students. This indicates that the students perceived higher total contact hours than the academics, who were actually the teachers that they were in contact with.

The estimation of the total contact hours was based on the data collected, removing outliers. Two universities were removed as outliers, which is 24 weeks per semester at the University of Health Sciences, Cambodia and 46 weeks per year at the non-semester based curriculum at the University of Malaya. Table 7.1 showed that most of the university had a range of 16 to 20 weeks in a semester which encompasses 720 to 800 hours per semester. The total 329 contact hours (academics) or 392 contact hours (students) found in this survey thus indicates that around 40% of the semester workload is contact hours.

The difference in total contact hours as perceived by academics and students may reflect that students received more teaching than what it is designed for. A curricular should be designed in such a way that the time needed for a student to complete the course must be feasible to achieve the intended competencies. Thus the academics who conduct the teaching must follow the designed curriculum in such a way as not to overburden students with unnecessary activities or overemphasis on certain competencies. The teaching and learning plan must take into consideration the amount of contact hours and the amount of independent work time to prepare and complete each activity. However, the difference of only 63 hours per semester with the average of 19 weeks between the academics and students may not be significant and may be due to several biases. First, responders' bias whereby the term contact hours was understood differently among the students and the academic staff. Secondly, recall bias wherein the students as well as the academics had to recall the time they had used especially when recalling the time for each different method of teaching and learning activity, which may be incorrectly estimated from what they had in the actual setting. In addition, recall of time taken for less interesting sessions may be perceived as longer than the actual time taken.

Total independent work hours

The academics estimated a total of 617 hours for independent work while students estimated a total of 610 hours. The estimation is similar between the two groups, which may indicate a good agreement between academics' expectations and students' study effort. However, the estimation of hours for different independent or non-contact activity was generally perceived as lower by students as compared to the hours perceived by the academics, although the proportion of hours was similar for the same activity. Reading texts and literature

and working with internet sources was found to be the highest time spent as perceived by both students and academics, although academics seem to expect students to spend more time than the student perceives. Similarly, academics expect students to spend more time as compared to the amount the student perceives they should spend on unsupervised field and laboratory work, preparation of written work as well as examinations (Table 6.2)

Table 6.2: The mean estimated total independent work hours based on teaching and learning activity, as perceived by students and academic staff

Teaching and learning activity	Perceived by students (Hour)	Perceived by academics (Hour)
Reading texts or literature	194.54	228.17
Unsupervised fieldwork	14.54	17.82
Unsupervised laboratory work	19.13	38.17
Preparation and execution of written work	38.83	48.82
Working with internet sources	107.40	132.40
Preparation for assessment and examinations	230.80	124.38
Others	5.11	28.10
Total mean Hours	610.34	617.85

These perception differences between students' and academics' points of view may be due to the differing definition of independent work. The variations may also due to different ways of instructing students on independent work. Universiti Sains Malaysia commented that some students did not follow proper instructions to complete tasks or assignment, thus spending less time. On the other hand, at West Visayas State University, independent work is clearly defined as student-generated portfolio. There are also specified "self-directed learning" slots, although students might use these for other non-academic activities. Students might also perceive independent work as less important than contact hour activities, thus recalling less time spent on the effort, as shown by the lower time perceived for completing field, laboratory and written work. Students perceived their time spent on preparation of assessments and examinations as almost double the length expected by the academics (20% of total hours by academics versus 38% by the students). This may be due to the exam-driven attitude of students in their study.

Total number of hours per semester

The total number of hours per semester is the sum of the estimated contact hours and independent work. The academics perceived a total of 947 hours but students perceived a higher total of 1,002 hours. Total hours for the average of 19 weeks per semester (after removal of outliers of 24 & 46 weeks for the non-semester-based universities) with 8 official hours in 5 days a week will only be 760 hours, which is lower than the hours estimated as perceived by both groups. The higher time perceived by students may be due to the fact that students consider their time spent including non-office hours, including weekends as part of workload, but on the other hand, academics considered only official office hour time as the student workload.

Ratio of contact hours and independent work per semester

The percentage ratio of contact to independent work hours as perceived by academics and by students was relatively similar (Figure 6.1). These percentages are in line with the concept of student-centred learning and the guidelines of a credit system published at many universities in Europe and North America wherein 1 hour of instruction needs at least 2 hours of supplementary assignments.

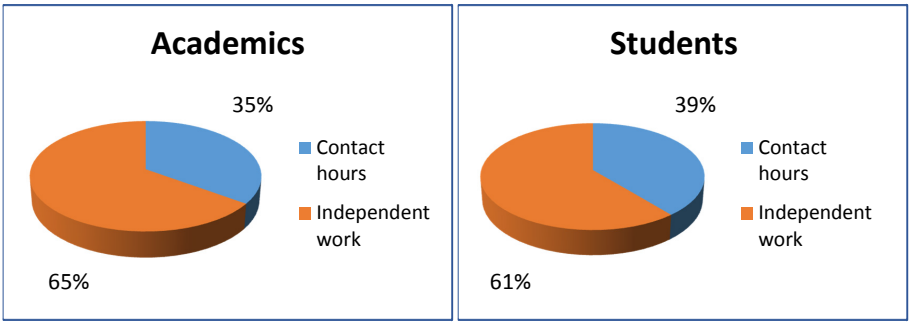


Figure 6.1. Percentage of contact hours compared to independent work

Total contact hours and independent work an average student needs

An average student workload was estimated to need 739 hours by the academics and 727 hours by students to complete all requirements in a semester. The estimation per week was 50 hours by academics and 62 hours by students.

In a 5-day week with 8 official hours a day, a week will have 40 office hours. The academics estimated that students may need about 10 non-office hours to complete the supplementary assignments of the course. However, the average student estimated a higher number of hours needed, which is around 22 non-office hours. If a student studies 10 hours a day, 6 days a week (from Monday to Saturday), the total hours per week is 60 hours. Students might recall the busiest week in the semester when they do their estimation. These estimations are reasonable for a range of 18-20 weeks per semester programme where the total hours of official hours per week is 760 in the average semester system.

Consideration of student expectations and feedback

Eighty-nine percent of the academics took students' expectations and feedback into consideration when planning the workload for their course, while only 71% of students claimed to be given the opportunity to provide feedback about the workload in the course. Students' feedback is important as an indirect evaluation of the curriculum. It may help in the planning of curricular design improvement as it may illustrate over– or under-loading of information as well as emphasis on certain competencies. However, such feedback may not always be collected at all universities, and not all teachers take students' expectations and feedback into consideration when planning the workload for their course.

Ninety one percent of academics estimate the hours students need to do a task when they plan the unit/course/module, while only 41% of students were informed about the number of hours planned for independent work. More than half of students are not aware of the actual objective of independent work and the importance thereof for assessment. The student guide should clearly tell students to prepare before participating in teaching and learning contact hours in class with the teachers. Teachers assume students prepare independently but do not verify it. Thus, clear guidance is important to enhance students' preparation or to guide them in completing tasks and assignments.

6.1.3. Summary and Conclusions of student workload survey

The total hours required to complete the course is aligned with the current practice of different institutions (720-800 hours per semester). The total 50 hours per week in which 17 hours are contact hours

(35%) and 33 hours are independent works (65%) is realistic. For every 1 contact hour should 2 hours of independent work should be provided.

Students, being in assessment-driven learning, perceived independent work mainly as a means of preparing for assessment, while academics expected students to prepare for the learning activities. It is, thus, necessary to give clear guidance on independent work, manoeuvring students' workloads correctly, as designed. Students' feedback can be an important tool for checking and balancing curricular design in order to avoid student overload and helps in maintaining good mental health among students.

6.2. STUDENT WORKLOAD FOR THE SOUTHEAST ASIA MEDICINE DEGREE PROGRAMME

The SEA Medicine Programme for undergraduate study was represented by 7 universities from Philippines, Myanmar, Cambodia, Vietnam & Malaysia. Student workload had been uniformly defined by all universities as the sum of contact hours and independent learning or non-contact hours with the teachers. However, student workload calculation varies between the universities, and was thus not comparable. In addition, some universities do not use a credit system or include internship as part of the programme workload (Table 6.3). Malaysia had clearly defined student workload as 40 notional hours, equivalent to 1 credit.

Table 6.3: Student workload by hours as defined by universities

	University	Hour definition	Credit
1	Universiti of Sains Malaysia	40 hours	1
2	University of Malaya	40 hours	1
3	University of Medicine, Mandalay, Myanmar**	35 hours per week	1
4	University of Health Sciences, Cambodia**	15 contact hours of theory or 30 contact hours of class practice or 45 contact hours of clinical practice or 90 hours of internship	1
5	University of Medicine and Pharmacy, Ho Chi Minh city, Vietnam	15 contact hours of theory or 30 contact hours of practice	1
6	University of Padjadjaran, Bandung, Indonesia	3 hours per week	1
7	Ateneo de Manila University, Philippines*	3 contact hours per week	
8	West Visayas State University, Philippines**	No specific definition	
9	University of San Augustin, Philippines	Not applicable	

* not credit system, hours is defined as unit.
** Medicine programme is inclusive of internship training.

The workload survey conducted, was only to estimate workload for the pre-clinical years, which has a different structure of teaching and learning from the clinical years. Another approach to estimate student workload, after considering the variations of calculation of workload and curriculum structure between all the universities, is to use workload hours per week. The estimated student workload per week is 50 hours with an average of 44 hours (Appendix C).

6.3. STUDENT WORKLOAD FOR MEDICINE DEGREE PROGRAMME

The workload survey estimates only the preclinical years. Student workload estimation was not directly comparable due to the different structure of each university curriculum, with different ways of calculation of workload.

APPENDIX A: Workload survey (Teacher Perception)

TEACHER			
1	How many **CONTACT HOURS** in total were devoted to your unit/course/module throughout the **SEMESTER**?	..... hours	
2	Specify the types of **INDEPENDENT WORK** you promote in the unit/course/module throughout the **SEMESTER**. Enter the estimated number of hours which, in your opinion, the student should have in order to complete the self-work in the unit/course/module.		
a	Reading texts or literature	Yes, ... hours	No
b	Fieldwork (site visits, etc., not supervised)	Yes, ... hours	No
c	Laboratory work (not supervised)	Yes, ... hours	No
d	Preparation and execution/presentation of written work (essays, reports, design work, modelling)	Yes, ... hours	No
e	Working with Internet sources	Yes, ... hours	No
f	Preparing for interim assessments, final examinations, tests, etc.	Yes, ... hours	No
g	Other (specify):	..... hours	No
3	How many hours on AVERAGE does a student need to complete all the requirements of the unit/course/module in this **SEMESTER** (taking into account CONTACT HOURS and INDEPENDENT WORK)?	..... hours	
4	How many hours per WEEK on AVERAGE does a student study (both CONTACT HOURS AND INDEPENDENT WORK) to complete all the requirements of the unit/course/module?	..... hours	
5	When planning the workload for your unit/course/module, do you consider it necessary to include hours for students' independent work?	Yes	No
6	Do you take students' expectations and evaluation into consideration when planning the workload for your course?	Yes	No

APPENDIX B: Workload survey (Student perception)

STUDENTS			
1	How many **CONTACT HOURS** in total were you given to study this unit/course/module throughout the **SEMESTER**?	..... hours	
2	Specify the types of **INDEPENDENT WORK** you use to learn the unit/course/module throughout the **SEMESTER**. Enter the estimated number of hours you need to complete self-work on the unit/course/module.	..... hours	
	Enter the estimated number of hours you needed to complete the self-work on unit/course/module.		
a	Reading texts or literature	Yes, ... hours	No
b	Fieldwork (site visits, etc.)	Yes, ... hours	No
c	Laboratory work (not supervised)	Yes, ... hours	No
d	Preparation and presentation of written work (essays, reports, design work, modelling)	Yes, ... hours	No
e	Working with Internet sources	Yes, ... hours	No
f	Preparing for interim assessments, final examinations, tests, etc.	Yes, ... hours	No
g	Other (specify):	..... hours	No
3	How many hours did you spend in the **SEMESTER** to complete all the requirements of **this** unit/course/module (taking into account CONTACT HOURS and INDEPENDENT WORK)?	..... hours	
4	How many hours per **WEEK** did you spend (both CONTACT HOURS AND INDEPENDENT WORK) to complete all the requirements of **the** unit/course/module?	..... hours	
5	Have you been aware of the number of hours planned for the students for independent work in the unit/course/module?	Yes	No
6	Did the lecturers guide you at the beginning of the unit/course/module on the necessary workload of each part of the independent work?	Yes	No

APPENDIX C: Hours per week for estimation of workload

	Hours	Total weeks (whole programme)	Total hours for whole programme	Average hours per academic year	Average hours per week	Number of academic years	Total weeks for pre-clinical	Total weeks for clinical years	Total hours for pre-clinical	Total hours for clinical years	Average hours for pre-clinical	Average hours for clinical years
USM	40 hours	195	6720	1344	34	5	70	125	2120	4600	30	37
Unpad	3 hours per week	168	7728	1288	46	6	118	50	6048	1680	51	34
UM	40 hours	206	9580	1916	47	5	84	122	5250	4330	63	35
UMM**	35 hours per week	311	11792	1685	38	7	149	162	5215	6577	35	41
ASMPH	3 contact hours per week	76	3040	1520	40	2	not applicable					
UMP	15 contact hours of theory or 30 contact hours of practice	240	10890	1815	45	6	120	120	5615	5275	47	44
UHS**	15 contact hours of theory or 30 contact hours of class practice or 45 contact hours of clinical practice or 90 hours of internship	288	13099	1637	45	8	108	180	4330	8769	40	49
WVSU**	No specific definition	216	11656	2331	54	5	114	102	4360	7296	38	72

** with internship

CHAPTER 7: Some examples of revised/new programmes

Minh Hong Pham,
Hoai Phong Nguyen

7A. UNIVERSITY OF MEDICINE AND PHARMACY, VIETNAM

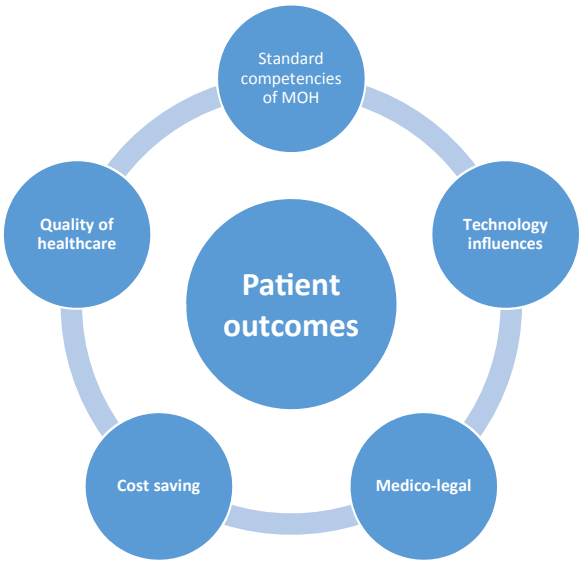
1. Name of the revised programme

- Programme name: Doctor of Medicine
- Degree awarded: Doctor of Medicine (MD)

2. Length and level of the programme

- Length of programme: 2 parts
  1) Part 1: Pre– Clinical: 3 years, 6 semesters, 120 weeks
     - Year 1: 10 courses: 36 credits
     - Year 2: 15 courses: 36 credits
     - Year 3: 14 courses: 36 credits
  2) Part 2: Clinical: 3 years, 6 semesters, 120 weeks
     - Year 4: 12 courses: 36 credits
     - Year 5: 11 courses: 34 credits
     - Year 6: 10 courses: 32 credits
       - Bachelor level
       - Further study:
     - Postgraduate programme: 18 months of training prior to obtaining the medical license
     - Residency programme: 3 years of training to obtain the 1st Degree of Specialist
     - Specialty programme: 2 years of training to obtain the 1st Degree of Specialist
     - Subspecialty programme: 2 years of training to obtain the 2nd Degree of Specialist
     - Master programme: 2 years of training to obtain the Degree of Master in Medicine
     - PhD Programme: 4 years of training to obtain the Degree of PhD in Medicine

3. Social need for the revised programme



1) **Ministry of Health (MOH)** established standard competencies for general medical doctors in Vietnam, which aligns with the improvement of the quality of undergraduate student assessment prior to their graduation as part of a quality assurance process of all medical training institutions in Vietnam. Therefore, medical training institutions have to develop an educational programme based on competencies and learning outcomes, and a competency-based assessment programme that is aligned with accreditation standards both at national and regional level.
2) **Patient outcomes**: reduce number of preventable injuries and death.
3) **Medico-legal:** less medico-legal cases by improving communication.
4) **Technology influences:** Advantages & disadvantages of technology for patient safety.
5) **Cost saving**: Due to reduction of hospital acquired conditions and medico-legal cases
6) **Quality of healthcare:** Improve the quality of healthcare due to appropriate and non-harming treatment.

4. Future fields, sectors of employment/occupation of graduates

1) Students who successfully complete the programme can work at:

   - Health stations, district hospitals and province or city hospitals throughout the country
   - Foreign countries in which graduates could potentially practice, ex: United states, France.

2) Future fields for the graduates:

   - **Medical based**: Internal Medicine, Geriatrics, Emergency Medicine, Anaesthesiology and Resuscitation, Family Medicine, Paediatrics, Infectious diseases, Medical Neurology, Dermatology, Endocrinology, Psychiatry, Phthisiology and Pulmonology, Oncology, and Radiology.
   - **Surgical based**: General Surgery, Urology, Paediatric Surgery, Thoracic Surgery, Neurosurgery, Obstetrics & Gynaecology, Ophthalmology, Traumatology-Orthopaedics, Otorhinolaryngology, and Plastic Surgery.
   - **Laboratory based**: Anatomic Pathology, Chemical Pathology, Clinical Immunology, Haematology, Medical Genetics and Microbiology.
   - **Public health**: Master of Public Health, Doctor of Public Health: Epidemiology, Family Health, Environmental & Occupational Health.

5. Description of the degree profile of a revised programme in terms of generic and/or subject-specific competencies. Definition of competencies and formulation of learning outcomes at programme level

Competence	Type of Competence	Definition	Learning outcomes (at programme level)
1. Knowledge – General – Medical	– General (G) – Specific (S)	1. Apply the scientific basis of the normal structure, development, function, and relationships among the major organ systems of the body to concepts of health and disease (S). 2. Link biochemical, physiological, neurological, and immunological mechanisms to their role in maintaining body homeostasis (S). 3. Apply principles of pathophysiology to diseases and disorders (S). 4. Evaluate the role of immunology and microbiology in health and disease (S). 5. Compare and contrast the genetic processes and environmental influences on health and on disease and their treatment (S). 6. Interpret the role of normal human biological, cognitive, psychological, and behavioural development across the life span as determinants of health and illness (S). 7. Interpret the clinical, laboratory, pathologic, and radiologic manifestations of common diseases in patient care (S). 8. Apply pharmacological principles to medical therapeutics (S) 9. Apply principles of nutrition for maintaining optimal health and managing disease (S). 10. Apply the principles of epidemiology to the practice of medicine for the individual and the local and global communities (S). 11. Describe how the principles of complementary medicine apply to patient care (S). 12. Discuss the scientific method, clinical, and translational research as they relate to patient care (S).	1. Apply the knowledge of the basic science, basic medical science and clinical medical science in healthcare practice. 2. Apply the evidence– based medicine into healthcare practice. 3. Apply the knowledge of health enhancement and disease prevention into healthcare practice for individuals and community.

Competence	Type of Competence	Definition	Learning outcomes (at programme level)
2. Patient care	– General (G) – Specific (S)	1. Elicit a complete and accurate patient history including belief systems, spiritual and cultural issues and incorporate these into the comprehensive care of a patient (S). 2. Perform an accurate and relevant screening and focused physical and mental status examinations (S). 3. Perform common clinical procedures (S). 4. Select appropriate physical examination techniques, laboratory tests, radiologic, and other clinical studies and interpret the results (S). 5. Access biomedical information resources and call on appropriate consultants to support evidence-based medical care (S). 6. Formulate a plan for the diagnosis and treatment of common medical conditions (S). 7. Recognise life-threatening conditions and institute appropriate initial care (S). 8. Identify opportunities for early intervention, prevention, and health education taking into account barriers to change (S)	4. Perform the accurate diagnosis, appropriate treatment and effective prevention for patients. 5. Determine and solve common health problems in the family, community and population.
3. Communication and collaboration	– General (G) – Specific (S)	1. Demonstrate empathic patient-centred communication (S). 2. Inform the patient and his/her representatives about the status of the patient's health and condition (S). 3. Synthesise and present a coherent description of the patient's clinical condition based upon the information obtained from the patient and other resources (S). 4. Demonstrate shared decision-making with patients including discussing the risks and benefits of medical interventions and obtaining informed consent (S).	6. Communicate and collaborate effectively with patients, families, colleagues and community in healthcare practice.

Competence	Type of Competence	Definition	Learning outcomes (at programme level)
		5. Demonstrate skills and strategies for engaging patients and their families in difficult conversations (e.g. end-of-life, medical errors, serious diagnosis, etc.) (S). 6. Collaborate effectively with other healthcare professionals in caring for patients (G),(S). 7. Negotiate conflicts within healthcare teams (G),(S). 8. Consider the patient's culture, beliefs and level of health literacy in communicating effectively (G),(S).	
4. **Practice-Based Learning and Improvement**	– General (G) – Specific (S)	1. Evaluate study design, methods, and results as they apply to evidence-based medicine (G),(S). 2. Apply reflection and feedback to incorporate lessons learned into future practice (G). 3. Utilise electronic and other resources in the practice of lifelong learning (G). 4. Apply medical standards, clinical practice guidelines, and practice algorithms appropriately for individual patients or populations (S). 5. Use learner-centred principles to teach colleagues, patients, and the community-at-large about health and medical issues (G),(S). 6. Critically appraise the effectiveness of diagnostic and therapeutic interventions (S).	7. Learn based on practice 8. Improve profession by lifelong learning
5. Systems-Based Practice	– General (G) – Specific (S)	1. Discuss the role of advocacy and healthcare policy in improving patient care (S). 2. Use system resources available to patients and communities for health education, treatment, and rehabilitation of medical and psychiatric conditions (S). 3. Define the elements in the healthcare system that lead to disparities in health and access to healthcare (S).	9. Practise healthcare based on health system.

Competence	Type of Competence	Definition	Learning outcomes (at programme level)
		4. Interpret information about the health of patient populations and communities to identify needs and plan appropriate interventions in support of population health (S). 5. Explain how diverse cultures and belief systems impact perception of health and illness and response to symptoms, diseases, and diagnostic and treatment interventions (S). 6. Apply the principles of cost-effective healthcare in patient care (S). 7. Analyse the organisation, financing, and delivery of healthcare (S). 8. Discuss the role of medical jurisprudence and conflicts of interest in the healthcare system (S).	
6. Ethics and Professionalism		1. Apply the theories and principles that govern ethical decision making (G). 2. Demonstrate ethical behaviour including: (G),(S) – Compassionate treatment of patients – Respect for privacy and dignity – Honesty and integrity – Truthfulness – Patient advocacy – Confidentiality – Accountability 3. Demonstrate reliability, punctuality, dependability, and integrity in all professional activities (G). 4. Promote ethical and professional behaviour of peers (G). 5. Recognise personal and professional conflicts of interest (G).	10. Uphold professional, moral and ethical values 11. Demonstrate a balanced dedication to serve the interest of individual patient and the commitment to social justice and the common good

6. Link of the competencies with the agreed meta-profile University of Medicine and Pharmacy, Ho Chi Minh City

Vision

To be a leading health science university in Vietnam and in the region.

Mission

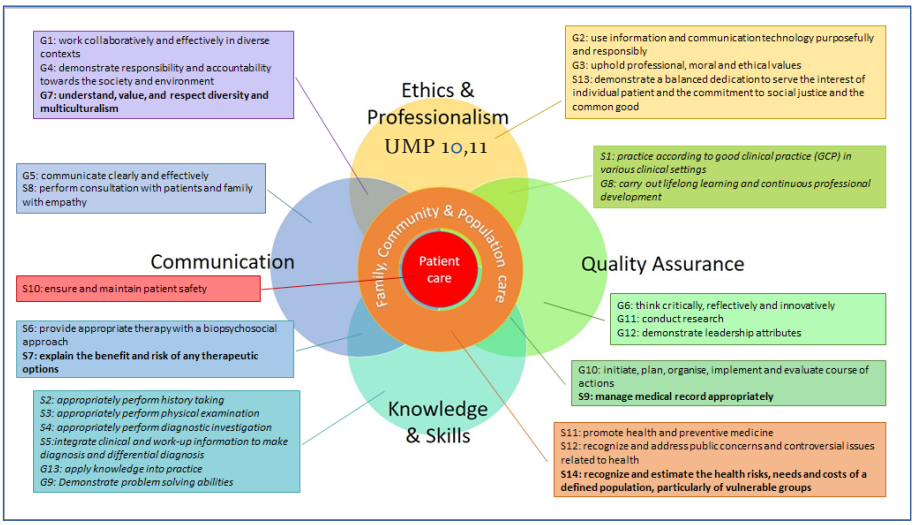
To train high quality health professionals, advance research and apply modern technology in order to protect, care for and promote health for all people.

Faculty of Medicine

- ***Elements of the meta-profile are included in the degree profile***

  - Patient care
  - Family, community, and population care
  - Knowledge and Skills
  - Communication
  - Ethics and Professionalism

- ***Elements of the meta-profile are included but limited in the degree profile***
  - Quality assurance: need enhancement



7. Structure of the programme: units/courses/modules with their learning outcomes and learning, teaching and assessment strategies

Programme learning outcomes are described from year 1 to year 6 in the attached file.

<table>
<tr><th colspan="6">YEAR 1 (36 credits)</th></tr>
<tr><th>Module 1: Molecules to cells
(14 credits)</th><th colspan="3">Module 2: Cells
to organs (4 credits)</th><th rowspan="2">Module 3: Organs to system
Introduction (2 credits)</th><th rowspan="2">Introduction of Pharmacology
(1 credit)</th></tr>
<tr><td>– General Physics – Biophysics – Nuclear Physics
– General chemistry – Organic chemistry
– Biology – Genetics
– Biochemistry
– Introduction to Microbiology</td><td>Embryology – Histology</td><td>Introduction of Pathology</td><td>Introduction of Anatomy</td></tr>
<tr><th colspan="6">Medical Foreign Languages (4 credits)</th></tr>
<tr><td colspan="2">– Philosophy – Political Economy – Scientific socialism – Revolutionary way of Vietnam Communist Party
(8 credits)
– Statistics (1 credit)</td><td colspan="4">– General and Applied Informatics
(2 credits)
– Physical education (2 credits)*
– National Defence and Security Education (8 credits)*</td></tr>
</table>

* 2 courses are taught before the first year and not included in the programme for the year

In the programme for year 1:

- Teaching and learning strategies: lectures with clicker questions, case-based learning (CBL) for theory and practice supervised by teachers at the laboratory room.
- Assessment strategies: Multiple Choice Question (MCQ) for theory, Checklist and **Objective Structure Practical Examination (OSPE)** for practice. Only in the Medical English course, knowledge is assessed by role play, summary and presentation (formative test), MCQ (final test); skills are evaluated by MCQ, gap-filling, cloze test, question-answer, paragraph writing and paragraph translation (final test).

YEAR 2 (36 credits)					
Introduction to Immunology (2 credits)	Defence and Immunity: Host pathogen interaction (3 credits)	Haematology Oncology (3 credits)	Cardiovascular system (3 credits)	Respiratory system (3 credits)	Renal Urinary (3 credits)
Practice of 6 modules above (3 credits)					
Medical Foreign Languages (4 credits) Physical education (1 credit)*					
Ho Chi Minh Ideology (2 credits) Health Organisation & Management (3 credits)					
Skill lab: (2 credits) – Taking medical history – Clinical examination – Making medical record – Basic nursing skills – Communication skills		Medical ethics and Professionalism (1 credit)	Practice at district hospitals: (4 credits) – Nursing skills – Primary healthcare system – History taking – Physical examination – Making medical record		

* This course is not included in the programme for year 2.

In the programme for year 2:

- Teaching and learning strategies: lectures with clicker questions, CBL, and team-based learning (TBL) for theory and practice supervised by teachers at the laboratory room, Skill lab and district hospitals.
- Assessment strategies: MCQ for theory, Checklist, **OSPE and OSCE** for practice. Only in the Medical English course, knowledge is assessed by role play, summary and presentation (formative test), MCQ (final test); skills are evaluated by MCQ, gap-filling, cloze test, question-answer, paragraph writing and paragraph translation (final test).

YEAR 3 (36 credits)					
1. Gastro-intestinal system (3 credits)	**2. Endocrine system and 3. Nutrition (3 credits)**	4. Reproductive medicine (2 credits)	**5.Musculo-skeletal system - 6. Dermatology (3 credits)**	**7. CNS and behaviour (3 credits)**	**Practice of modules 2,3,4 & 6 (1 credit)**
PRACTICE OF MEDICINE: Internal Medicine (8 credits) + General Surgery (8 credits) – Internal Medicine + General Surgery practice: history taking + physical examination+ symptomatology + problem-based approach – Professionalism + Communication – Health education + public health					
PUBLIC HEALTH (5 credits) – Demography (1 credit) – Basic epidemiology (2 credits) – Nutrition – Food safety & Hygiene (2 credits)					

In the programme for year 3:

- Teaching and learning strategies: lectures with clicker questions, CBL, and TBL for theory and practice supervised by teachers at the laboratory room, Skill lab and city hospitals.
- Assessment strategies: MCQ for theory; Checklist, Mini-CEX, **OSPE and OSCE** for practice

YEAR 4 (36 credits)					
CLINICAL REASONING (2 credits) MEDICAL ETHICS (1 credit)	INTERNAL MEDICINE (8 credits) Internal medicine (4) Haematology (2) Endocrinology (2)	SURGERY – EMERGENCY MEDICINE (8 credits) – Thoracic surgery (2) – Orthopaedics, Trauma and Rehabilitation (4) – Emergency Resuscitation (2)	OBSTETRICS & GYNAECOLOGY (8 credits)	PAEDIATRICS (8 credits)	Multi-disciplinary training for medical and nursing students (1 credit)
Clinical clerkship: Theory and Clinical practice (morning and afternoon)					

In the programme for year 4:

- Teaching and learning strategies: lectures with clicker questions, CBL, and TBL for theory; one-minute preceptor, bedside teaching, clinical reasoning, feedback based on RIME and SPIKES models for practice at the city hospitals.
- Assessment strategies: MCQ for theory; Checklist, Mini-CEX, **OSCE** and Structured Oral Examination (SOE) for practice.

YEAR 5 (34 credits)												
Infectious disease	Neurology	Scholarly Project	Psychiatry	Traditional Medicine	Oncology		Option	Option	Option	Option	Scholarly Project	Family Medicine
4 credits	4 credits	1 credit	2 credits	2 credits	4 credits		2 credits	2 credits	2 credits	2 credits	1 credit	8 credits
Options: – Tuberculosis, Dermatology, Geriatrics, Urology, Ophthalmology, Dentistry, ENT, Paediatrics Surgery, Neurosurgery, Anaesthesia & Resuscitation, Forensic Medicine. – Go abroad and study under 4 credits.												

In the programme for year 5:

- Teaching and learning strategies: lectures with clicker questions, CBL, and TBL for theory; one-minute preceptor, bedside teaching, clinical reasoning, feedback based on RIME and SPIKES models for practice at the city hospitals.
- Assessment strategies: MCQ for theory; Checklist, Mini-CEX, **OSCE** and Structured Oral Examination (SOE) for practice.

NĂM 6 (32 credits)						
Internal medicine (7 credits)	Surgery (7 credits)	1 week off	Obstetrics Gynaecology (7 credits)	Paediatrics (7 credits)	1 week off	Graduate Exam* (4 credits)
Family Medicine Practice (3 credits)						
Medical Ethics (1 credit)						

* This course is not included in the programme for year 6.

In the programme for year 6:

- Teaching and learning strategies: lectures with clicker questions, CBL, and TBL for theory; one-minute preceptor, bedside teaching, clinical reasoning, feedback based on RIME and SPIKES models for practice at the city hospitals.
- Assessment strategies: MCQ for theory; Checklist, Mini-CEX, **OSCE,** SOE, Portfolio, Meta-cognition for practice.

8. Overall consistency of the programme

8.1. The year of study is mapped onto the PLOs of the new programme

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11
Y1	+	+	+					+			+
Y2	+	+	+			+	+	+	+	+	+
Y3	+	+	+	+	+	+	+	+	+	+	+
Y4	+	+	+	+	+	+	+	+	+	+	+
Y5	+	+	+	+	+	+	+	+	+	+	+
Y6	+	+	+	+	+	+	+	+	+	+	+

8.2. Short description of the methodology at programme level: learning, teaching and assessment strategies for achieving the programme-level learning outcomes

- Learning strategies:
  - Lecture with clicker questions
  - Case-based learning
  - Team-based learning
  - Practice at Labo, Skill-lab
  - Practice at health stations, district hospitals, province/city hospitals
- Teaching strategies:
  - One-minute preceptors
  - Bedside teaching
  - Clinical reasoning
  - Critical thinking
  - EBM
  - Feedback: 360°, RIME/SPIKES models
- Assessment strategies:
  - MCQ
  - OSPE
  - OSCE
  - SOE
  - Mini-CEX

- Portfolio
- Meta-cognition

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

- Feedback obtained every semester from medical students and faculty members
- Curriculum Committee including Preclinical Curriculum Committee and Clinical Curriculum Committee will be involved in analysing feedback and deciding on the improvements.
- Such improvements will be implemented and their success monitored based on feedback from medical students and faculty members and learning results of medical students.
- The internal unit and programme level quality control procedures will be coordinated.
- There is no local agency to audit/ accredit the programme
- The programme will be accredited by AUN.

10. OTHER RELEVANT ASPECTS

We are preparing all the other aspects the accreditation body requires for a programme redesign proposal to be considered for approval.

7b. University of Medicine, Mandalay, Myanmar

Hla Moe

1. NAME OF THE REVISED PROGRAMME

MBBS
(Bachelor of Medicine and Bachelor of Surgery)

2. LENGTH AND LEVEL OF THE PROGRAMME

Length: 6 years + 1-year Internship (Total 7 years)

- Foundation phase (First MBBS) – 40 weeks (2F system) – two semesters
- Preclinical phase 1 (Second MBBS) – 69 weeks (3F system) – three semesters
- Preclinical phase 2 (Third MBBS) – 40 weeks (3F system) – two semesters
- Clinical phase 1 (Final Part I MBBS) – 40 weeks (3F system) – two semesters
- Clinical phase 2 (Final Part II MBBS) – 70 weeks (3F system) – four semesters

Total number of weeks:
311 weeks – (259 weeks (taught course) Plus 52vInternship (House Officer Training) for four disciplines (Medicine, Surgery, OBGY and Paediatrics) for completion of the course
*Students can take up to a maximum of 14 years
Programme; Bachelor's degree
Admission criteria – must pass matriculation examination (Grade 11) with defined mark score (more than 500 marks out of 600), accepts 300-400 students per year.
Possible progression after graduation of the course:

- Medical doctors working at government hospitals or in private practice
- Medical management, working for medical aid companies or NGOs
- Medical journalism
- Positions in pharmaceutical companies
- Medical entrepreneur, managing private practices
- Academics/Research
- Public health workers in NGOs / INGOs
- Master and PhD degree in pre-clinical subjects
- Master and Doctorate degree in clinical Speciality
- Attempt at Fellowship and Membership Examination for Royal College
- Medical education, involved in public health promotion

3. SOCIAL NEED OF THE REVISED PROGRAMME

Local needs – patient safety which is the most important competency for medical doctors. This competency is also found to show the widest gap in terms of importance and achievement in Medical Universities in ASEAN countries. In addition, there are changes in the educational status of patients, empowerment of social media, exploration of information technology, biomedical advancement, changes in disease patterns, urbanisation, shortage of healthcare personnel, deficiency of healthcare resources, cost and quality assurance of healthcare services which create the need to change the existing curriculum. Moreover, there is a need to integrate basic science and apply it in its clinical context in order to meet public demand for safe, comprehensive and quality healthcare services.

4. FUTURE FIELDS, SECTORS OF EMPLOYMENT/OCCUPATION OF GRADUATES

After graduation with an MBBS degree, graduates can join to Postgraduate degrees in both clinical and preclinical fields. More than 70% of graduates enter medical practice after graduation.

5. DESCRIPTION OF THE DEGREE PROFILE OF THE REVISED PROGRAMME IN TERMS OF GENERIC AND/OR SUBJECT-SPECIFIC COMPETENCIES

Competence		Type of Competence	Definition	Learning Outcomes (at programme level)
Clinical	PO1: Knowledge	Specific	– Ability to acquire adequate knowledge of the Biological, Behavioural, Clinical, Ethical and Socioeconomic science that are relevant in understanding health and illness and the provision of healthcare for individuals, families and the community.	Interpret medical knowledge, concepts and principles in a safe, effective and evidence-based manner.
	PO2: Practical Skills	Specific	– Ability to take an accurate, organised and problem-focussed medical history using appropriate perspective, tact and judgement. – Ability to perform an accurate physical and mental state examination. – Ability to interpret and integrate the history and physical examination findings and apply judgement to arrive at provisional and differential diagnoses. – Ability to formulate a management plan with rational and efficient use of investigational modalities and execute the plan of management in concert with the patient.	Demonstrate appropriate competent practical and clinical skills in diagnosis and patient management.
	PO3: Values, Attitudes and Professionalism	Specific	– Adherence to ethical standards	Model professional values, attitudes and ethical behaviour in medical practice.
Social	PO4: Social Skills and Responsibility	Specific	– Understanding and respect for all patients with different religious, cultural and social values. – Awareness of the need to communicate clearly and sensitively with patients and their families and to involve them fully in planning and executing the management plan.	Engage patients and their families in making health related decisions using suitable social skills with empathy, respect and sensitivity.
	PO5: Communication, Leadership and Team Skills	Specific	– Communicate clearly, considerately and sensitively with patients, relatives, colleagues, nurses and other health professionals and the general public.	Communicate effectively with patients, family, colleagues and the broader community either as a collaborative team member or a leader.
	PO6: Public and Community Health Management Skills	Specific	– Ability to use managerial and entrepreneurial principles in addressing public and community health issues	Develop community public health programmes using resources and entrepreneurial skills to enhance population health.

Competence		Type of Competence	Definition	Learning Outcomes (at programme level)
Critical Thinking	PO7: Problem Solving and Scientific Skills	Specific	– Ability to pursue independent inquiry and to use current technologies to search for new information, to critically appraise it and to integrate it in improving practice.	Critically evaluate current knowledge and technology to solve healthcare/medical problems in a creative scientific manner.
Information Management	PO8: Information Management & Lifelong Learning Skills	Generic	– Responsibility to maintain standards of medical practice at the highest possible level through continuing medical education throughout their professional career. – Commitment to continuing professional development and lifelong learning	Integrate medical informatics efficiently to engage in lifelong learning and continuing professional development.
Patient safety / care	PO1: Knowledge	Specific	– Ability to acquire adequate knowledge of the Biological, Behavioural, Clinical, Ethical and Socioeconomic science that are relevant in understanding health and illness and the provision of healthcare for individuals, families and the community.	Interpret medical knowledge, concepts and principles in a safe, effective and evidence-based manner.
	PO2: Practical Skills	Specific	– Ability to take an accurate, organised and problem-focussed medical history using appropriate perspective, tact and judgement. – Ability to perform an accurate physical and mental state examination. – Ability to interpret and integrate the history and physical examination findings and apply judgement to arrive at provisional and differential diagnoses. – Ability to formulate a management plan with rational and efficient use of investigational modalities and execute the plan of management in concert with the patient.	Demonstrate appropriate competent practical and clinical skills in diagnosis and patient management.
	PO3: Values, Attitudes and Professionalism	Specific	– Adherence to ethical standards	Model professional values, attitudes and ethical behaviour in medical practice.
	PO4: Social Skills and Responsibility	Specific	– Understanding and respect for all patients with different religious, cultural and social values. – Awareness of the need to communicate clearly and sensitively with patients and their families and to involve them fully in planning and executing the management plan.	Engage patients and their families in making health related decisions using suitable social skills with empathy, respect and sensitivity.

Competence		Type of Competence	Definition	Learning Outcomes (at programme level)
	PO5: Communication, Leadership and Team Skills	Specific	– Communicate clearly, considerately and sensitively with patients, relatives, colleagues, nurses and other health professionals and the general public.	Communicate effectively with patients, family, colleagues and the broader community either as a collaborative team member or a leader.
	PO6: Public and Community Health Management Skills	Specific	– Ability to use managerial and entrepreneurial principles in addressing public and community health issues	Develop community public health programmes using resources and entrepreneurial skills to enhance population health.
	PO7: Problem Solving and Scientific Skills	Specific	– Ability to pursue independent inquiry and to use current technologies to search for new information, to critically appraise it and to integrate it in improving practice.	Critically evaluate current knowledge and technology to solve healthcare/medical problems in a creative scientific manner.

6. LINK OF THE COMPETENCIES WITH THE AGREED META-PROFILE

SEAMed Competencies	UMM Programme Competencies
Patient care	PO1-Knowledge PO2-Practical skills PO3-Values, attitude and professionalism PO4-Social skills and responsibility PO5-Communication, leadership and team skills PO6-Public and community health management skills PO7-Problem solving and scientific skills
Family, community and population care	PO4-Social skills and responsibility PO6-Public and community health management skills
Ethics and professionalism	PO3-Values, attitude and professionalism PO4-Social skills and responsibility PO-8-Information management and lifelong learning skills
Quality assurance	PO7-Problem solving and scientific skills PO-8-Information management and lifelong learning skills
Knowledge and skills	PO1-Knowledge PO2-Practical skills PO6-Public and community health management skills PO7-Problem solving and scientific skills
Communication	PO5-Communication, leadership and team skills

7. STRUCTURE OF THE PROGRAMME: UNITS/COURSES/MODULES WITH THEIR LEARNING OUTCOMES AND LEARNING, TEACHING AND ASSESSMENT STRATEGIES

COURSE	COURSE LEARNING OUTCOME	TEACHING AND LEARNING	ASSESSMENT STRATEGIES
Foundation year (First MBBS)	At the end of the course, students are able to demonstrate applying knowledge of medical sciences to: – Language of Myanmar and English – Mathematics – Physics – Chemistry – Zoology – Botany (PO1)	• Lecture • PBL • Laboratory session • SDL • Seminar • Assignments	• Language Test • Mathematics Test • Physics Test • Chemistry Test • Zoology Test • Botany Test • Written Assessment • Group Poster & Evaluation submission • PBL/Other Small Group Teaching Attendance • Reflective Portfolio & Interview
Pre-clinical phase 1 (Second MBBS)	At the end of the course, students are able to: 1. Describe the normal and abnormal human structure, function and behaviour in relation to the diagnosis, principles of management and prevention of health problems (PO2) 2. Demonstrate the ability to interview, examine patients systematically and satisfactorily perform basic clinical procedures, recognising the practical and therapeutic nature of the patient-doctor relationship (PO3; PO4; PO5) 3. Identify the distribution of risk factors and prevention of disease and injury, and contributing factors to the development and/or continuation of poor health for individuals and communities (PO2) 4. Demonstrate the ability to work cooperatively as a member of a team, accepting and providing leadership as appropriate, and the commitment to advancement of learning within a community of medical scholars (PO6)	• Lecture • PBL • Laboratory session • Clinical day • SDL • Seminar • Assignments	• Anatomy Tests and Exam • Physiology Tests and Exam • Biochemistry Tests and Exam • Written Assessment • Laboratory work • Small group teaching sessions (TBL/PBL) • Group mini project submission • Objective Structured Practical Examination • Group Poster & Evaluation submission • Interview & viva voce

COURSE	COURSE LEARNING OUTCOME	TEACHING AND LEARNING	ASSESSMENT STRATEGIES
Pre-clinical phase 2 (Third MBBS)	At the end of the course, students are able to: 1. Describe the normal and abnormal human structure, function and behaviour in relation to the diagnosis, principles of management and prevention of health problems (PO2) 2. Demonstrate the ability to interview, examine patients systematically and satisfactorily perform basic clinical procedures, recognising the practical and therapeutic nature of the patient-doctor relationship (PO3; PO4; PO5) 3. Identify the distribution of, risk factors and prevention of disease and injury, and contributing factors to the development and/or continuation of poor health for individuals and communities (PO2) 4. Demonstrate the ability to work cooperatively as a member of a team, accepting and providing leadership as appropriate, and the commitment to advancement of learning within a community of medical scholars (PO6)	• Lecture • PBL • Laboratory session • Clinical day • SDL • Seminar • Assignments	• Pharmacology Tests and Exam • Pathology Tests and Exam • Microbiology Tests and Exam • Written Assessment • Clinical and bedside teaching on Medicine and Surgery • Laboratory work • Self-directed learning project • Objective Structured Clinical Examination on Medicine and Surgery • PBL/Clinical Days /Other Small Group Teaching Attendance • Evaluation/Submission of research projects • Interview & viva voce
Clinical phase 1 (Final Part I MBBS)	At the end of the course, students are able to: 1. Apply the understanding of normal and abnormal human structure, function and behaviour to the diagnosis, management and prevention of health problems (PO2; PO7; PO8) 2. Interpret clinical symptoms and signs by systematically examining patients, identify appropriate investigations to be undertaken and communicate this information to the patient, patients' families and carers in an effective and ethical manner (PO3; PO7) 3. Demonstrate a compassionate, ethical and professional behaviour in clinical practice (PO4; PO5)	• Lecture / Mini-lecture • Tutorial • Seminar • Clinical Reasoning Session • Clinical Area teaching • Independent Active Learning	• Pathology Tests and Exam • Preventive and Social Medicine Tests and Exam • Forensic Medicine Tests and Exam • Written Assessment • MCQ/MSQ • Long case • Short Case • Objective Structured Clinical Examination on Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics • Self-directed learning project • Objective Structured Clinical Examination on Medicine and Surgery • PBL/Clinical Days /Other Small Group Teaching Attendance • Evaluation/Submission of research projects • Community Posting • Written Report • Interview & viva voce

COURSE	COURSE LEARNING OUTCOME	TEACHING AND LEARNING	ASSESSMENT STRATEGIES
Clinical phase 2 (Final Part II MBBS)	At the end of the course, students are able to: 1. Apply the understanding of normal and abnormal human structure, function and behaviour to the diagnosis, management and prevention of health problems (PO2; PO7; PO8) 2. Interpret clinical symptoms and signs by systematically examining patients, identify appropriate investigations to be undertaken and communicate this information to the patient, patients' families and carers in an effective and ethical manner (PO3; PO7) 3. Apply evidence-based, ethical and economically responsible decisions on the appropriate management of health problems in individuals and in communities, and in planning of the public and population health strategies (PO2; PO4) 4. Demonstrate a compassionate, ethical and professional behaviour in clinical practice (PO4; PO5)	• Lecture / Mini-lecture • Tutorial • Seminar • Clinical Reasoning Session • Clinical Area teaching • Independent Active Learning • Community Posting	• MCQ • Long case • Short Case • Objective Structured Clinical Examination • Written Assessment • Clinical and Bedside teaching • Self-directed learning project • Objective Structured Clinical Examination • CBL/Clinical Days /Other Small Group Teaching • Attendance • Interview & viva voce

8. PROGRAMME OVERALL CONSISTENCY

Mapping of course to Programme Outcomes

Course	Programme Outcomes							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
Foundation Year (First MBBS)	√		√	√	√	√	√	
Pre-Clinical phase 1 (Second MBBS)	√	√	√	√	√	√	√	
Pre-Clinical phase 2 (Third MBBS)	√	√	√	√	√	√	√	√
Clinical phase 1 (Final part I MBBS)	√	√	√	√	√	√	√	√
Clinical phase 2 (Final part II MBBS)		√	√	√	√	√	√	√
Internship course	√	√	√	√	√	√	√	√

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

- Feedback obtained from
  - Students (Teaching evaluation exercises)
  - Lecturers (Block review meetings, surveys)
  - Supervisors (Graduate surveys)
  - Patients
- Feedback and improvements discussed during
  - Academic board meting
  - Curriculum meetings
  - Management meetings
- Monitored / audited by the
  - External examiners
  - Quality Management Unit (QMC)
  - ISO 9001:2015 (ongoing process)
  - Myanmar Medical Council Accreditation Standards and Guidelines
  - Networking with AUN (ASEAN University Network)

10. OTHER RELEVANT ASPECTS

Major Changes in Revised Programme for Patient Care
PO2-Practical skills PO3-Values, attitude and professionalism PO4-Social skills and responsibility PO5-Communication, leadership and team skills PO7-Problem solving and scientific skills

- Plan to change curriculum of University of Medicine, Mandalay, Myanmar under guidance of Ministry of Health and Sports in 2019
- Need to collaborate with other medical universities (5 Medical Universities) from Myanmar
- Need to get commitment from Department of Human Resources of the Ministry of Health and Sports
- Public demand on safety and comprehensive healthcare services
- Suggest adding Research and Leadership contents

7c. West Visayas State University, College of Medicine, Philippines

Lynette Alcala

1. DOCTOR OF MEDICINE (MD) REVISED PROGRAMME

2. LENGTH & LEVEL OF THE PROGRAMME: 4 Years, 3 Years Pre-Clinical; 1 Year Clinical Clerkship (description of the Programme)

The Doctor of Medicine programme of the West Visayas State University-College of Medicine is a four-year programme divided into three (3) years of Preclinical classroom instruction and one (1) year of clinical clerkship. The Preclinical Years consist of one year of basic medical instruction, comprising eight pre-clinical blocks integrating anatomy, physiology and biochemistry into an organ system integrated approach.

Block 1 introduces the student to the concept of health, disease and the art and science of medicine. Block 2 moves further into the basic principles of health promotion and maintenance. The science of medicine starts with Block 3 which discusses the fundamentals and organisation of the cell followed by the different systems, starting with the integumentary (Support and Motion Communication), Nervous Control and Integration, Vascular Integration and Defence, Respiration and Digestion, Excretion and Reproduction. Horizontally integrated with this organ integrated block are Basics in Research I, Community Work I and Medical Jurisprudence.

The second and third year comprises the Clinical Years, starting with Block 9, properly labelled as Growth and Development -exploring man from birth to death differentiating the stages of development and the deviations from normal. This is followed by the different organ systems from the Integumentary, Digestive, Cardiovascular, Respiratory and Reproductive Systems which has been integrated to include all related concepts of disease across all age groups from paediatrics to adult medicine including the surgical, pathological, microbiological or therapeutic concepts related to the organ system. A parallel integration of Research II and Community Work II likewise is weaved into the organ system concerned.

The third year starts off with the Musculoskeletal system, Neuropsychiatry and Genetics, Endocrine, Hematopoietic, Genito-Urinary systems and the Special Senses including ophthalmology and ear, nose and throat. During the third year of clinical block, concepts of disease are also integrated in the different age groups, taking the same approach used in year level 2. Integrated into the year level three is Research III, Community Work III and Legal Medicine. During the clinical years, laboratory correlates already include regular hospital exposure and actual patient encounters during preceptorship, laboratory activities in microbiology, parasitology, pathology and clinical diagnosis related to the particular organ system.

The fourth year is spent in clinical clerkship with the students rotating in the different clinical specialties in the hospital (Paediatrics, Obstetrics and Gynaecology, Surgery, Internal Medicine, Anaesthesiology, Orthopaedics, Diagnostic Imaging, Laboratory as well as the community.

2.1. Length of the programme

Year level 1 – basic medicine – 8 months
Year level 2 – clinical medicine 1 – 8 months
Year level 3 – clinical medicine 2 – 8 months
Year level 4 – clerkship – 12 months

2.2 Master's programme

2.3. We admit students from the different baccalaureate (4-5 year) programmes, preferably science-based programmes, to be admitted to the college of medicine.

2.1. Post -MD programme

- Internship Training (General Physicians)
- Immersion in the community with modular training in community management (doctors to the barrio programme)
- Pursue residency training (specialty training)
- Master's degree in teaching
- Master's degree in research

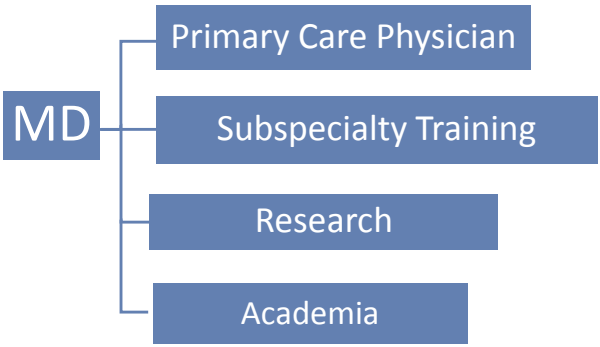
3. SOCIAL NEED OF THE PROGRAMME

3.1. The West Visayas State University College of Medicine being a government funded university stands by its mission-vision statement of training a community of physicians who are socially accountable, professionally competent and committed to delivering primary healthcare with compassion and devoted to serving the healthcare needs of the Filipino people.

The college being a state funded institution and in answer to the World Health Organisation's call for equality in care, the college took it as a serious concern as well as a big challenge to equip our students with the basic competencies to answer this call. With the lack of available doctors serving the geographically disadvantaged areas of the archipelago, as well as the maldistribution of workforce in the country, this hopes to address the maldistribution of medical doctors in the country and address the needs of geographically disadvantaged areas of the archipelago for available medical care. The college of medicine supplies 30% of the physicians who serve the geographically disadvantaged localities through the "Doctors to the Barrios" programme of the government, not only as a return of service obligation (their being medical scholars) but as a form of employment straight after graduation. The rest of the graduates are equally equipped with competencies to undertake further training in the different specialty programmes and augment the growing workforce for subspecialty care in the different provinces as well as pursue further training in research or academia.

3.2. The inclusion of the concepts of Quality Assurance in the curriculum is deemed necessary for the changing landscape of medicine, not only in terms of patient care and community and population care, but for development in the different specialty care as well as factors affecting care in the national and international environment. Development in patient care demands changes in the curriculum which is aligned with the regional and global standards as we move closer to bridge connections around the world.

4. FUTURE FIELDS OF OCCUPATION FOR GRADUATES



Future Field of Occupation		
Primary Care Physician	Serving the geographically disadvantaged areas of the archipelago as primary care physicians and local health managers through the Doctors to the Barrio Programme	Private practice in communities far from big centres with state-of-the-art facilities as primary care physicians
Subspecialist	Pursue further training in different fields of specialisation (Family Medicine, Internal Medicine, Paediatrics, Obstetrics & Gynaecology, Surgery, Orthopaedics, Pathology, Radiology, etc.) in accredited training programmes in the country.	Pursue further subspecialty training in specific fields of endeavour.
Researcher	Research Fellowship	
Academic	Basic Medical Education	Other related to Academia

5. DESCRIPTION OF THE DEGREE PROFILE OF THE PROGRAMME OUTCOME-BASED ORGAN SYSTEM INTEGRATED PROBLEM-BASED LEARNING-DRIVEN CURRICULUM

Vision: Excellence in Community Primary Healthcare Practice

At the end of the four-year medical degree in medicine, the student under the outcome-based organ system integrated problem-based learning-driven curriculum should be able to achieve the following outcomes in line with the National and Southeast Asian Curricular Framework for medical education.

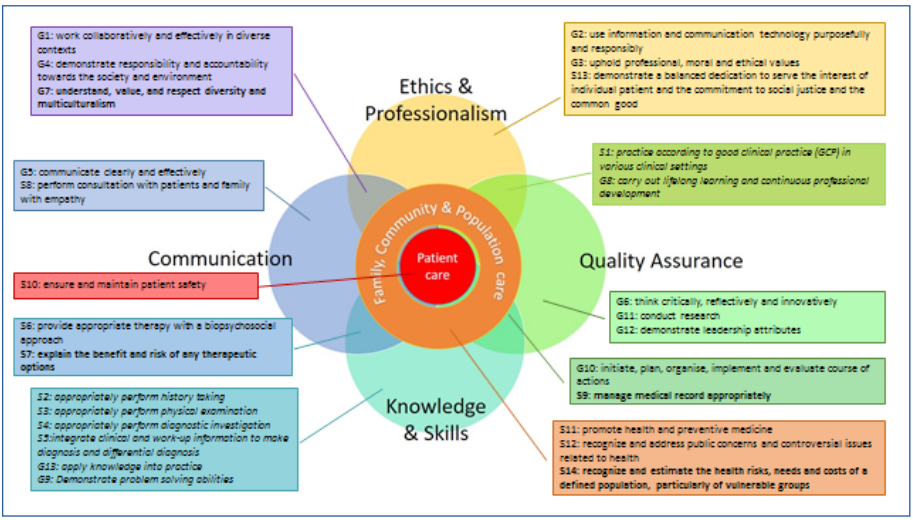
DESCRIPTION of GENERIC and SPECIFIC COMPETENCIES SEAMed FRAMEWORK	**INSTITUTIONAL OUTCOMES Upon completion of the medical education at the West Visayas State University –College of Medicine, a graduate is expected to be a:**	**PROGRAMME OUTCOMES (COMMISSION OF HIGHER EDUCATION PHILIPPINES) At the end of the four-year (4) MD programme, the graduate should be able to:**	**BLOCK OUTCOMES (WVSU-COM) After successfully completing a BLOCK/ ORGAN SYSTEM, the student should be able to:**
Generic – 9,10,13 Specific -2,3, 4, 5,6,9, 10, 11, 12, 14	**WV1. COMPETENT PRIMARY HEALTHCARE PROVIDER** Apply requisite knowledge and skills of the basic medical science in the performance of fundamental tasks as a primary healthcare provider	Demonstrate diagnosis, management and presentation of clinical conditions in various settings to all types of audience and maximising team-based approach to healthcare delivery. **(1,2,3,6)**	Diagnose and manage patients presenting with signs and symptoms relating to the particular organ system. Discuss and explain the management and outcome of the disease to the patient and the family
Generic -1, 2,3,4, 7, 8 Specific 1, 13	**WV2. ETHICAL LIFELONG LEARNER** Develop essential habits and proper attitudes in the acquisition of knowledge and humane treatment of patients. Apply principles of professional ethics in the practice of medicine.	Engage in continuing personal and professional development while adhering to the local, national and international codes of conduct in the practice of the profession. **(2,7,8)**	Practice the proper bedside manners in the care of patients with specific disease/ disorder. Interact with various professional and paramedical personnel in the delivery of healthcare.
Generic – 1, 2, 3, 4, 7, 12 Specific – 1, 10, 11,12, 13,14	**WV3. SOCIALLY ACCOUNTABLE** Instil social awareness and empathy in the course of serving the medical and psychological needs of the community.	Demonstrate commitment to service by implementing government programmes in collaboration with other healthcare providers with respect to cultural, legal, professional and ethical practices. **(2,5,9,10)**	Identify and discuss issues and concerns of patients with a particular complaint that might have an impact on their family and community. Advocate for changes and practices in the family and community that may promote local and global cooperation.
Generic -1, 5, 10, 11 Specific – 9, 12,14	**WV4. RESEARCH CAPABLE** Utilise appropriate knowledge, skills and experiences in their academic endeavours to contribute to scientific research and application to patient care and community health.	Generate new knowledge through research and translate findings into clinical and community practice. **(2,4,8)**	Correlate research findings to patient care and community health as well as identify research questions as catalyst for future research endeavours which will impact on the local, national and international community.

6. LINK OF THE DEGREE PROGRAMME WITH THE META-PROFILE

Outcome-Based Organ System Integrated Problem-Based Learning-Driven Curriculum
Vision: Excellence in community primary healthcare practice

INSTITUTIONAL OUTCOMES **Upon completion of the medical education at the West Visayas State University –College of Medicine, a graduate is expected to be a:**	**PROGRAMME OUTCOMES (CHED CMO)** **At the end of the four-year (4) MD programme, the graduate should be able to:**	**SEAMed FRAMEWORK** **In line with the framework proposed by the Subject Area on Medicine**	**BLOCK OUTCOMES** **After successfully completing a BLOCK/ ORGAN SYSTEM, the student should be able to:**
WV1. COMPETENT PRIMARY HEALTHCARE PROVIDER Apply requisite knowledge and skills of the basic medical science in the performance of fundamental tasks as a primary healthcare provider	Demonstrate competence in diagnosis, management and presentation of clinical conditions in various settings to all types of audience and maximising team-based approach to healthcare delivery. **(1,2,3,6)**	PATIENT CARE COMMUNITY & POPULATION CARE KNOWLEDGE & SKILLS COMMUNICATION	Diagnose and manage patients presenting with signs and symptoms relating to the particular organ system. Discuss and explain the management and outcome of the disease to the patient and the family
WV2. ETHICAL LIFELONG LEARNER Develop essential habits and proper attitudes in the acquisition of knowledge and humane treatment of patients. Apply principles of professional ethics in the practice of medicine.	Engage in continuing personal and professional development while adhering to the local, national and international codes of conduct in the practice of the profession. **(2,7,8)**	KNOWLEDGE & SKILLS ETHICS & PROFESSIONALISM	Practice the proper bedside manners in the care of patients with specific diseases/ disorders. Interact with various professional and paramedical personnel in the delivery of healthcare
WV3. SOCIALLY ACCOUNTABLE Instil social awareness and empathy in the course of serving the medical and psychological needs of the community	Demonstrate commitment to service by implementing government programmes in collaboration with other healthcare providers with respect to cultural, legal, professional and ethical practices . **(2,5,9,10)**	PATIENT CARE COMMUNITY & POPULATION CARE QUALITY ASSURANCE	Identify and discuss issues and concerns of patients with a particular complaint that might have an impact on their family and community. Advocate for changes and practices in the family and community that may promote local and global cooperation.
WV4. RESEARCH CAPABLE Utilise appropriate knowledge, skills and experiences in their academic endeavours to contribute to scientific research and application to patient care and community health.	Generate new knowledge through research and translate findings in clinical and community practice. **(2,4,8)**	PATIENT CARE COMMUNITY & POPULATION CARE RESEARCH QUALITY ASSURANCE	Correlate research findings to patient care and community health as well as identify research questions as a catalyst for future research endeavours which will impact on the local, national and international community.

The SEAMed FRAMEWORK



7. STRUCTURE OF THE PROGRAMME (QUALITY ASSURANCE)

BLOCK DESCRIPTION	PROGRAMME OUTCOME	SEAMed FRAMEWORK	CONTENT	Teaching-Learning Activities	Evaluation
YEAR LEVEL I Introduction to Health, Disease & Medicine Health Promotion & Maintenance Fundamentals & Organisation of the Cell Shape, Support & Motion Communication, Control & Integration Vascular Integration & Defence Respiration & Digestion Excretion & Reproduction Community Work I YEAR LEVEL II Growth & Development Integumentary System Digestive System Cardiovascular System	COMPETENT PRIMARY HEALTHCARE PROVIDER Apply requisite knowledge and skills of basic medical science in terms of incorporating a quality assurance framework in the performance of fundamental tasks as a primary healthcare provider. Demonstrate competence in diagnosis, management and presentation of clinical conditions in various settings applying the principles of the quality assurance framework to all types of audience and maximising the team-based approach to healthcare delivery. (1,2,3,6)	PATIENT CARE COMMUNITY & POPULATION CARE KNOWLEDGE & SKILLS COMMUNICATION QUALITY ASSURANCE		Tutorials Clinical Preceptorial Lectures Laboratory Work Community Work Research Development	Divide into Yr Level/Blocks Written Exam Small Group Discussion /PBL 7 Jump Performance Clinical Rating Scale Community Output Research Output

BLOCK DESCRIPTION	PROGRAMME OUTCOME	SEAMed FRAMEWORK	CONTENT	Teaching-Learning Activities	Evaluation
Respiratory System Reproductive System Community Work II YEAR LEVEL III Musculoskeletal System Neurology/Psychiatry/Genetics Endocrine System Hematopoietic System Genito-urinary System Special Senses Legal Medicine Community Work III	ETHICAL LIFELONG LEARNER Develop essential habits and proper attitudes in the acquisition of knowledge and humane treatment of patients Apply principles of professional ethics in the practice of medicine. Engage in continuing personal and professional development while adhering to the local, national and international codes of conduct in the practice of the profession (2,7,8).	KNOWLEDGE & SKILLS ETHICS & PROFESSIONALISM COMMUNICATION			
YEAR LEVEL II Growth & Development Integumentary System Digestive System Cardiovascular System Respiratory System Reproductive System Research II Community Work II YEAR LEVEL III Musculoskeletal System Neurology/Psychiatry/Genetics Endocrine System Hematopoietic System Genito-urinary System Special Senses Legal Medicine Community Work III	SOCIALLY ACCOUNTABLE Instil social awareness and empathy in the course of serving the medical and psychological needs of the community Demonstrate commitment to service by implementing government programmes in collaboration with other healthcare providers with respect to cultural, legal, professional and ethical practices (2,5,9,10).	PATIENT CARE COMMUNITY & POPULATION CARE KNOWLEDGE & SKILLS ETHICS & PROFESSIONALISM COMMUNICATION QUALITY ASSURANCE			
Research I, II, III	RESEARCH CAPABLE Utilise appropriate knowledge, skills and experiences in their academic endeavours guided by the principles of quality assurance in contributing to scientific research and application to patient care and community health. Generate new knowledge through research and translate findings in clinical and community practice, incorporating principles of quality assurance. (2,4,8)	PATIENT CARE COMMUNITY & POPULATION CARE RESEARCH QUALITY ASSURANCE			

8. OVERALL CONSISTENCY OF THE PROGRAMME

Programme Outcome	Competent Primary Care Provider	Ethical Lifelong Learner	Socially Accountable	Research Capable
Year Level 1	Blocks 1-8	Blocks 1-8	Blocks 1 & 2, FCM I	Research I
Year Level 2	Blocks 9-14	Blocks 9-14	FCM II	Research II
Year Level 3	Blocks 15-20	Blocks 15-20	FCM III	Research III
Clerkship	Clinical Area Rotations in Paediatrics, Surgery, Internal Medicine, Obstetrics & Gynaecology, Community Medicine, Elective Rotations	Clinical Area Rotations in Paediatrics, Surgery, Internal Medicine, Obstetrics & Gynaecology, Community Medicine, Elective Rotations	Community Rotation	

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

CLASSROOM FEEDBACK	BLOCK FEEDBACK	EXTERNAL FEEDBACK
Students (Lecturer, Tutor, Recipient) Feedback Form (Rating Scale)	Block Meetings with MEU & Academics	APMC/CHED/PRC Technical Panel for Medical Education
Lecturers (Feedback on Content & Strategies)	Block curriculum evaluation & review	PAASCU Accreditation
Student Reflection/Portfolio Projects		ISO (University Level) Accreditation
Community Feedback		
Supervisor		

The internal quality control enhancement process involves three mechanisms for eliciting feedback in the revision of the curriculum. Classroom feedback mechanisms include valuable student feedback in terms of the strategies for delivering instruction in the form of assessing lecturers in their manner of organising content and delivering instruction. The other aspect of feedback includes faculty performance in small group discussions as tutors and bedside preceptors in clinical exposures and community work. Lecturers continuously update instruction in terms of content updates and strategies for delivering new knowledge and procedures, as

well as using evidence in the discussion of cases, procedures and treatment.

In terms of showing evidence for the achievement of outcomes, students are required to submit reflection papers and portfolios on projects performed in the classroom, in clinical areas, as well as in the community. The recipient communities also display the impact of the project in their community, based on the purpose of the student projects and the interventions that they have implemented in the community. All these feedback mechanisms are processed by the supervisor for proper implementation. Block Feedback is another vital component for internal quality enhancement. Pre– and post-block assessment is done annually to integrate revisions among faculty lecturers, small group learning tutors and clinical preceptors. These changes are discussed during block and academic council meetings scheduled all throughout the academic year.

External feedback is done regularly thru the Association of Philippine Medical Colleges Association (APMC) Technical Committee with the Philippine Professional Regulatory Commission (PRC) for Medical Education. The Medical Schools are also encouraged to do External Accreditation from licensed accrediting bodies like the Philippine Accrediting Association for State Colleges and Universities (PAASCU), the only certified accrediting body for Medical Education in the Philippines. The University also adheres to the International Organization for Standardization (ISO) for curriculum, records and procedures done by the university.

10. IMPLEMENTATION

The implementation of the Redesigned Curriculum on Quality Assurance is presented to the Deans' Council for discussion and approval. After revisions had been made and appropriate actions had been taken, such revisions are presented to the College Academic Council for discussion and final approval. After approval at college level has been achieved it will be presented to the University Academic Council and subsequently recommended to the Board of Regents.

7d. University of Health Sciences, Cambodia

Bounchan Youttiroung

1. NAME OF THE REVISED PROGRAMME

- Programme name: **Medical Doctor (MD)**
- Degree awarded: **Diploma of Doctor in Medicine (MD)**

2. LENGTH AND LEVEL OF THE PROGRAMME

- Length of programme: 96 months (8 years)
- Level: Medical Doctor (MD) equivalent to Clinical Master
- 56 courses

At the Faculty of Medicine, UHS, Medical Doctor Curriculum is an eight-year opportunity for medical students to progressively develop their knowledge, skills, and attitudes with the hope of graduating a competent General Medical Doctor.

The curriculum is divided into Basic Medical Education and Clinical Education Programmes.

The Basic Medical Education Programme is being taught from Years 1 to 6. When students complete their 6th year of Basic Medical Education successfully, they will obtain a Bachelor of Medical Sciences. The students can further progress to their post-graduate studies for (1) next one to two years in Non-Clinical subjects to gain a Non-Clinical Master of the particular subject, or (2) the next two years in clinical subjects to become a Medical Doctor in General Medicine or (3) the next four years to become a specialist in clinical medicine.

To become a Medical Doctor, students have to spend another 2 years of Clinical Internship after their Bachelor of Medical Sciences in the hospitals. Clinical internship is comprised of a combination of lectures, demonstrations and case conferences (6-months rotation in the four basic disciplines namely: Medicine, Surgery, Paediatrics and Obstetrics-Gynaecology). The students are assessed using the logbooks for knowledge, skills and attitudes during their postings. Final

examinations are conducted at the end of each rotation, which includes MCQ (SBA) and OSCE. The students need to complete a research thesis also during this period, must defend their thesis successfully, and pass the National Exit Examination to get their Diploma of Doctor in Medicine (MD) so that they can apply for a job in a hospital, health centre or private clinic.
This MD programme also aims to provide a platform for the development of advanced training or specialty education within medicine; and to issue licensure for medical practice in Cambodia.

3. SOCIAL AND PROFESSIONAL NEEDS OF THE NEW OR REVISED PROGRAMME

Medical doctors in any practice setting have to comply with the country's rules and regulations, and professional standards as stipulated by the Ministry of Health (MoH) and Medical Council of Cambodia. They should possess a specialised body of knowledge to appropriately fulfil their role, to train future medical students and others. They should also undertake research activities and continuing professional development in order to maintain and improve their competence and practice. The following are the rules and regulations (also the needs) of the country to which the training needs to be aligned:

- **MOH Rules & Regulations:** Less medico-legal cases by improving communication,
- **Cambodia Medical Council:** Requires the graduates to be well-trained in patient safety,
- **Patient outcomes:** Reduce number of preventable injuries and death (e.g. Traffic accident, NCD),
- **Technology influences:** Advantages & disadvantages of technology on patient safety,
- **Cost saving:** Due to reduction of hospital-acquired conditions and medico-legal cases,
- **Quality of healthcare:** Improve the quality of healthcare due to appropriate and non-harming treatment,

In an attempt to enhance the effectiveness of the programme to achieve the aforementioned outcomes, the Semiology course was redesigned.

Previously, "Semiology Course" (Signs and symptoms) has been taught in year 2 and year 3 of the Basic Medical Education Programme through lectures (no hands-on learning). Students were exposed to

real patients from year 4 on. As the students at this level were not skilled to approach and handle a patient safely with confidence, it was necessary to redesign the Semiology course to include different levels of skill training, including simulation-based training.

This course has been revised to enhance practical psychomotor skills, communication and ethical value through simulation. The students will be trained and allowed to practice their skills in the simulation Lab before they are exposed to real patients. This will also provide the students the opportunity to build up their confidence and be safe medical practitioners.

4. FUTURE FIELDS, SECTORS OF EMPLOYMENT/OCCUPATION OF GRADUATES

In Cambodia medical doctors [MD in general medicine (6+2 years)] work in public/private/non-governmental hospitals or clinics, government and academic institutions and non-governmental organisations as stated below:

- Public/private/non-governmental hospitals or clinics,
- Government and academic institutions,
- Academic public/private/institutions
- Health Sector researchers
- Non-Governmental Organisation (NGO)/International Organisation (IO)

5. DESCRIPTION OF THE DEGREE PROFILE

5.1. Programme Goal

To prepare the Medical student with appropriate knowledge, skills, and attitude to successfully practice general medicine, in line with the identified strategies of the Ministry of Health of Cambodia.

5.2. Programme Outcomes

Graduates from this programme will be able to:

1. Appropriately apply their knowledge and skills of general medicine in the treatment, rehabilitation of both physical and mental health at primary healthcare and referral levels.
2. Pay more attention to vulnerable groups such as women, children and disabled persons.

3. Manage emerging diseases and natural disasters.
4. Provide health education and prevention to the community.
5. Show a positive attitude and respect for people regardless of economic status, custom and beliefs.
6. Work competently as a team with other health professionals within the appropriate structures, policy and codes of conduct of the Ministry of Health.
7. Conduct related health research in order to contribute to the improvement of the country's health status.

5.3. Degree Profile of the Programme
Core Competencies of Medical Doctor (MD) in Cambodia
Domain I: Scientific Foundations for Medical Practice

Possesses specialised body of knowledge in order to provide competent clinical care, by demonstrating his/her knowledge:

- CC1: Biomedical Sciences
- CC2: Behavioural Sciences
- CC3: Public Health
- CC4: Information and Communication
- CC5: Organisation, Management and Research

Domain II: Provision and Management of Patient Care

Perform appropriate diagnostic and therapeutic procedures in order to provide a consistent and holistic *care of patients*.

- CC6: General Principles of Diagnostic and Therapeutic Procedures
- CC7: Diagnosis of Disease and Conditions
- History Taking
- Physical and Mental State Examination
- Patient Investigation (Labo, radiological and clinical)
- Diagnosis
- Management Plan
- CC8: Patient Management
- General Patient Management
- Specific Patient Management (Medicine, Surgery, Paediatrics, Gynaecology-Obstetrics)

Domain III: Professional and Personal Behaviours

- CC9: Professional and Legal/ethical Practice
- Legal and Ethical Practice
- Good Standing and Reputation of the Profession
- Safe Medical Practice
- Collaboration and Teamwork
- CC10: Maintaining and Improving Professional Competence
- CC11: Critical Analysis, Research and Education
- Access, Analysis and Synthesis of Information
- Research and Education
- CC12: Communication
- Patients (and relatives)
- Colleagues

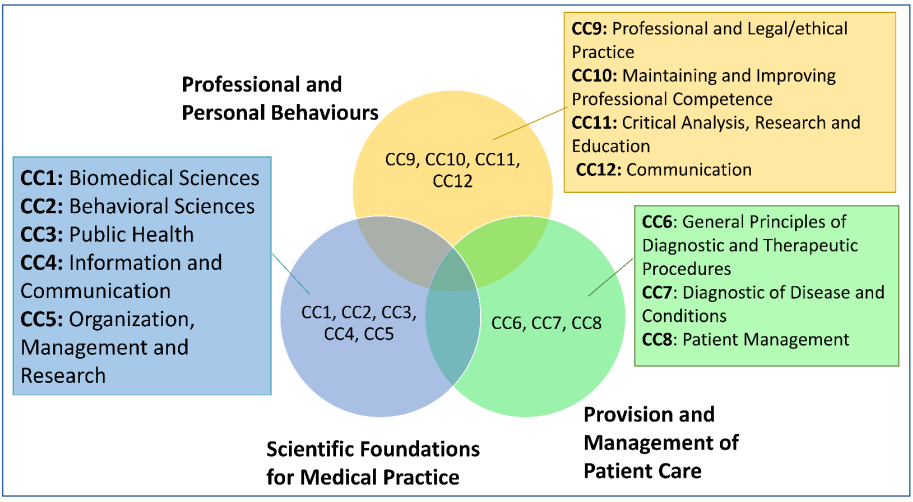


Figure 1: Degree Profile of the Programme

5.4. Revised Course Outcome

To apply biomedical sciences to safely, ethically and effectively practice history taking and physical examination, there is no change in the programme outcomes.

5.5. Revised Course Objectives

At the end of the course students will be able to:

1. Relate principles of anatomy and physiology to the examination and assessment process, anticipating advance practice.
2. Conduct a tactful, accurate, organised and problem-focused medical history-taking by respecting every human being, with an appreciation for the diversity of human backgrounds and cultural values.
3. Conduct physical examinations systematically to obtain subjective health data that includes the patient profile, chief complaint, present illness, past medical family and social history and a full review of the system.
4. Interpret and integrate the history and physical examination findings to differentiate between abnormal findings.
5. Demonstrate ethical values and professional behaviour in communicating with patients and relatives.

5.6. Tuning Asia Southeast Medical Competence Framework (TASEMed)

- Six domains of competence were identified

    1. Patient care
    2. Family, community & population care
    3. Ethics & professionalism
    4. Quality assurance
    5. Knowledge & skills
    6. Communication

- Patient care is at the centre of TASEMed Framework.
- All 27 generic and specific competencies were mapped in the six domains. Some competencies were classified in more than one domain.

Generic Competencies (G)

G1: Ability to work collaboratively and effectively in diverse contexts.

G2: Ability to use information and communication technology purposefully and responsibly.

G3: Ability to uphold professional, moral and ethical values.

G4: Ability to demonstrate responsibility and accountability towards society and the environment.

G5: Ability to communicate clearly and effectively.

G6: Ability to think critically, reflectively and innovatively.

G7: Ability to understand, value, and respect diversity and multiculturalism.

G8: Ability to carry out lifelong learning and continuous professional development.

G9: Demonstrate problem solving abilities.

G10: Ability to initiate, plan, organise, implement and evaluate courses of action.

G11: Ability to conduct research.

G12: Ability to demonstrate leadership attributes.

G13: Ability to apply knowledge into practice.

Specific Competencies (S)

S1: Ability to practice according to good clinical practice (GCP) in various clinical settings.

S2: Ability to appropriately perform history taking.

S3: Ability to appropriately perform physical examinations.

S4: Ability to appropriately perform diagnostic investigation.

S5: Ability to integrate clinical and work-up information to make diagnoses and differential diagnoses.

S6: Ability to provide appropriate therapy with a biopsychosocial approach.

S7: Ability to explain the benefit and risk of any therapeutic options.

S8: Ability to perform consultations with patients and families with empathy.

S9: Ability to manage medical records appropriately.

S10: Ability to ensure and maintain patient safety.

S11: Ability to promote health and preventive medicine.

S12: Ability to recognise and address public concerns and controversial issues related to health.

S13: Ability to demonstrate a balanced dedication to serving the interest of individual patients and the commitment to social justice and the common good.

S14: Ability to recognise and estimate health risks and healthcare needs and costs of a defined population, particularly of vulnerable groups.

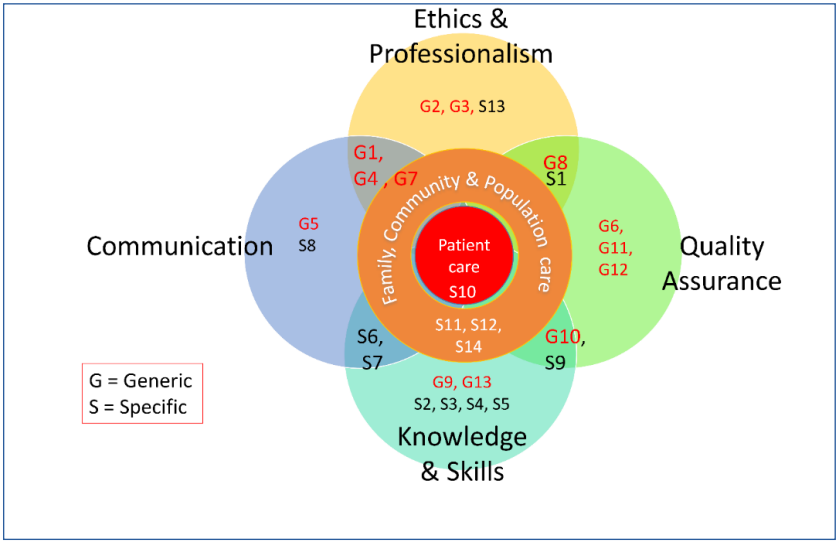


Figure 2: TASEMed Meta-Profile

6. LINK TO META-PROFILE

The Core Competencies (CC) for Medical Doctors at UHS are well aligned to the competencies of Tuning Asia South East Medical Competence Framework (TASEMed). CC1, CC2, CC3 and CC5 are aligned with the knowledge and skills of the Meta-Profile. CC4 is aligned with Communication, CC5 with Quality Assurance, CC6, CC7 and CC8 with Patient Care, CC9 and CC12 are aligned with both Ethics & Professionalism and Communication (represented in the intersection area). CC10 is aligned with Ethics & Professionalism. CC11 is aligned with both Ethics & Professionalism and Quality Assurance (area of overlap between Ethics and Professionalism and Quality Assurance).

The contents of the Semiology course remains the same. The instructional delivery was redesigned to include skills and attitude. The students will be trained and allowed to practice their skills in the simulation Lab before they are exposed to real patients. This will also provide the students with an opportunity to build up their confidence and become safe medical practitioners. By redesigning the Semiology course to include more skills and attitude training, the emphasis on skills, ethics and professionalism is more aligned with the TASEMed meta-profile.

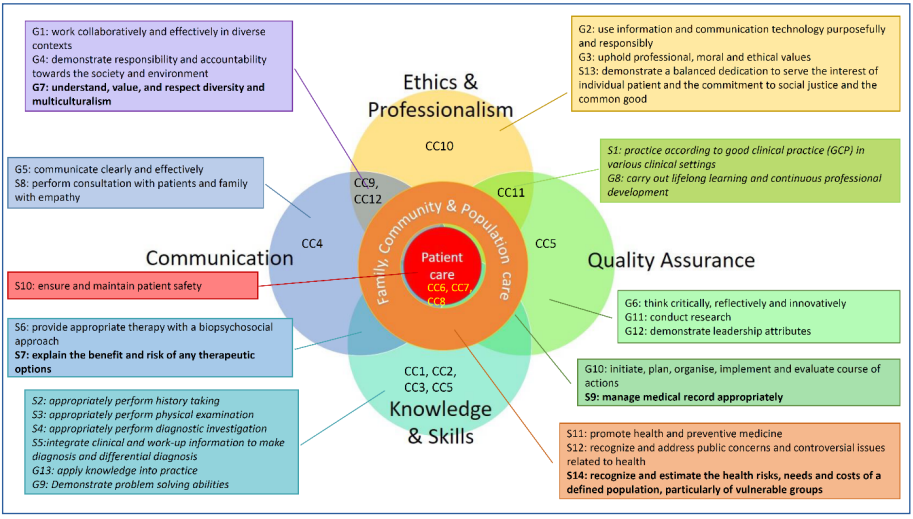


Figure 3: Link to Meta-Profile

7. STRUCTURE OF THE PROGRAMME

- Name of revised course: Semiology
  In this course series students will obtain the knowledge, skills, and professional attitudes related to communication, history taking, physical examination, and clinical reasoning in a manner that will promote understanding and the demonstration of professional attitudes and behaviours. This course extends over year 2 and year 3 and focuses on specific domains (e.g. respiratory, cardiovascular systems, etc.). In particular students will continually refine their ability to effectively communicate with patients, improve safe clinical practice, clinical reasoning skills and development of ethics and professionalism.
- Credit: 6 credit (3 credit in Year 2 and 3 credit in Year 3)

Competence	Type of competence	Course	Definition	Learning outcome	T&L Strategies	Assessment
Scientific Foundations for Medical Practice	Knowledge & Skills	Semiology	1. Relate principles of anatomy and physiology to the examination and assessment process, anticipating advance practice. 2. Conduct a tactful, accurate, organised and problem-focused medical history by respecting every human being, with an appreciation for the diversity of human background and cultural values. 3. Conduct systematically to obtain subjective health data that includes the patient profile, chief complaint, present illness, past medical family and social history and a full review of the system. 4. Interpret and integrate the history and physical examination findings to differentiate between abnormal findings. 5. Demonstrate ethical values and professional behaviour in communicating clearly, considerately and sensitively with patients and relatives.	Apply biomedical sciences to practice safe, ethical and effective history-taking and physical examination.	Lectures, Practical session, Clinical Skills Lab Session	MCQ (SBA), OSCE

The "Old" Semiology Course has been taught in year 2 and year 3 of the Basic Medical Education Programme and the students were given lectures only (CC1 – Biomedical Sciences only). Revision on this course aims to include Knowledge & Skills, Communication Skills, Ethics & Professionalism, and Patient Care by adding CC4 (Information and Communication), CC9 (Professional and Legal/Ethical Practice), CC10 (Maintaining and Improving Professional Competence), CC11 (Critical Analysis), and CC12 (Communication to patients, relatives and colleagues).

This revised course will allow the students to improve their psychomotor skills, communication and ethical values through simulation. For this, the students will be trained and allowed to practice their skills in the simulation Lab before they are exposed to real patients. This will also provide the students with the opportunity to build up their confidence and be safe medical practitioners.

8. PROGRAMME OVERALL CONSISTENCY

Year	Course	Credit	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CC10	CC11	CC12	T&L methods	Assessment
Year 1	Chemistry Biochemistry	3	1	0	0	0	0	0	0	0	0	0	0	0	Lectures, Practical Session, Clinical Skills Lab Session	Multiple Choice Questions (MCQ), Objective Structure Clinical Examination (OSCE)
	Biology	3	1	0	0	0	0	0	0	0	0	0	0	0		
	Embryology	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Anatomy	4	1	0	0	0	0	0	0	0	0	0	0	0		
	Demography	3	1	1	0	0	0	0	0	0	0	0	0	0		
	Foundation of Nursing Sciences	2	1	1	0	0	0	0	0	0	0	1	0	1		
	Introduction to Public Health	3	0	1	1	1	0	0	0	1	0	1	1	0		
	Infection disease agents	3	1	0	1	0	0	0	0	0	0	0	0	0		
Year 2	Anatomy	4	1	0	0	0	0	0	0	0	0	0	0	0	Lectures, Practical Session, Clinical Skills Lab Session	MCQ, OSCE
	Histology	2	1	0	0	0	0	0	0	0	0	1	0	0		
	Physiology	4	1	0	0	0	0	0	0	0	0	0	0	0		
	Anatomy Skills Lab	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Histology Skills Lab	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Semiology	3	1	1	0	1	0	0	0	0	1	1	1	1		
	Public Health	2	0	0	1	1	1	0	0	0	0	1	1	0		
	Biochemistry	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Biophysics	1	1	0	0	0	0	0	0	0	0	0	0	0		

Year	Course	Credit	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CC10	CC11	CC12	T&L methods	Assessment
Year 3	Histology	2	1	0	0	0	0	0	0	0	0	0	0	0	Lectures, Practical Session, Clinical Skills Lab Session	MCQ, OSCE
	Physiology	4	1	0	0	0	0	0	0	0	0	0	0	0		
	Pathophysiology	3	1	0	0	0	0	0	0	0	0	0	0	0		
	Histology Skills Lab	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Anatomy Skills Lab	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Semiology	3	1	1	0	1	0	0	0	0	1	1	1	1		
	Microbiology	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Immunology	1	1	0	0	0	0	0	0	0	0	0	0	0		
	Public Health	2	0	0	1	1	1	0	0	0	0	1	1	0		
Year 4	General Medicine	7	1	1	1	1	1	1	1	1	1	1	1	1	Lectures, Practical Session, Simulation session, Clinical Teaching, Case-Based Seminar, Ward round, Clinical Procedures	Logbook, MCQ, OSCE
	General Surgery	7	1	1	1	1	1	1	1	1	1	1	1	1		
	Pathophysiology	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Psychiatry	2	1	1	1	1	1	1	1	1	1	1	1	1		
	OBGYN	3	1	1	1	1	1	1	1	1	1	1	1	1		
	Pathology	3	1	0	0	0	0	0	0	0	0	0	0	0		
	Microbiology	4	1	0	0	0	0	0	0	0	0	0	0	0		
	Pathology Skills Lab	2	1	0	0	0	0	0	0	0	0	0	0	0		
	Clinical Practice	5	1	1	1	1	1	1	1	1	1	1	1	1		

Year	Course	Credit	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CC10	CC11	CC12	T&L methods	Assessment
Year 5	ENT	1	1	1	1	1	1	1	1	1	1	1	1	1	Lectures, Practical Session, Simulation session, Clinical Teaching, Case-Based Seminar, Ward round, Clinical Procedures	Logbook, MCQ, OSCE
	Ophthalmology	1	1	1	1	1	1	1	1	1	1	1	1	1		
	Radiology-Medical Imagery	3	1	o	o	1	1	1	1	o	1	1	1	1		
	General Medicine	7	1	1	1	1	1	1	1	1	1	1	1	1		
	General Surgery	7	1	1	1	1	1	1	1	1	1	1	1	1		
	Psychiatry	2	1	1	1	1	1	1	1	1	1	1	1	1		
	Paediatrics	4	1	1	1	1	1	1	1	1	1	1	1	1		
	OBGYN	3	1	1	1	1	1	1	1	1	1	1	1	1		
	Pharmacology	5	1	o	o	o	o	1	1	1	o	1	1	o		
	Deontology	2	o	1	o	1	o	o	o	o	1	1	1	1		
	Clinical Practice	8	1	1	1	1	1	1	1	1	1	1	1	1		
Year 6	Paediatrics	4	1	1	1	1	1	1	1	1	1	1	1	1	Lectures, Practical Session, Simulation session, Clinical Teaching, Case-Based Seminar, Ward round, Clinical Procedures	Logbook, MCQ, OSCE
	OBGYN	3	1	1	1	1	1	1	1	1	1	1	1	1		
	General Medicine	7	1	1	1	1	1	1	1	1	1	1	1	1		
	General Surgery	7	1	1	1	1	1	1	1	1	1	1	1	1		
	Anaesthesiology& EM	2	1	1	1	1	1	1	1	1	1	1	1	1		
	Psychiatry	2	1	1	1	1	1	1	1	1	1	1	1	1		
	Pharmacology	4	1	o	o	o	o	1	1	1	o	1	1	o		
	Forensic Medicine	3	1	1	o	o	o	1	1	1	1	1	1	o		
	Clinical Practice	8	1	1	1	1	1	1	1	1	1	1	1	1		

Year	Course	Credit	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CC10	CC11	CC12	T&L methods	Assessment
Year 7-Year 8	Paediatrics	3	1	1	1	1	1	1	1	1	1	1	1	1	Simulation session, Clinical Teaching, Case-Based Seminar, Ward round, Clinical Procedures	Logbook, MCQ, OSCE
	OBGYN	3	1	1	1	1	1	1	1	1	1	1	1	1		
	General Medicine	3	1	1	1	1	1	1	1	1	1	1	1	1		
	General Surgery	3	1	1	1	1	1	1	1	1	1	1	1	1		
	Clinical Practice	40	1	1	1	1	1	1	1	1	1	1	1	1		

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

1. At the end of the course, the evaluation (questionnaire-based feedback) will be obtained (once at the end of year 2 and year 3) from students, lecturers and course coordinators.
2. Feedback and decisions regarding improvements will be analysed by the Academic and research committee.
3. The improvements suggested will be implemented and monitored again throughout the evaluation. The results of the evaluation will be discussed during the semester meeting and the process repeated annually.
4. Quality control will be monitored by the Internal Quality Assurance (IQA) Unit

10. OTHER RELEVANT ASPECTS

As the revision of this Semiology course has minor changes (teaching-learning methodologies), this proposal does not require approval by the accreditation body. These minor changes just need to be presented to the faculty's curriculum development committee .

7e. Ateneo School of Medicine and Public Health, Philippines

Manuel M. Dayrit

1. NAME OF THE NEW PROGRAMME: MASTER OF PUBLIC HEALTH GOVERNANCE

Designed for persons who wish to build careers in the field of healthcare as public health administrators. The course provides graduates with the competencies and confidence to manage persons, resources, constraints in complex public health systems at various levels including national, regional, provincial, municipal to ensure the effective, efficient, and equitable delivery of healthcare to specific populations.

2. LENGTH AND LEVEL OF THE PROGRAMME: MASTER'S LEVEL; 1 ACADEMIC YEAR; 2 SEMESTERS, 19 WEEKS PER SEMESTER; 5 DAYS PER WEEK FOR COURSE WORK AND INDEPENDENT WORK.

Entry qualifications include degrees in: nursing, pharmacy, midwifery, public health, medicine, dentistry, veterinary medicine, and other allied health professions like occupational health and physical therapy. At least two years of work experience in healthcare.

Students who are already employed in a healthcare facility and who wish to further their careers in their present occupations through increasing their administrative qualifications are ideal candidates for the course.

The 2-year programme comprises 2 semesters with 19 weeks per semester.

The Master's programme allows for progression to other academic degrees including doctorate in public health and doctorate in management of health systems.

3. SOCIAL NEED FOR THE NEW OR REVISED PROGRAMME

The Local Government Code of 1991 mandated the devolution of the Philippine public health system in 1991. As a result, governors and municipal mayors were given the responsibility to manage health services in their respective jurisdictions. Twenty-seven years after the

devolution, there remains a critical need for leaders/administrators at the local government level to ensure the proper delivery of healthcare services to their constituencies. The programme is designed to fill the need for building capacity for local health governance at the local government level.

Thus this course is primarily designed for healthcare personnel working in municipal, district, and provincial health offices and provincial hospitals and municipal health facilities. The programme aims to improve the administration of basic healthcare services at these levels towards the goal of universal healthcare.

Courses in public administration may cover governance issues but will not necessarily focus on healthcare. This programme is designed specifically for healthcare professionals.

However, the skills learned in this course are easily transferrable to work in private sector hospitals and clinics.

4. FUTURE FIELDS, SECTORS OF EMPLOYMENT/OCCUPATION OF GRADUATES

Students who complete the programme will qualify for administrative jobs at all levels of the health system, both public and private. While the target of the training is personnel working in the public sector, the competencies learned are transferable to private sector jobs.

Specifically, the occupations and jobs that graduates of this course can qualify for include:

Public health administrators, municipal health administrators, provincial health administrators, regional health administrators, hospital administrators.

5. DESCRIPTION OF THE DEGREE PROFILE OF THE NEW PROGRAMME OR A REVISED PROGRAMME IN TERMS OF GENERIC AND/OR SUBJECT-SPECIFIC COMPETENCIES. DEFINITION OF COMPETENCIES AND FORMULATION OF LEARNING OUTCOMES AT PROGRAMME LEVEL.

The course aims to develop the following generic and specific competencies in its graduates.

TABLE 1

Competence	Type of Competence	Definition (KSA needed)	Learning outcomes (at programme level)	Modules
G1 Ability to work collaboratively and effectively in diverse contexts	Generic	K: Team dynamics, group dynamics, networks S: Communication, negotiation, documentation A: Openness, willingness to learn, enthusiasm, inclusiveness	K: Demonstrate knowledge of theory of team dynamics and networks S: Demonstrated ability for team building and teamwork	Module 2,4
G2 Ability to use information and communication technology purposefully and responsibly	Generic	K: Working knowledge of information and communication technology S: Computer skills A: Openness to new technology	Demonstrate ability to communicate using various modalities, including through computers	Module 2,6
G3 Ability to uphold professional, moral and ethical values	Generic	K: Knowledge of ethical principles S: Ability to make ethical judgements A: Integrity and open mind	Demonstrate ability to make ethical judgements	Module 6
G4 Ability to demonstrate responsibility and accountability towards the society and environment	Generic	K: Knowledge of social norms and principles to safeguard the environment S: Ability to apply social norms and principles to safeguard the environment in real life A: Respect for others and for the environment	Demonstrate ability to be accountable for one's duties and work	Module 6
G5 Ability to communicate clearly and effectively	Generic	K: Knowledge of principles of communication S: Ability to express oneself and listen to others A: Open to communicating with others	Demonstrate the ability to express one's ideas orally and in writing. Demonstrate the ability to listen to others.	Module 1,2,4
G6 Ability to think critically, reflectively and innovatively (needs further refinement)	Generic	K: Knowledge of the scientific method S: Applying the scientific method in practice A: Diligence, care and respect for evidence, facts, and awareness of personal and systemic biases	Demonstrate the ability to think critically and logically.	
G7 Ability to understand, value, and respect diversity and multiculturalism	Generic	K: Recognition of diversity among people, social groups, and nations S: Ability to respect others A: Open, non-judgemental attitude towards others	Demonstrate the ability to respect others of different groups, creeds, genders, cultures, nationalities.	Module 1,2,4

Competence	Type of Competence	Definition (KSA needed)	Learning outcomes (at programme level)	Modules
G8 Ability to carry out lifelong learning and continuous professional development	Generic	K: Knowledge of ways to learn continuously S: Ability to update oneself continuously A: Passion for new learning	Demonstrate the ability to update oneself in one's profession.	Module 1-6
G9 Demonstrate problem solving abilities	Generic	K: Knowledge of various ways to problem solve S: Ability to problem-solve in real life A: Open mind, perseverance and willingness to try new ideas	Demonstrate the ability to problem solve.	Module 1, 2,3,4,5,6
G10 Ability to initiate, plan, organise, implement and evaluate courses of action	Generic	K: Knowledge of ways to use information to brainstorm and see new patterns S: Actual skill to develop new approaches to existing problems A: Curious and adventurous spirit	Demonstrate the ability to explore new approaches to problems.	Module 1,2, 3,4,5,6
G11 Ability to conduct research and use research effectively	Generic	K: Knowledge of research processes S: Ability to interpret and use research information effectively and wisely A: Openness to new knowledge generated by research	Demonstrate the ability to use research information in addressing real-life problems.	Module 1,2,3,4
G12 Ability to demonstrate leadership attributes	Generic	K: Knowledge of principles of being a leader S: Ability to take leadership roles; also to take the role of a follower	Demonstrate the ability to lead and to follow depending on the situation.	Module 1,2
G13 Ability to apply knowledge into practice	Generic	K: Knowledge of the principles in applying information S: Ability to organise information and use it in practice A: Openness to new ways of thinking	Demonstrate the ability to solve practical problems.	Module 1,2,3,4,5,6
S1 Ability to gather and organise health data from operations to optimise healthcare delivery	Specific	K: Knowledge of the data used in the practice of medicine, clinical procedures, and health systems S: Manage data regarding clinical care A: Respect for patients, diligence in completing the spectrum of care.	Demonstrate working knowledge of data analysis and use. Demonstrate ability to interpret and manage data from operations to enable continuous high-quality patient centred care	Module 1,2,3,4,5,6

Competence	Type of Competence	Definition (KSA needed)	Learning outcomes (at programme level)	Modules
S2 Ability to facilitate and coordinate clinical processes, procedures, and requirements	Specific	K: Knowledge of the practice of medicine, clinical procedures, and health systems S: Manage processes enabling clinical care A: Respect for patients, diligence in completing the spectrum of care	Demonstrate working knowledge of the practice of medicine, clinical procedures, and health systems Demonstrate ability to manage operations to enable continuous high-quality patient centred care	Module 2
S3 Ability to support clinical care through provision of necessary inputs for ensuring good quality patient centred cost effective care	Specific	K: Knowledge of clinical services in a healthcare facility S: Manage processes to enable clinical care A: Compassion for patients; Care and thoroughness in following standards	Demonstrate the ability to support patient-centred care as appropriate.	Module 1,2,3,4,5,6
S4 Ability to solve logistical problems to assure non-interruption of essential healthcare services	Specific	K: Knowledge of supply chain S: Demonstrated ability to analyse supply chain problems; skill in dealing with suppliers A: Honesty, integrity	Demonstrate ability to manage supply chain problems; solve stock-outs, oversupply; timely and orderly bidding processes and procurement; documentation	Module 1,2,3,4,5,6
S5 Ability to solve Human Resources problems to assure non-interruption of essential healthcare services	Specific	K: Knowledge of Human Resource management principles S: Skills in personnel management A: Respect for co-workers	Demonstrate the ability to work with various members of the healthcare team.	Module 4
S6 Ability to manage medical records appropriately	Specific	K: Knowledge of medical records management S: Skill in completing medical records, reviewing records for accuracy and completeness	Demonstrate the ability to keep medical records in order.	Module 2,5
S7 Ability to ensure and maintain patient safety	Specific	K: Principles of patient safety S: Handwashing, procedures for infection control A: Discipline in adherence to protocols	Demonstrate the ability to apply the principles of patient safety consistently	Module 1,2,3,4,5,6
S8 Ability to promote health and preventive medicine	Specific	K: Knowledge of principles of preventive medicine S: Ability to communicate effectively A: Desire to share good practices with others	Demonstrate the ability to promote practices to prevent ill health.	Module 1,2,3,5,6

Competence	Type of Competence	Definition (KSA needed)	Learning outcomes (at programme level)	Modules
S9 Ability to recognise and address public concerns and controversial issues related to health	Specific	K: Knowledge of principles in handling controversy S: Ability to deal with controversial issues, deal with various groups, including media A: Courage and integrity in dealing with controversy	Demonstrate the ability to manage controversy.	Module 1
S10 Ability to demonstrate a balanced dedication to serve the interest of individual patient and the commitment to social justice and the common good	Specific	K: Knowledge of ethical principles S: Ability to apply ethical principles to real world problems A: Courage and integrity in making ethical decisions	Demonstrate the ability to make ethical decisions.	Module 1,2
S11 Ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups	Specific	K: Knowledge of risk factors of disease and social determinants of healthcare S: Ability to analyse risks for disease and population needs for healthcare A: Passion for preventive care	Demonstrate the ability to address the risk factors of disease personally and among groups	Module 1,2,3,5,6
S12 Ability to maintain and upgrade the facilities and equipment	Specific	K: Knowledge of standards for hospital facilities S: Ability to inspect facilities and identify deviations from the standards and judgment in applying standards A: Courage, integrity and even-handedness in applying standards	Demonstrate the ability to keep facilities and equipment in working order	Module 1,2
S13 Ability to assure security and safety of healthcare facilities and their personnel	Specific	K: Knowledge of safety standards and protocols S: Ability to apply safety standards and protocols to real life situations A: Courage, integrity and even-handedness in applying safety standards	Demonstrate the ability to safeguard the safety of facilities and personnel	Module 1,2,5
S14 Ability to analyse budgets for planning purposes	Specific	K: Knowledge of budget line items and rules on budgetary management S: Ability to manage budgets, propose allocations, make re-alignments A: Integrity in the proper use of public funds	Demonstrate the ability to discuss budgets	Module 3

Competence	Type of Competence	Definition (KSA needed)	Learning outcomes (at programme level)	Modules
S15 Ability to implement current budgets	Specific	K: K: Knowledge of budget line items and rules on budgetary management S: Ability to manage budgets, propose allocations, make re-alignments A: Integrity in the proper use of public funds	Demonstrate the ability to discuss budget implementation	Module 3
S16 Ability to evaluate past budget performance	Specific	K: K: Knowledge of budget line items and rules on budgetary management S: Ability to manage budgets, propose allocations, make re-alignments A: Integrity in the proper use of public funds	Demonstrate the ability to discuss budget performance	Module 3
S17 Ability to resolve conflicts within the healthcare team	Specific	K: Knowledge of the principles of teamwork S: Leadership skills, skills to be a team player A: Respect for co-workers	Demonstrate the ability to settle conflicts in the healthcare team	Module 1,2,3,4,5,6
S18 Ability to work with government officials at all levels (village, municipal, regional, national)	Specific	K: Knowledge of political processes S: Skills to deal with government officials at various levels A: Courage, integrity, respect for colleagues in government	Demonstrate the ability to effectively work with government officials at various levels.	Module 1,2,3,4,5,6

6. LINK OF THE COMPETENCIES WITH THE AGREED META-PROFILE

Generic competencies which appear in the Medicine meta-profile are indicated in the Table 1. New specific competencies have been developed which are different from the specific competencies listed in the TA-SE Medicine meta-profile.

7. STRUCTURE OF THE PROGRAMME: UNITS/COURSES/MODULES WITH THEIR LEARNING OUTCOMES AND LEARNING, TEACHING AND ASSESSMENT STRATEGIES

Seven modules have been identified to form the core of the course. These modules are: 1) Policy, Plans, and Programmes; 2) Operations Management; 3) Public Finance; 4) Human Resources; 5) Regulations and Legalities; 6) Ethics and Accountability; 7) Strategic Management Paper.

Within each module, specific subjects have been identified. The course requires a 5,000 – 8,000-word paper featuring a strategic analysis and proposed solution to a real-life administrative problem to be identified by the student and approved by the faculty adviser.

Structure of the Course: Total number of weeks: 38 weeks (19 weeks in first semester; 19 weeks in second semester, inclusive of 2 weeks of final write-up of the Strategic Management Paper.

The programme can be tailored to the background and previous experience of students. In other words, student competencies can be assessed at the start of the course and appropriate adjustments can be made to each student's programme of learning.

TABLE 2

Unit/Course/Module	Learning Outcome (at unit/course/module level)	Learning, teaching strategies	Assessment Strategies	Time Allotment for the module
Module 1: POLICY, PLANS, AND PROGRAMMES – Economics – Bureaucracy – Strategic management – Organisational development – National programmes – Health systems – LGU code	Students will be able to *verbally explain and analyse national and or local health* policies and their impact on individuals and populations	1) Lecture by experts and resource persons 2) Case studies/class discussion 3) Independent study in preparation for lectures and case discussions 4) Observation visits to health facilities – group work 5) Essays – reflection	1. Written exam for the module 2. Graded Participation in Case Discussions 3. Essay to constitute part of final strategic paper	6 weeks Distribution: 3 weeks in first semester. 3 weeks in second semester. (spiral learning) Contact hours (one-third of total student workload) and Independent work (two-thirds of total student workload)
Module 2: OPERATIONS MANAGEMENT – Planning – Information technology – Statistical systems – Logistics – Health promotion and prevention – Community organisation – Selected national and local government programmes	Students will be able to describe and undertake analyses of health facility operations, e.g. procurement of supplies; contracting for infrastructure projects	1) Lectures by experts and resource persons 2) Case studies/class discussion 3) Independent study in preparation for lectures and case discussions 4) Observation visits to health facilities – group work 5) Essays – reflection	1. Written exam for the module 2. Graded participation in case discussions 3. Essay to constitute part of final strategic paper	8 weeks Distribution: 4 weeks in first semester; 4 weeks in second semester (spiral learning) Contact hours (one-third of total student workload) and Independent work (two-thirds of total student workload)
Module 3: PUBLIC FINANCE – Planning and budgeting – Budget implementation – Assessment of budget implementation	Students will be able to describe how the financial system works. Students will be able to interpret and analyse budget of health facility	1) Lectures by experts and resource persons 2) Case studies/class discussion 3) Independent study in preparation for lectures and case discussions 4) Observation visits to health facilities – group work 5) Essays – reflection	1. Written exam for the module 2. Graded participation in Case Discussion 3. Essay to constitute part of final strategic paper	6 weeks Distribution: 3 weeks in first semester; 3 weeks in second semester (spiral learning) Contact hours (one-third of total student workload) and Independent work (two-thirds of total student workload)

Unit/Course/Module	Learning Outcome (at unit/course/module level)	Learning, teaching strategies	Assessment Strategies	Time Allotment for the module
Module 4: HUMAN RESOURCES DEVELOPMENT AND MANAGEMENT – Leadership – HR management – Civil service – HR development – Succession planning and recruitment	Students will be able to describe the various components of HR management – hiring, performance assessment, staff development, termination. Students will be able to create job descriptions. Students will be able to analyse and discuss performance indicators	1) Lectures by experts and resource persons 2) Case studies/class discussion 3) Independent study in preparation for lectures and case discussions 4) Observation visits to health facilities – group work 5) Essays — reflection	1. Written exam for the module 2. Graded participation in Case Discussion 3. Essay to constitute part of final strategic paper	6 weeks Distribution: 3 weeks in first semester; 3 weeks in second semester (spiral learning) Contact hours (one-third of total student workload) and Independent work (two-thirds of total student workload)
MODULE 5: REGULATIONS AND LEGALITIES – Omnibus policies (LGU relevant) – Regulatory environment and public health laws – National policy implementation – LGU code	Students will be able to discuss the various government laws and policies on public health Students will be able to describe the regulations for the licensing and accreditation of health facilities	1) Lectures by experts and resource persons 2) Case studies/class discussion 3) Independent study in preparation for lectures and case discussions 4) Observation visits to health facilities – group work 5) Essays — reflection	1. Written exam for the module 2. Graded participation in Case Discussion 3. Essay to constitute part of final strategic paper	6 Weeks Distribution: 3 weeks in first semester; 3 weeks in second semester (spiral learning) Contact hours (one-third of total student workload) and Independent work (two-thirds of total student workload)
MODULE 6: ETHICS AND ACCOUNTABILITY – Code of conduct of the civil service Anti-corruption	Students will be conversant with the ethical code of conduct. Students will be able to demonstrate knowledge and understanding of civil service rules. Students will be able to describe procedures for disciplinary investigation and action.	1) Lectures by experts and resource persons 2) Case studies/class discussion 3) Independent study in preparation for lectures and case discussions 4) Observation visits to health facilities – group work 5) Essays — reflection	1. Written exam for the module 2. Graded participation in Case Discussion 3. Essay to constitute part of final strategic paper	4 weeks Distribution: 2 weeks in first semester; 2 weeks in second semester (spiral learning)

Unit/Course/Module	Learning Outcome (at unit/course/module level)	Learning, teaching strategies	Assessment Strategies	Time Allotment for the module
MODULE 7; Strategic Management Paper (to be compiled from the various essays written for the Modules 1 to 6).	Students will produce a 5,000-8,000-word essay on a specific health facility (rural health unit, district hospital, regional health office, unit of national office) to analyse and discuss a particular administrative issue, function, process for the purpose of recommending a system improvement.	Under guidance of a mentor, students will write the paper in instalments	Acceptance of final strategic paper by a Review panel	2 weeks for final writing

8. SHORT DESCRIPTION OF THE METHODOLOGY AT PROGRAMME LEVEL: LEARNING, TEACHING AND ASSESSMENT STRATEGIES FOR ACHIEVING THE PROGRAMME-LEVEL LEARNING OUTCOMES

See Table 2.

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

The quality of learning strategies and instruction will be monitored through student feedback. Faculty will be evaluated through student feedback, peer review, and review by superior. A standardised tool for measuring faculty performance will be developed and used.

External accreditation will also be sought to ascertain the quality of administrative and academic processes in the programme.

Tracking of graduates will be carried out to gather data on their jobs and career development.

10. OTHER RELEVANT ASPECTS

The programme will be developed in coordination with the Ateneo School of Government, Department of Health and selected local governments.

7f. Universitas Padjadjaran, Indonesia

Yuni Susanti Pratiwi

1. NAME OF THE NEW OR REVISED PROGRAMME

This is a revised programme.

The revised programme is: Bachelor's Degree of Medicine (BdM)

2. LENGTH AND LEVEL OF THE PROGRAMME

Level: Bachelor's degree

Length: 7 semesters (each semester consists of 14 weeks study time, 2 weeks of exam session and remedial) / 28 months / 112 weeks

After this bachelor's degree, students can proceed to the Medical Profession Doctor Programme (MPPD) for 3 semesters (18 months, 72 weeks) to qualify to practice as a medical doctor (MD) or study a master's level programme in the future.

3. SOCIAL NEED FOR THE NEW OR REVISED PROGRAMME

Indonesia has recently implemented a new national health system and health insurance as part of its efforts to achieve community health quality. The external stakeholders who include the province and city health offices, primary health services doctors, supervisory doctor at teaching hospitals and also the alumni from the programme have given feedback on the lack of competence of graduates with regards to the community and the national healthcare system. The school also obtained similar feedback from academics and students. Furthermore, strengthening other competencies such as social-cultural literacy, financial literacy, quality assurance, research capabilities and professionalism, are important to achieving high quality graduates.

These identified competencies are all related directly or indirectly to ensuring patient as well as community welfare. The enhancement of these competencies will train the students to be

aware of potential harm to healthcare recipients. An appropriate academic atmosphere and more convenient learning methods are necessary to achieve these improvements. Thus, Universiti Padjadjaran (Unpad), as one of the public medicine faculties in Indonesia, has to ensure that graduates from Unpad bachelor's degree of medical sciences have the knowledge and skills not only in relation to the community and the national healthcare system, but also in relation to ensuring the safety of the community and the preparation of graduates to be trained as qualified and safe healthcare professionals.

This revised programme consists of revising delivery methods in some courses. The revised programme will provide students with the materials as well as hands-on training in community and the national healthcare system through community-based medical education. Delivery methods such as flipped-in classroom and project-based learning will also be added. Project-based learning will include community projects supervised by an academician in the Jatinangor community, along with other students from health professions (pharmacy, nursing, midwives and psychology).

Social needs were identified based on:

1. External stakeholder meeting attended by the province and city health offices, primary health service doctors, supervisor doctors at teaching hospitals and also alumni from the programme.
2. TRACER study by the alumni, which traced their members and employment status thereof.
3. Focus Group Discussion with academics and students
4. Areas of concern from accreditation process from the Indonesian (LAM PT-Kes) and Malaysian Qualification Agency (MQA)

4. FUTURE FIELDS, SECTORS OF EMPLOYMENT/OCCUPATION OF GRADUATES

The graduates of the programme will be able to serve as:

1. Community health providers
2. Officers in government health programmes
3. Professionals in health services and health organisations
4. Researchers in health sciences
5. Academicians

The graduates may also pursue higher degrees to become medical doctors and other master's level programmes (biomedical sciences, public health, epidemiology, health economy, hospital management, healthcare law, and others).

5. DESCRIPTION OF THE DEGREE PROFILE OF THE NEW PROGRAMME OR A REVISED PROGRAMME IN TERMS OF GENERIC AND/OR SUBJECT-SPECIFIC COMPETENCIES. DEFINITION OF COMPETENCIES AND FORMULATION OF LEARNING OUTCOMES AT PROGRAMME LEVEL.

Areas of competencies in revised programme are:

1. Area of personal and professional competencies
   U1: Professionalism
   U2: Common sense, introspective character and self-initiative development
2. Area of problem solving and critical thinking
   U3: Scientific literacy
   U4: Financial literacy
   U5: Social, cultural literacy
   U6: Innovation and creativity
   U7: Information and technology literacy
3. Area of knowledge and skills (this one should be the first area of competence)
   U8: Health problem management
   U9: Clinical skills
   U10: Effective communication
   U11: Collaboration and teamwork
   U12: Patient safety and health services quality assessment

Competencies	Definition	Learning Outcome
U1. Professionalism	Ability to develop professional health practices in accordance with the values and principles of godliness, noble morality, ethics, discipline, law, and socio-culture in the local, regional and global context.	U1.1 Able to recognise moral values and ethical principles in managing health problems for individuals, families and society.
		U1.2 Able to identify legal aspects that are relevant to medical and health services.
		U1.3 Able to recognise variations of views based on the social and cultural backgrounds of individuals, families and communities and the implications of these views on healthy behaviour, prevention and management of health problems.
U2.Common sense, introspective character and self-initiative development	Ability to analyse the principle of providing medical care by realising limitations, overcoming personal problems, developing oneself, following refresher courses and continually increasing knowledge and developing knowledge for patient safety.	Able to self-reflect, be self-aware and self-evaluate to identify strengths and weaknesses of oneself, continuously.
		Able to apply lifelong learning characters in the context of self-development.
		Able to accept and act on feedback from other parties for self-development.
		Able to recognise and overcome the problems of physical, psychological, social and cultural limitations of oneself.
U3. Scientific literacy	Capacity to utilise scientific knowledge in the form of concepts, theories, procedures and practices, compile questions and draw evidence-based conclusions in order to understand and make decisions related to medical and health phenomena and make changes to these phenomena through clinical actions and individual, family and community health interventions in the framework of human welfare and advancement in science.	Able to understand the scientific medical, health and technology concepts.

Competencies	Definition	Learning Outcome
		Able to identify scientific health issues that underlie local, national and regional decisions and articulate their scientific and technological-based opinion.
		Able to design, conduct and translate scientific research into health practice.
		Able to analyse and evaluate data and critically interpret scientific evidence and draw scientific conclusions.
		Able to communicate the results of scientific research verbally and in writing in scientific community forums.
		Able to communicate health using updated health technology to the general public.
U4. Financial literacy	Sensitivity and ability to utilise knowledge, skills, attitudes and behaviour in managing resources effectively for long-term health and financial well-being.	Able to identify and solve financial problems.
		Able to apply financial concepts into daily life practice.
		Able to describe various types of health insurance.
		Able to describe principles of budgeting and financial management effectively.
		Able to relate financial relationships with ethical, social, political and environmental issues.
U5. Social, cultural literacy	The ability to recognise and accept differences in social, cultural, religious background and others in managing the health problems of individuals, families and communities.	Able to understand the principle of assessing and treating others with respect, using procedures that are appropriate for their culture.
		Able to explain the principles of reflection to make changes related to culture.
		Able to explain behavioural analysis of dominant culture in relation to other cultures.
		Able to demonstrate non-judgmental social skills in dealing and communicating with others, using respectful procedures.

Competencies	Definition	Learning Outcome
U6. Innovation and creativity	The ability to find, evaluate, use, share and produce material using information technology and the internet both cognitively and skilfully.	Able to use information technology effectively to obtain information, interpret results and assess the quality of information.
		Able to identify the relationship between technology, lifelong learning, confidentiality and stewardship of information.
		Able to use appropriate skills and technology in communicating and collaborating with peers, colleagues, family and the general public.
		Able to use skills to participate as civil society to contribute to the information society.
U7. Information and technology literacy	The ability to plan and design new and innovative ways to solve the health problems of individuals, families and communities based on evidence	Able to demonstrate sensitivity to the surrounding environment.
		Able to understand the principles of innovation and produce ideas in problems solving.
		Able to practice flexible approaches based on various perspectives or frames of mind in problem solving.
		Able to provide critical questions, answers, responses, and interpretations.
		Able to produce unusual questions, answers, responses, events and interpretations.
U8: Health problem management	Ability to manage health problems of individuals, families and communities in a comprehensive, holistic, integrated and sustainable manner in the context of primary healthcare.	Able to carry out health promotion, disease prevention and early detection of health problems in individuals, families and communities.
		Able to identify the principles of managing individual, family and community health problems holistically, comprehensively, continuously and collaboratively.
		Able to formulate the involvement of patients, families and communities in improving health status and solving health problems.

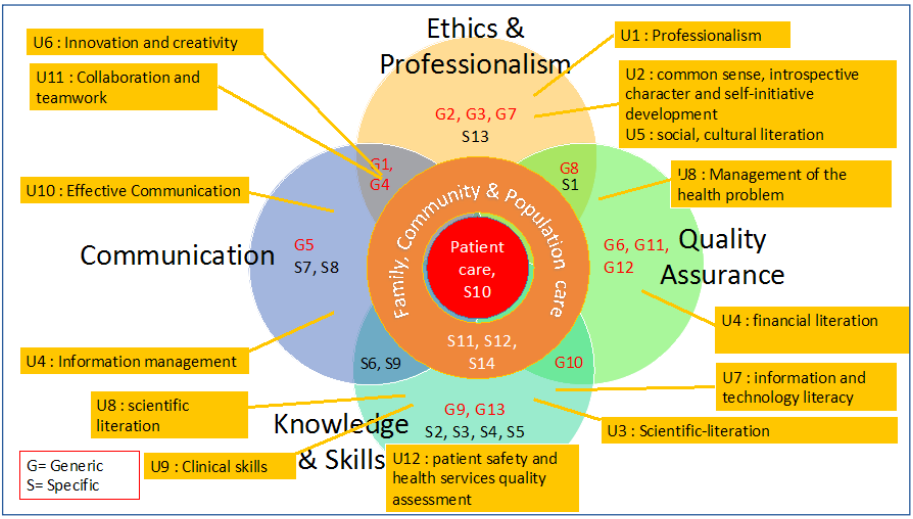
Competencies	Definition	Learning Outcome
		Able to identify service systems and health service policies and principles of leadership and management of comprehensive health services in an appropriate system.
		Able to identify resources in prevention and resolution of health problems.
U9: Clinical skills	Ability to perform clinical procedures related to health problems by applying the principles of patient safety, personal safety, and the safety of others	Able to propose differential diagnoses and diagnoses of health problems by identifying and demonstrating appropriate clinical skills including history, physical examination, writing medical records, and interpretation of laboratory results.
		Able to identify a holistic and relevant health management plan for health problems.
U10: Effective communication	Able to identify a holistic and relevant health management plan for health problems.	Able to demonstrate effective communication and empathise with patients and their families in simulated conditions.
		Able to demonstrate effective communication and empathy with the community in an effort to improve community health status.
		Able to identify advocacy efforts in solving individual, family and community health problems.
U11: Collaboration and teamwork	Ability to collaborate with colleagues, health professionals and other professions in managing health problems by applying values, ethics, roles and responsibilities, and problem management effectively.	Able to identify the principles of applying values and ethics in collaborative practice.
		Able to explain the roles and responsibilities of doctors, other healthcare and other professions in managing health problems in simulated conditions.
		Able to demonstrate effective communication with doctors, other healthcare and other professions in managing health problems in simulated conditions.
		Able to design management of individual, family and community-based collaborative team health problems in writing.

Competencies	Definition	Learning Outcome
U12: Patient safety and health services quality assessment	Able to apply patient safety principles and principles of efforts to improve the quality of health services for individuals, families and communities	Able to identify the importance and principles of patient safety in managing individual, family and community health problems.
		Able to identify human factors related to patient safety efforts in managing individual, family and community health problems.
		Able to explain the role of team collaboration in health services that pay attention to patient safety.
		Able to explain the principles and methods of improving the quality of health services on an ongoing basis in optimal and safe health services.

6. LINK OF THE DEGREE WITH THE AGREED META-PROFILE

An assessment of the present curriculum design was made and the following were deliberated:

- A mapping between BdM Unpad competencies and TA SeaMed Meta-profile was made.
- All of the BdM Unpad competencies able to fit in to the TA SeaMed Meta-profile.
- All generic and specific competencies in the TA Seamed meta-profile, including in BdM, Unpad learning outcome.
- The differences are the TA-SeaMed generic competencies (G12 – Ability to demonstrate leadership attributes) and TA-SeaMed specific competencies (S14-Ability to recognise and estimate the health risks and healthcare needs of a defined population, particularly of vulnerable groups), which are not explicitly addressed in BdM Unpad.
- Based on the social needs, feedback from stakeholders and identified differences between BdM Unpad competencies and the meta-profile will be used as a basis for the programme revision.



Picture 1. Mapping of BdM competencies with TA-SeaMed Meta-profile

7. STRUCTURE OF THE PROGRAMME: UNITS/COURSES/MODULES WITH THEIR LEARNING OUTCOMES AND LEARNING, TEACHING AND ASSESSMENT STRATEGIES

This is the recent curriculum structure at BdM Unpad:

Semester I	Semester II	Semester III	Semester IV	Semester V	Semester VI	Smt. VII (junior Clerkship)
TPB/ FBS I (4)	HIS (8)	EMS (7)	CVS (8)	GIS (7)	RPS (10)	TM (7)
TPB/ FBS II (4)						
TPB/ FBS III (4)	DMS (8)	NBS (10)	RS (7)	GUS (7)		FM (7)
TPB/ FBS IV (4)						
CSP I (1)	CSP II (2)	CSP III (2)	CSP IV (2)	CSP V (2)	CSP VI (2)	CSP VII (2)
PHOP I (1)	PHOP II (2)	PHOP III (1)	PHOP IV (1)	PHOP V (1)	PHOP VI (2)	PHOP VII (2)
CRP I (1)	CRP II (2)	CRP III (1)	CRP IV (1)	CRP V (1)	CRP VI (2)	CRP VII (2)
BHP I (2)	BHP II (3)	BHP III (1)	BHP IV (1)	BHP V (1)	BHP VI (1)	BHP VII (1)
21	25	22	20	19	17	21

Description: () = credit load in semester credit unit
FBS = Fundamentals of Biomedical Science
RPS = Reproductive System
EMS = Endocrine & Metabolism System
NBSS = Neurobehaviour and Senses System
DMS = Dermatomusculoskeletal System
RS = Respiratory System
CVS = Cardiovascular System
HIS = Haematoimmunology System
GUS = Genitourinary System
GIS = Gastrointestinal System
TM = Tropical Medicine
FM = Family Medicine
BHP = Bioethics & Humanities Programme
PHOP = Public Health Oriented Programme
CRP = Community Research Programme
CSP = Clinical Skill Programme

Since, interestingly, the meta-profile TA-SeaMed Meta-profile fitted properly, the revision and development of the curriculum will have more emphasis on delivery method. Our programme will provide wider opportunity for our students to study and work on community and primary healthcare services through community-based medical education and project-based learning. Below are the list of revised delivery methods.

Year and Semester	Major	Previous delivery method	Revised delivery method
1st year (1st and 2nd semester)	BMP (FBS, HIS and DMS)	• Problem-based learning • Laboratory activity • Mini lectures	• Problem-based learning cases • Laboratory activity • Blended learning (Flipped classroom)
	PHOP I, PHOP II, BHP I, BHP II, CRP I, CRP II	Lectures	• Lectures • Extramural activity • Supervised Community Activity together with students from other faculties (Interprofessional Education)
	CSP I-II	Clinical Skills Laboratory	Clinical Skills Laboratory
2nd year (3rd and 4th semester)	BMP (EMS, NBSS, CVS, RS)	• Problem-based learning • Laboratory activity • Mini lectures	• Problem-based learning • Blended learning (Flipped Classroom) • Meet the expert sessions
	PHOP III, PHOP IV, BHP III, BHP IV CRP II,I CRP IV	Lectures	• Lectures • Extramural activity • Project-based learning (Research and implementing project)
	CSP III-IV	Clinical Skills Laboratory	• Clinical Skills Laboratory
3rd year (5th and 6th semester)	BMP (GIS, GUS, RPS)	• Problem-based learning • Laboratory activity • Mini lectures	• Problem-based learning • Blended learning (Flipped Classroom) • Meet the expert session
	PHOP V, PHOP VI, BHP V BHP VI, CRP V CRP VI	• Lectures	• Lectures • Extramural activity • Project-based learning (Research and implementing project)
	CSP V-VI	• Clinical Skills Laboratory	• Clinical Skills Laboratory
4th year (7th semester)	BMP (TM and FM)	• Problem-based learning	• Community-based education (working in primary healthcare)
	CSP VII	• Clinical Skills Laboratory	• Clinical Skills Laboratory

Note: the red font indicates the new delivery method added

Course	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	Delivery Method	Assessment Method
FBS I	v	v	v		v	v	v	v				v		PBL, Laboratory Activity, Flipped Classroom	MCQ, Oral Exam, Assignment
FBS II	v	v	v		v	v	v	v				v			
FBS III	v	v	v		v	v	v	v				v			
FBS IV	v	v	v		v	v	v	v				v			
EMS	v	v	v		v	v		v				v			
NBSS	v	v	v		v	v	v	v				v			
DMS	v	v	v		v	v	v	v				v			
HIS	v	v	v		v	v	v	v				v			
RS	v	v	v	v	v	v	v	v				v			
CVS	v	v	v	v	v	v	v	v				v			
GIS	v	v	v	v	v	v	v	v				v			
GUS	v	v	v	v	v	v	v	v				v			
TM	v	v	v	v	v	v	v	v	v		v	v		Community-based education (working in primary healthcare)	MCQ, Oral Exam, Assignment, Portfolio
FM	v	v	v	v	v	v	v	v	v		v	v			
CSP I-VII	v	v	v	v	v	v	v	v	v				v	Clinical Skills Laboratory	OSCE
BHP I-VII	v	v	v					v						Lecture, extramural, supervised community, iPE, project-based learning, research	MCQ, Research Publication, Project Report
PHOP I-VII	v	v	v	v				v		v	v				
CRP I-VII	v	v	v				v	v		v		v	v		

8. PROGRAMME OVERALL CONSISTENCY

The blue colour block shows the revision of competencies gained from the revised delivery method (community based medical education).

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

Various methods are used to monitor the effectiveness of the revised course and delivery method. First and foremost is the internal feedback from the students and lecturers involved. Feedback also gained from administrative staff. We also plan focus group discussions to analyse feedback and get recommendations. We gather external feedback from general practitioners from primary healthcare and the Health Office from the West Java Province.

7g. University of Malaya, Malaysia

Jamuna Vadivelu,
Hong Wei-Han,
Foong Chan Choong,
Vinod Pallath

1. NAME OF THE PROGRAMME

Bachelor of Medicine and Bachelor of Surgery (MBBS)

2. LENGTH AND LEVEL OF THE PROGRAMME

- This is a full-time bachelor/ undergraduate programme which lasts 60 months over five stages, including 7 weeks of electives and 7 weeks of Pre-internship
    - Stage 1 – 52 weeks
    - Stage 2 – 52 weeks
        - **Repeat Stage 1 or Stage 2 ONCE
    - Stage 3.1 – 46 weeks
    - Stage 3.2 – 52 weeks
    - Stage 3.3 – 48 weeks
        - **Repeat Stage 3.1, Stage 3.2 or Stage 3.2 ONCE
- Total number of weeks: 250 weeks
- Students can take up to a maximum of 7 years
- Progression to further study:
    - MBBS → Clinical Specialties
    - MD
    - Non-Clinical Master/PhD (e.g. medical sciences, medical education, anatomy, physiology)

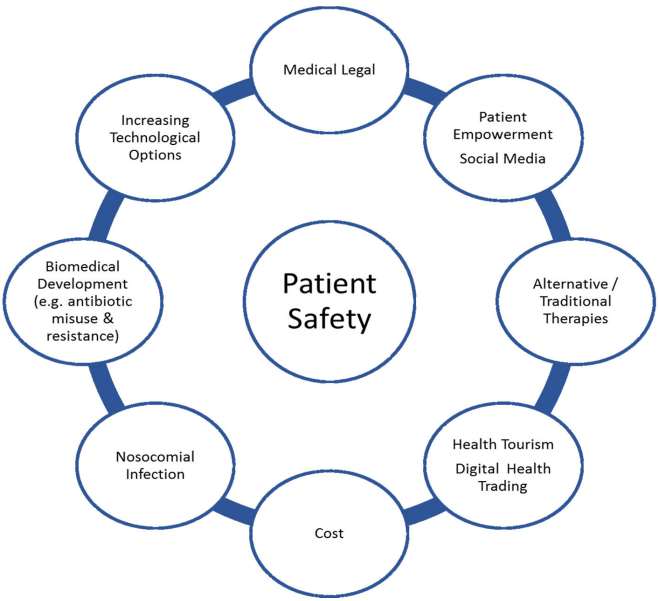
3. THE SOCIAL NEED FOR THE PROGRAMME REVISION PROPOSED

Patient safety

- Medical legal
- Patient empowerment – social media
- Alternative/ traditional therapies
- Health tourism – digital health trading

- Cost
- Nosocomial infection
- Biomedical development (e.g. antibiotic misuse & resistance)
- Increasing technological options

In line with the Ministry of Health Malaysia Action Plan 2016 – 2020, one of the areas of Thrust 2 is Strengthening health system governance and organisational capacity. One of the strategic measures is enhancing safety for patients and healthcare personnel. Recent literature showed that the Ministry of Health of Malaysia is putting more emphasis on patient care, specifically on reducing harm to patients. With increasing complaints from society, medical schools play a vital role in cultivating good habits and teaching medical students about bridging the gaps in quality of care and patient safety. Curriculum in medical schools needs to address patient safety in their training programme. Preparing skilled, trained and empowered healthcare professionals is necessary to increase patients' satisfaction, engagement and participation in the process of caring for them. Confounding needs as presented in the diagram can be improved with interprofessional collaboration to maintain a positive clinical work environment in order to deliver best care practices.



4. FUTURE FIELDS, SECTORS OF EMPLOYMENT/OCCUPATION OF GRADUATES

Future sectors of employment for graduates:

- Medical doctors working at government hospitals or in private practice
- Medical education, involved in curriculum design
- Medical management, working for medical aid companies or NGOs
- Medical journalism
- Tele-medicine
- Positions in pharmaceutical companies
- Medical entrepreneur, managing large private practices
- Academics/Research

More than 98% of the graduates enter medical practice upon graduation. Patient safety is an important element of medical practice. Hence, embedding this area in the medical curriculum will ensure medical practitioners are well equipped with the relevant knowledge, skills and attitude in safe medical practises. This will result in patient satisfaction, engagement and participation in their care process.

5. DESCRIPTION OF THE DEGREE PROFILE OF THE NEW PROGRAMME OR A REVISED PROGRAMME IN TERMS OF GENERIC AND/OR SUBJECT-SPECIFIC COMPETENCIES. DEFINITION OF COMPETENCIES AND FORMULATION OF LEARNING OUTCOMES AT PROGRAMME LEVEL.

The structure of the MBBS programme is a matrix of Stages (Time) and Themes (Curriculum content).

With regards to Duration, the programme is divided into the following Four Stages:

- MIA 1001: Medical Sciences 1 (Stage 1)
- MIA 2001: Medical Sciences 2 (Stage 2)
- MIA 3001: Practice of Clinical Medicine 1 (Stage 3.1)
- MIA 4001: Practice of Clinical Medicine 2 (Stage 3.2)
- MIA 5001: Practice of Clinical Medicine 3 (Stage 3.3)

The content is integrated through Four Themes that span across the entire curriculum of the five stages:

- Basic and Clinical Sciences Theme (BCS)
- Patient and Doctor Theme (Pt-Dr)
- Population Medicine Theme (Pop Med)
- Personal and Professional Development Theme (PPD)

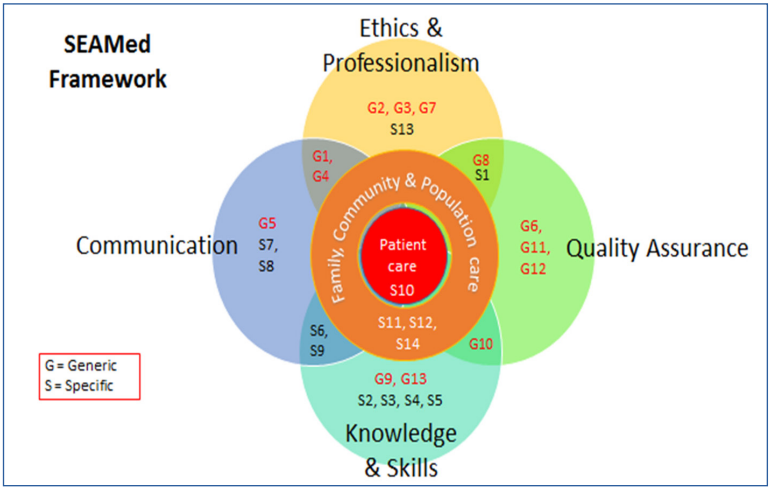
Competence		Type of Competence	Definition	Learning Outcomes (at programme level)
Clinical	UM1: Knowledge	Specific	• Ability to acquire adequate knowledge of the Biological, Behavioural, Clinical, Ethical and Socioeconomic science that are relevant in understanding health and illness and the provision of safe healthcare for individuals, families and the community.	Interpret medical knowledge, concepts and principles in a safe, effective and evidence-based manner.
	UM2: Practical Skills	Specific	• Ability to take an accurate, organised and problem-focussed medical history using appropriate perspective, tact and judgement. • Ability to perform an accurate physical and mental state examination. • Ability to interpret and integrate the history and physical examination findings and apply judgement to arrive at provisional and differential diagnoses. • Ability to formulate a management plan with rational and efficient use of investigational modalities and execute the plan of management in concert with the patient.	Demonstrate appropriate competent practical and clinical skills in diagnosis and patient management.
	UM4: Values, Attitudes and Professionalism	Specific	• Adherence to ethical standards	Model professional values, attitudes and ethical behaviour in medical practice.

Competence		Type of Competence	Definition	Learning Outcomes (at programme level)
Social	UM3: Social Skills and Responsibility	Specific	• Understanding and respect for all patients with different religious, cultural and social values. • Awareness of the need to communicate clearly and sensitively with patients and their families and to involve them fully in planning and executing the management plan.	Engage patients and their families in making health related decisions using suitable social skills with empathy, respect and sensitivity.
	UM5: Communication, Leadership and Team Skills	Specific	• Communicate clearly, considerately and sensitively with patients, relatives, colleagues, nurses and other health professionals and the general public.	Communicate effectively with patients, family, colleagues and the broader community either as a collaborative team member or a leader.
	UM8: Managerial and Entrepreneurial Skills	Specific	• Ability to use managerial and entrepreneurial principles in addressing health issues	Develop community public health programmes using resources and entrepreneurial skills to enhance population health.
Critical Thinking	UM6: Problem Solving and Scientific Skills	Specific	• Ability to pursue independent inquiry and to use current technologies to search for new information, to critically appraise it and to integrate it in improving practice.	Critically evaluate current knowledge and technology to solve healthcare/medical problems in a creative scientific manner.
Information Management	UM7: Information Management & Lifelong Learning Skills	Generic	• Responsibility to maintain standards of medical practice at the highest possible level through continuing medical education throughout their professional career. • Commitment to continuing professional development and lifelong learning	Integrate medical informatics efficiently to engage in lifelong learning and continuing professional development.

The patient safety module has components that are embedded in the curriculum and are addressed as part of UM Competencies 1 (Knowledge), 2 (Practical Skills) and 4 (Values, Attitudes and Professionalism)

6. LINK OF THE COMPETENCIES WITH THE AGREED META-PROFILE

META-PROFILE from TA-SE

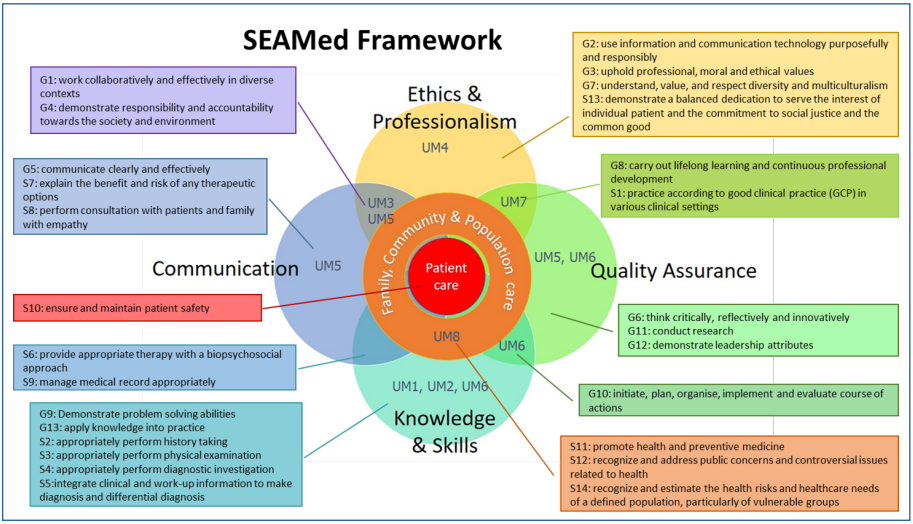


UNIVERSITY OF MALAYA

- VISION
  - To be an internationally renowned institution of higher learning in research, innovation, publication and teaching.
- MISSION
  - To advance knowledge and learning through quality research and education for the nation and for humanity.

FACULTY OF MEDICINE

- VISION
  - To be a Centre of Excellence in Medicine
- MISSION
  - To become a Premier Medical Centre that is world renowned and to provide excellent Healthcare, Education and Research Programmes delivered with efficiency, sensitivity and enthusiasm



In providing quality patient care, knowledge and skills, ethics and professionalism, communication and quality assurance are fundamental components of medical training. The Tuning Academy proposal has identified generic and specific competencies that are required for safe and quality patient care. Based on the current MBBS programme, the domains put forward in the TASEMed Framework correspond to the course learning outcomes. There has been much emphasis on knowledge and skills in the programme. However, the areas of ethics and professionalism have to be emphasised, as these areas are always delivered as a hidden curriculum. The patient safety module adds value and to ensure students are formally taken through important professional knowledge, skills and attitude that is required in healthcare. Below we present a table summarising the coincidences and differences

Domains	Coincidences	Differences
Patient care	– Implemented variably across all departments – Patient care is the utmost important	No differences
Family, community & population care	– Implemented variably across all departments and is one of the themes in the programme	No differences
Ethics & professionalism	– Implemented variably across all departments during clinical immersions – Health law and ethics are addressed	– Little importance is placed on having role models for the students. The focus should be on how students learn, i.e. having a role model for the students . – Ultimately, the behaviour of the students is the most important focus and supersedes all other domains. – Ethics and professionalism between departments requires consistency Delivery of this domain to produce the desired outcome and the governance of this area is still a gap to be addressed
Knowledge & skills	– Implemented variably across all departments for pre-clinical and clinical years	Overemphasis has been given to the knowledge component
Communication	– Implemented variably during clinical immersion – Communication skills workshops are organised for students	No differences
Quality assurance	– Accreditation process is carried out – Audits are continuously conducted	– Quality assurance could include patient education, cost benefits, cost efficiency In-depth description of quality vs costs vs effectiveness and health economics is proposed

7. STRUCTURE OF THE PROGRAMME: UNITS/COURSES/MODULES WITH THEIR LEARNING OUTCOMES AND LEARNING, TEACHING AND ASSESSMENT STRATEGIES

Course	Course learning outcome	Teaching and learning	Assessment strategies
STAGE 1	At the end of the course, students are able to: 1. Describe the normal and abnormal human structure, function and behaviour in relation to the diagnosis, principles of management and prevention of health problems (PO1) 2. Demonstrate the ability to interview and examine patients systematically and satisfactorily perform basic clinical procedures, recognising the practical and therapeutic nature of the patient-doctor relationship (PO2; PO3; PO4) 3. Identify the distribution of risk factors and prevention of disease and injury, and contributing factors to the development and/or continuation of poor health for individuals and communities (PO1) 4. Demonstrate the ability to work cooperatively as a member of a team, accepting and providing leadership as appropriate, and the commitment to advancement of learning within a community of medical scholars (PO5)	• Lectures • PBL • Laboratory sessions • Clinical day • SDL • Seminars • Assignments	For the UMMP, assessments comprise both formative assessment and summative assessment. For Stage 1, there is a great emphasis on formative assessment wherein students are given feedback and learning support. Formative assessments include: • Anatomy Formative Spot Test • Clinical Exercises • Self-directed learning project (paediatrics) • Group Poster & Evaluation submission • L-Plate Test • Workshop Attendance • PBL/Clinical Days /Other Small Group Teaching Attendance • Reflective Portfolio & Interview • Reflective essays Summative assessments include: • Anatomy Summative Spot Test • Pathology Summative Spot Test • Objective Structured Clinical Examination • Written Assessment
STAGE 2	At the end of the course, students are able to: 1. Describe the normal and abnormal human structure, function and behaviour in relation to the diagnosis, principles of management and prevention of health problems (PO1)	• Lectures • PBL • Laboratory sessions • Clinical days • SDL • Seminars • Assignments	For Stage 2, there are still many formative assessments. These include:

Course	Course learning outcome	Teaching and learning	Assessment strategies
	2. Demonstrate the ability to interview, examine patients systematically and satisfactorily perform basic clinical procedures, recognising the practical and therapeutic nature of the patient-doctor relationship (PO2; PO3; PO4) 3. Identify the distribution of risk factors and prevention of disease and injury, and contributing factors to the development and/or continuation of poor health for individuals and communities (PO1) 4. Demonstrate the ability to work cooperatively as a member of a team, accepting and providing leadership as appropriate, and the commitment to advancement of learning within a community of medical scholars (PO5)		• Anatomy Formative Spot Test • Clinical Exercises • Self-directed learning project (Paediatrics) • PBL/Clinical Days /Other Small Group Teaching Attendance • Evaluation/Submission • Reflective Portfolio & Interview • Laboratory Haematology Required Assessment (LHRA) Summative assessments include: • Objective Structured Clinical Examination • Anatomy Summative Spot Test • Pathology Summative Spot Test • Written Assessment – MCQ • Written Assessment – Key Feature (SAQ)
STAGE 3.1	At the end of the course, students are able to: 1. Apply the understanding of normal and abnormal human structure, function and behaviour to the diagnosis, management and prevention of health problems (PO1; PO6; PO7) 2. Interpret clinical symptoms and signs by systematically examining patients, identify appropriate investigations to be undertaken and communicate this information to the patient, patients' families and carers in an effective and ethical manner (PO2; PO6) 3. Demonstrate a compassionate, ethical and professional behaviour in clinical practice (PO3; PO4)	• Lectures/Mini-lectures • Tutorials • Seminars • Clinical Reasoning Sessions • Clinical Area teaching • Independent Active Learning	For Stage 3.1, all assessments are summative. These are: • MCQ • Long case • Modified Long Case • Short Case • Objective Structured Clinical Examination • Teaching Evaluation Exercise • Attitude Evaluation: E-logbook, Attendance

Course	Course learning outcome	Teaching and learning	Assessment strategies
STAGE 3.2	At the end of the course, students are able to: 1. Apply the understanding of normal and abnormal human structure, function and behaviour to the diagnosis, management and prevention of health problems (PO1; PO6; PO7) 2. Interpret clinical symptoms and signs by systematically examining patients, identify appropriate investigations to be undertaken and communicate this information to the patient, patients' families and carers in an effective and ethical manner (PO2; PO6) 3. Apply evidence-based, ethical and economically responsible decisions on the appropriate management of health problems in individuals and in communities, and in the planning of the public and population health strategies (PO1; PO3; PO8) 4. Demonstrate a compassionate, ethical and professional behaviour in clinical practice (PO3; PO4)	• Lectures/Mini -lectures • Tutorials • Seminars • Clinical Reasoning Sessions • Clinical Area teaching • Independent Active Learning • Community Posting	Similarly, for Stage 3.2, all assessments are summative, including: • MCQ • Long case • Modified Long Case • Short Case • Objective Structured Clinical Examination • Required Assignment (Community Posting): • Written Report • Teaching Evaluation Exercise • Attitude Evaluation: E-logbook, Attendance
STAGE 3.3	At the end of the course, students are able to:	• Lectures/ Mini -lectures • Tutorials • Seminars • Clinical Reasoning Sessions • Clinical Area teaching • Independent Active Learning	Similarly, for Stage 3.3, all assessments are summative, including: • MCQ • Long case • Modified Long Case • Short Case • Objective Structured Clinical Examination • Required Assignment (Pre-Internship): • Written Report • Teaching Evaluation Exercise Attitude Evaluation: E-logbook, Attendance

Course	Course learning outcome	Teaching and learning	Assessment strategies
	1. Apply the understanding of normal and abnormal human structure, function and behaviour to the diagnosis, management and prevention of health problems (PO1; PO6; PO7) 2. Interpret clinical symptoms and signs by systematically examining patients, identify appropriate investigations to be undertaken and communicate this information to the patient, patients' families and carers in an effective and ethical manner (PO2; PO6) 3. Apply evidence-based, ethical and economically responsible decisions on the appropriate management of health problems in individuals and in communities, and in planning of the public and population health strategies (PO1; PO3; PO8) 4. Demonstrate a compassionate, ethical and professional behaviour in clinical practice (PO3; PO4)		

The medical curriculum is a five-year programme. In Stages 1 & 2, students undertake the body system blocks where they will be introduced to the basic clinical sciences of Anatomy, Physiology, Pathology, Molecular Medicine, Immunology, Pharmacology and Infectious Diseases; integrated within the blocks. In Stage 1, students will undertake Language in Medicine, Foundation, Musculoskeletal Sciences, Cardiovascular Sciences and Respiratory Sciences. In Stage 2, students will undertake Haematology, Neurosciences, Vision and Behaviour, Endocrine, Nutrition and Sexual Health, Renal and Urology, Gastroenterology and Nutrition, and Oncology and Palliative Care.

At the end of Stage 1 and Stage 2, students will undertake Basic Life Support sessions - Advanced Cardiac Life Support, ACLS in Stage 1 and Paediatric Advanced Life Support, PALS in Stage 2. Stage 3

marks the start of the clinical clerkship years. Students will undertake the following clinical postings; Medicine, Paediatric, Surgery, Otorhinolaryngology and Ophthalmology, Acute Care, Psychological Medicine, Orthopaedic Surgery, Obstetrics & Gynaecology, Primary Care Medicine and Community Health.

8. OVERALL CONSISTENCY OF THE PROGRAMME

Mapping of course to Programme Outcomes

UMMP Programme Outcomes:

PO1: Knowledge
PO2: Practical Skills
PO3: Social skills and responsibility
PO4: Values, attitudes and professionalism
PO5: Communication, leadership and team skills
PO6: Problem solving and scientific skills
PO7: Information management and lifelong learning
PO8: Entrepreneurial and managerial skills

Course	Programme Outcomes							
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
STAGE 1	√	√	√	√	√			
STAGE 2	√	√	√	√	√			
STAGE 3.1	√	√	√	√		√	√	
STAGE 3.2	√	√	√	√		√	√	√
STAGE 3.3	√	√	√	√		√	√	

Programme consistency is preserved by aligning the new module's outcomes with overall programme outcomes.

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

- Feedback obtained from
  - Students (Teaching evaluation exercises)
  - Lecturers (Block review meetings, surveys)
  - Supervisors (Graduate surveys)

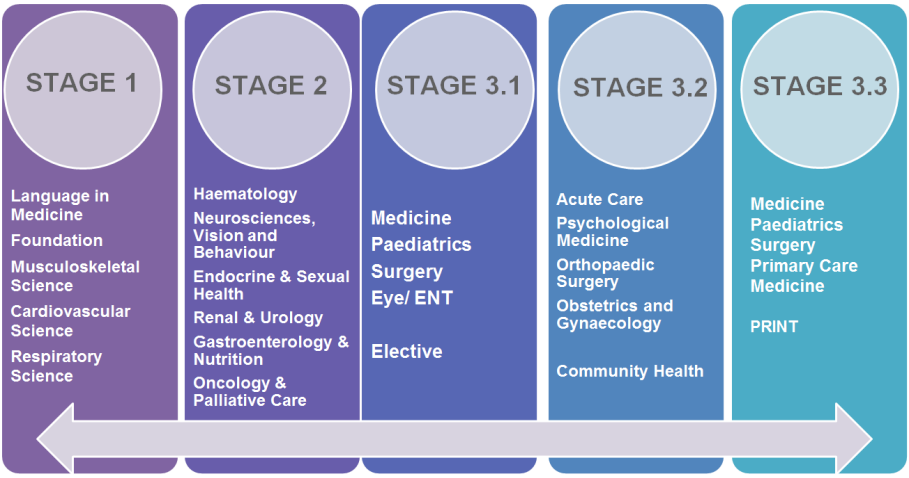
- Feedback and improvements discussed during
  - Block review meetings
  - Curriculum board meetings
  - Management board meetings
- Monitored/audited by the
  - External examiners
  - Quality Management and Enhancement Unit (QMEC)
  - ISO 9001:2018
  - Malaysia Medical Council and Malaysia Qualifications Agency

The University of Malaya Medical Programme (UMMP) has its internal quality control processes. Student feedback is collected for each teaching activity. Subsequently, student feedback is presented and discussed with coordinators (lecturers) during regular block review meetings. Next, a summary of block review meetings is presented and discussed during curriculum and management meetings. Revisions and improvements are discussed and decided during these meetings. Overall, the UMMP is audited, assessed and accredited by its external examiners, the university's Quality Management and Enhancement Unit (QMEC), the national Malaysia Medical Council and Malaysia Qualifications Agency and the international standards (ISO 9001:2015). Following the institutional policy, specifically for the revised Patient Safety module, student feedback will be collected for individual topics to evaluate its effectiveness. Student feedback will be considered together with input from the coordinators (lecturers) to improve on its next implementation.

10. OTHER RELEVANT ASPECTS

Implementation

Elements of patient safety were addressed in the original curriculum. However, there was no structured, well-defined module that aligned to key elements of the competencies (knowledge, skills and attitude). The components of ethics and professionalism in safe patient care were not complete. The new module has addressed these deficiencies. The Tuning survey and WHO Curriculum Guide on Patient Safety formed the basis of the development of this module. The components of the module are integrated across the five stages of the curriculum.



Four themes - Basic and Clinical Sciences, Patient-Doctor, Personal and Professional Development, Population Medicine

Appendix A: Patient Safety Module

UMMP PATIENT SAFETY MODULE

Stage 1

Theme: Infection control

Topic	Format	Learning objectives	PLO
Introduction to hospital policies for patient safety • Handwashing • Infection control • Prescription • Medication administration • Blood transfusion • Sharps handling • 5S Housekeeping (seiri, seiton, seiso, seiketsu, shitsuke)	Lecture	• Demonstrate awareness of importance of hospital policies for patient safety • Demonstrate knowledge of WHO/international standards for patient safety • State significance of compliance with handwashing technique, safety protocols for blood transfusion and sharps handling method in infection control	PLO 1 and 2
Standard precautions, expanded precautions & dress code in hospital setting	Lecture / online module / practical	• Explain the difference between universal precautions and standard precautions • Explain the rationale for standard precautions • Describe the basic principles and procedures of standard precautions • Outline the types and indications of isolation/expanded precautions • Understand how infection in the hospital setting can be prevented • Demonstrate knowledge of prescribed dress code for healthcare practitioners	PLO 2 and 4
Sterilisation techniques for instruments	Online module	• Differentiate between disinfection and sterilisation • Explain different types of sterilisation • Describe the disinfection methods used in hospitals • Explain the importance of quality control for sterilisation and disinfection	PLO 1 and 2

Topic	Format	Learning objectives	PLO
Audit on infection control	Briefing + fieldwork	• Describe the importance of performing safety audits in a healthcare setting • Conduct an audit on infection control practices and analyse its results	PLO 2
Hand Hygiene Australia	Online module	• State the importance of handwashing in preventing the spread of disease • Discuss strategies to improve hand hygiene compliance • Explain current recommendations on hand hygiene practice	PLO 1 and 2
Infection control and handwashing	Clinical Days Block 2	• Define handwashing • State the purpose of handwashing • State the indication of handwashing • Describe the types of handwashing • List types of antimicrobial products that are recommended for handwashing • Demonstrate the correct technique for handwashing • Appreciate the importance of handwashing	PLO 1 and 2
Scrubbing, gowning and gloving	Clinical Days Block 2	• Describe Standard Precautions and Transmission-Based Precautions • Demonstrate surgical scrub techniques • Demonstrate gowning and gloving (no touch technique) • Demonstrate change of gloves while maintaining a sterile field	PLO 1 and 2
Basic Life Support	ACLS (Practical)	• Demonstrate correct procedure of basic life support skills • Demonstrate proficiency in performing basic life support skills	PLO 1 and 2

Stage 2

Theme: Procedural safety

Topic	Format	Learning objectives	PLO
Audit on integration of procedural skills + safety measures	Fieldwork	• Conduct an audit on procedural safety practices and analyse its results	
Intravenous cannulation & venepuncture Patient identification, sample collection and labelling	Clinical Days Block 6	• State the indications for intravenous cannulation • Describe the complications of intravenous cannulation • Discuss the indications for replacing a cannula • Set up a sterile field • Prepare a patient for intravenous cannulation • Assess cannulation sites • Choose the correct cannula size • Insert a cannula using aseptic technique • Secure a cannula • Remove a cannula • Demonstrate planning, equipment collection and the performance of venepuncture on the arm model	PLO 1 and 2
Sharps and needlestick injury	Clinical Days Block 6	Students should be able to demonstrate their awareness regarding: • The diseases transmissible by blood • Safety issues regarding the use and disposal of sharps • Techniques and equipment used in avoiding needlestick injury • Common errors when handling sharps • Correct procedure following a needlestick injury • Planning and execution of simple tasks involving sharps and the ability to perform manual tasks while wearing gloves	PLO 1 and 2

Topic	Format	Learning objectives	PLO
Intramuscular and subcutaneous injections	Clinical Days Block 8	• Identify the correct sites for administration of different types of intramuscular and subcutaneous injections • Describe how to prepare an adult and a paediatric patient for an injection • Demonstrate the ability to perform intramuscular and subcutaneous injections using a mannequin • Describe to a patient how to self-administer an insulin injection	PLO 1 and 2
Naso-gastric intubation	Clinical Days Block 10	• Students should be able to demonstrate their awareness regarding: • Reasons for insertion of tubes • Complications in the use of NG tubes • Demonstrate the method of insertion	PLO 1 and 2
Administration of intravenous injections and fluids	Clinical Days Block 10	• To safely set up and administer intravenous drugs and intravenous fluid therapy	PLO 1 and 2
Stoma care	Clinical Days Block 10	• To provide the required information when caring for a patient post stoma surgery • State the potential problems that can occur with stomas	PLO 1 and 2
Safe transfusion practice	Theme session	• Explain the rationale for clinical protocols and practices for the request and transfusion of blood	PLO 1 and 2
Blood products in the treatment of disease	Lecture	• Apply the principles of blood transfusion and the rationing of blood products • Demonstrate the awareness of the cost effectiveness of alternative treatment strategies	PLO 1 and 2
Basic Life Support	PALS (Practical)	• Demonstrate correct procedure of basic life support skills • Demonstrate proficiency in performing basic life support skills	PLO 1 and 2

Stage 3.1

Theme: Vulnerable patients & professional behaviour

Topic	Format	Learning objectives	PLO
Hospital policy on patient safety • Threats to patient safety • Introduction to methods of ensuring patient safety, documentation	Lecture	• Identify hospital policies which ensure patient safety in UMMC • State the importance of quality assurance in healthcare • Identify threats to patient safety	PLO 2 and 6
Vulnerable patients	Lecture	• Identify vulnerable persons in the patient population • Discuss issues experienced by vulnerable patients • Discuss strategies to optimise healthcare services for vulnerable patients	PLO 2, 4 and 6
Audit on 'vulnerable patient care / professionalism'	Fieldwork	• Conduct an audit on procedural safety practices • Analyse results of the audit	PLO 4 and 6
Procedural skills	Bedside teaching	• Describe the steps of procedural skill taught in the session • Perform the procedural skills	PLO 1 and 2

Stage 3.2

Theme: Medication safety

Topic	Format	Learning objectives	PLO
Audit on medication safety	Fieldwork	• Conduct an audit on medication safety practices • Analyse results of the audit	PLO 2 and 6
Procedural skills	Bedside teaching	• Describe the steps of procedural skills taught in the session • Perform the procedural skills	PLO 1 and 2

Topic	Format	Learning objectives	PLO
Prescription Writing (PILL Module)	Workshop & online module	• Demonstrate awareness of the importance of proper prescription writing • Identify structure and contents of the prescription • Write a correct prescription for the given medical context/presenting the medical condition	PLO 2
Patient Safety 1: Complexity of patient care and the systems involved	Lecture	• Identify components of patient safety • Identify patient safety protocols	PLO 2
Patient Safety 2: Why applying human factors is important for patient safety	Lecture	• Identify human factors in healthcare • Describe relationships between human factors and patient safety: stress, fatigue, distraction • Identify human factors and ergonomics • Apply the learnt knowledge into practice	PLO 4
Patient Safety 3: Being an effective team player	Lecture	• Describe the importance of teamwork based on evidence • Describe the characteristics of a successful team • Describe effective communication: the bedrock of teamwork	PLO 5
Patient Safety 4: Learning from errors to prevent harm	Lecture	• Demonstrate awareness of the nature of error and how healthcare providers can learn from errors to improve patient safety • Compare and contrast the terms: error, slip, lapse, mistake, violation, near miss, hindsight bias • Identify situational and personal factors associated with errors • Analyse an adverse event • Practise strategies for reducing errors	PLO 6
Patient Safety 5: Patient safety and invasive procedures	Lecture	• Describe patient safety in invasive procedures	PLO1

Topic	Format	Learning objectives	PLO
Patient Safety 6: Improving medication safety	Lecture	• Describe the scale of medication error • Identify potential risks associated with all medication given • Identify common causes and process of errors • Describe responsibilities during prescribing and administering medication • Describe common hazardous situations • Suggest methods to make medication safer • Describe a multidisciplinary approach to medication safety	PLO 2 and 6
Patient Safety 7: Infection prevention and control	Lecture	• Identify extent of the problem related to infection prevention and control • Identify the main causes and types of infection • Outline the principle of universal/standard precaution • Describe the methods of prevention: hand washing, PPE • Describe immunisation of Hep B	PLO 2
Patient Safety 8: Engaging patients and their carers	Lecture	• Discuss issues related to engaging patients and their carers	

Stage 3.3

Theme: Documentation & medicolegal issues

Topic	Format	Learning objectives	PLO
Health Law	Lecture / online module Visits to court	• Identify principles of medical law • Describe the possible legal issues associated with healthcare	PLO 2
Incidence reporting and investigations	Lecture	• Identify investigation and reporting procedure • Write appropriate, helpful content for incident reports	PLO 2

Topic	Format	Learning objectives	PLO
Just Culture	Lecture	• Describe the principles and importance of Just Culture • Describe the roles of human factors in improving reliability and safety	PLO 2 and 4
Audit on proper documentation and medico-legal implications	Fieldwork	• Conduct an audit on documentation / high-risk practices • Analyse results of the audit	PLO 6

APPENDIX B: WHO Curriculum Guide on Patient Safety (2009) Retrieved from

www.who.int/patientsafety/education/curriculum_guide_medical_schools

7h. Universiti Sains Malaysia, Malaysia

Muhamad Saiful Bahri Yusoff,
Nor Azwany Yaacob,
Nik Ahmad Zuky Nik Lah,
Muhd Al-Aarifin Ismail

1. NAME OF THE NEW OR REVISED PROGRAMME

Programme name: Doctor of Medicine
Degree awarded: Doctor of Medicine (M.D)
Revise a module of the programme – Massive Open Online Course on Patient Safety (MOOC-PS)

2. LENGTH AND LEVEL OF THE PROGRAMME

Length of programme: 195 weeks over 10 semesters (5 years)
Level: Bachelor
Number of courses: 38 courses
The programme gives access to Master in Medicine, Master in Surgery, Master in Laboratory-Based Medicine and Master of Sciences in Basic Medical Sciences.

3. SOCIAL NEED FOR THE NEW OR REVISED PROGRAMME

This revised programme will serve as a complementary course to nurture the professional behaviour of medical graduates. Knowledge of patient safety has been well defined in the current undergraduate curriculum. The students are expected to apply this knowledge when they perform various procedures under direct supervision by various respective clinical supervisors during the period of undergraduate study. This is well highlighted in the clinical year undergraduate logbook in which the component of patient safety is visible to the students. Emphasis on patient safety will enhance effective training in producing a caring, empathic and holistic doctor for the community. Hence, the complementary MOOC on patient safety will provide another platform for the students to revisit patient safety along different phases of the medical programme.

The Malaysian Medical Council had also emphasised the requirement of patient safety training for medical graduates. Enhancement of medical practice on patient safety will provide the community with appropriate and correct non-harming treatment which will

eventually reduce and prevent unnecessary injuries or death. Improvement of patient care and doctor-patient communication will hopefully reduce medico-legal cases which are on the rise. The ultimate goal is to improve the quality of healthcare for the nation.

4. FUTURE FIELDS, SECTORS OF EMPLOYMENT/OCCUPATION OF GRADUATES

Future medical graduates with this revised curriculum will also have similar opportunities with the current employment scheme. However, passionate, caring and holistic medical doctors will have more marketable value in the future challenging world of the medical profession.

List of future fields/occupations for graduates are as follow:

1. Medical doctors working in the government or private practice
2. Medical personnel in the Malaysian Medical Council
3. Medical education sectors
4. Medical journalism
5. Medical entrepreneur
6. Academicians
7. Researchers and scientists in medical and health sectors

5. DESCRIPTION OF THE DEGREE PROFILE OF THE NEW PROGRAMME OR A REVISED PROGRAMME IN TERMS OF GENERIC AND/OR SUBJECT-SPECIFIC COMPETENCIES. DEFINITION OF COMPETENCIES AND FORMULATION OF LEARNING OUTCOMES AT PROGRAMME LEVEL

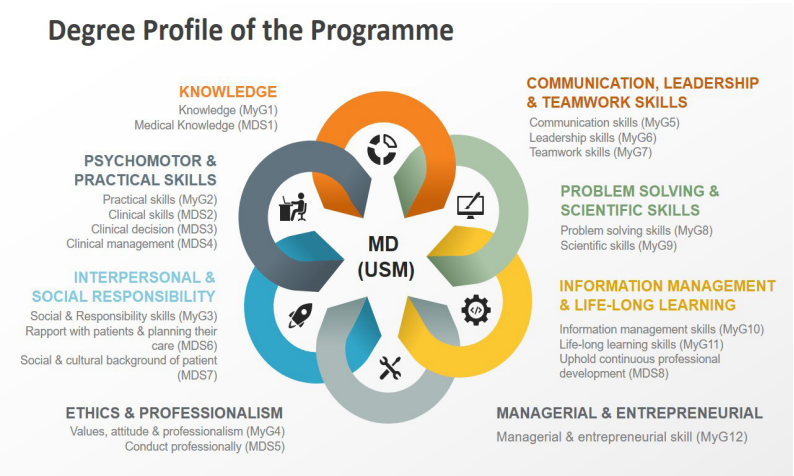


Figure 1: Degree profile of Universiti Sains Malaysia Medical Degree Programme

This programme outcome with generic and specific competencies of the Doctor of Medicine Degree Programme of Universiti Sains Malaysia (USM) is illustrated in Figure 1. The competencies in patient safety were clearly visible as it is integrated with other competencies such as communication, leadership and teamwork skills, Psychomotor and practical skills and Ethics and professionalism.

USM degree programme profile				
Programme outcome	**Generic competencies & code**	**Revised programme**	**Specific competencies & code**	**Description**
KNOWLEDGE (PO1)	Knowledge (MyG1)	PATIENT SAFETY	Medical knowledge (MDS1)	Knowledge of basic medical sciences and health related problems including each case management
PSYCHOMOTOR & PRACTICAL SKILLS (PO2)	Practical skills (MyG2)		Clinical skills (MDS2)	Skill to take history, perform physical examination, planning for investigation, diagnosis, treatment and monitoring of cases
			Clinical decision (MDS3)	Skill to critically appraise history and clinical findings to derive on diagnosis and plan for case management
			Clinical management (MDS4)	Skill to outline, conduct and interpret investigations to manage cases
INTERPERSONAL & SOCIAL RESPONSIBILITY (PO3)	Social & Responsibility skills (MyG3)		Rapport with patient & planning their care(MDS6)	Skill to effectively communicate and be accountable to patients and community
			Social & cultural background of patient (MDS7)	Respect and express empathy regardless of patient's social and cultural background
ETHICS & PROFESSIONALISM (PO4)	Value, attitude & professionalism (MyG4)		Conduct professionally (MDS5)	Carry out medical duty in a professional manner

USM degree programme profile				
Programme outcome	**Generic competencies & code**	**Revised programme**	**Specific competencies & code**	**Description**
COMMUNICATION, LEADERSHIP & TEAMWORK SKILLS (PO5)	Communication skills (MyG5)	PATIENT SAFETY		Act as effective team member with good inter-professional behaviour
	Leadership skills(MyG6)			
	Teamwork skills (MyG7)			
PROBLEM SOLVING & SCIENTIFIC SKILLS (PO6)	Problem solving skills (MyG8)			Skill to use scientific evidence to solve medical problems
	Scientific skills (MyG9)			
INFORMATION MANAGEMENT & LIFELONG LEARNING (PO7)	Information management skills (MyG10)		Upkeep continuous professional development (MDS8)	Skill to search and find updated information for evidence-based practice
	Lifelong learning skills (MyG11)			
MANAGERIAL & ENTREPRENEURIAL (PO8)	Managerial & entrepreneurial skill (MyG12)			Skill to manage and market health to the community
Patient Safety	Skill to avoid, prevent, detect and ameliorate adverse outcomes or injuries to patients that may arise from any procedure or circumstance related to healthcare including care for injured patients and support the unfortunate staff involved.			

6. LINK OF THE DEGREE WITH THE AGREED META-PROFILE

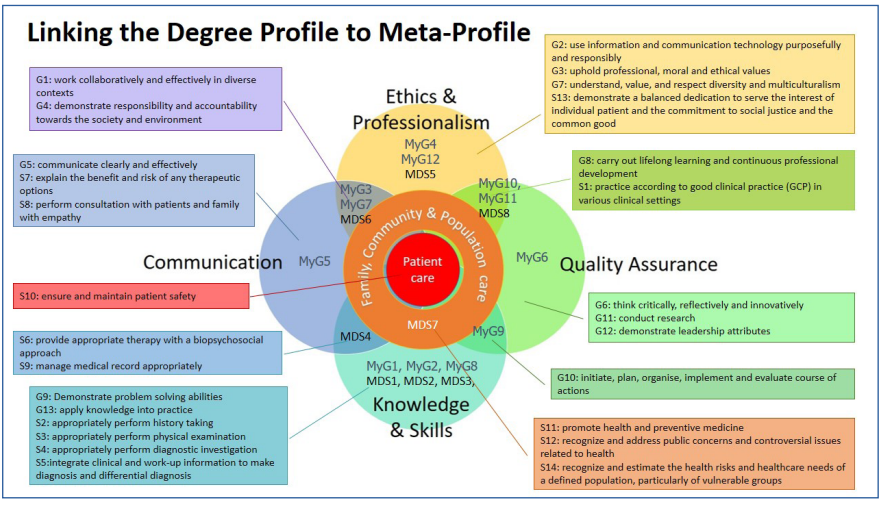


Figure 2: The link between the degree profile with the SEA-MED meta-profile

The above diagram illustrates the link between the USM medical degree profile of generic and specific competencies to the SEA-MED Meta-profile. Patient safety competencies are at the heart of all the competencies in the meta-profile.

Programme outcome Domain	Similarities	Differences
KNOWLEDGE (PO1)	Knowledge includes basic medical sciences and health related problems and their application to case management	Additional skills including bio psychosocial approach and medical record management
PSYCHOMOTOR & PRACTICAL SKILLS (PO2)	Psychomotor and practical skills applies the knowledge gained	The application of knowledge in psychomotor and practical skill were both emphasised
INTERPERSONAL & SOCIAL RESPONSIBILITY (PO3)	Interpersonal and social responsibility are strongly linked with communication	Embedded in communication, ethics and professionalism
ETHICS & PROFESSIONALISM (PO4)	Uphold moral and professional values in medical duty	Includes social responsibility and accountability, effective teamwork, professional development and lifelong learning
COMMUNICATION, LEADERSHIP & TEAMWORK SKILLS (PO5)	Communication is closely linked with leadership and teamwork skills	Communication is the main domain for achieving the competencies of teamwork and leadership as well as effective patient-doctor relationship.
PROBLEM SOLVING & SCIENTIFIC SKILLS (PO6)	Think critically based on scientific evidence	Embedded as quality assurance which also includes leadership and research skills
INFORMATION MANAGEMENT & LIFELONG LEARNING (PO7)	Skill to use updated technology for evidence-based practice	The domain is in the combination of Quality assurance and Ethics & Professionalism
MANAGERIAL & ENTREPRENEURIAL (PO8)	Skill to collaborate and promote health	Is in combination with communication, ethics, professionalism and quality assurance

The similarities that had been noted indicate that the current programme had listed all the relevant competencies for medical doctor training. However, the differences illustrate that the patient safety component was not clearly defined. Hence, the current programme needs to be revamped rather than completely replaced by a new programme.

7. STRUCTURE OF THE PROGRAMME: UNITS/COURSES/MODULES WITH THEIR LEARNING OUTCOMES AND LEARNING, TEACHING AND ASSESSMENT STRATEGIES

YEAR	SEM	Code	Course Name	Credit Unit	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	T&L	ASSESS-MENT
1	1	GMT101	Cell & Tissue	2	1	1	1	1	1	1	0	0	PBL, Lectures, Practical Session, Clinical Skill Lab Session	OSCE, MTF, SBA, SEQ, PBL ASSESS-MENT
		GMT102	Molecular biology & Pharmacology	2	1	1	1	1	1	1	1	0		
		GMT103	First Aid and Med-ical Ethics	2	1	1	1	1	1	1	1	0		
		GMT104	Microbiology, Immunology & Pathology	4	1	1	1	1	1	1	1	0		
		GMT105	Respiratory sys-tem	4	1	1	1	1	1	1	1	0		
	2	GMT106	Haemopoietic & Lymphoid	3	1	1	1	1	1	1	1	0		
		GMT107	Cardiovascular system	4	1	1	1	1	1	1	1	0		
		GMT108	Gastrointestinal system	4	1	1	1	1	1	1	1	0		
		GMT109	Genitourinary system	4	1	1	1	1	1	1	1	0		
2	3	GMT201	Nervous system & Psychology	5	1	1	1	1	1	1	1	0		
		GMT202	Endocrine system	4	1	1	1	1	1	1	1	0		
		GMT203	Reproductive system	3	1	1	1	1	1	1	1	0		
	4	GMT204	Musculoskeletal system	5	1	1	1	1	1	1	1	0		
		GMT205	Infectious Disease	3	1	1	1	1	1	1	1	0		

YEAR	SEM	Code	Course Name	Credit Unit	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	T&L	ASSESS-MENT
		GMT206	Community Medicine, Research Methodology & Statistics	4	1	1	1	1	1	1	1	0		
		GMT 301	Asas Klinikal I	3	1	1	0	1	1	1	1	0	CBL, Clinical Teaching, Seminar, Lecture, Oncall, Ward works, Clinical Procedures	SBA, MTF, SBQ, Long Case, Short Case, OSCE, Case Write Up, Logbook, STEPS,
		GMT 302	Asas Klinikal II	3	1	1	0	1	1	1	1	0		
3	5	GMT 305	Perubatan Dalam I	8	1	1	1	1	1	1	1	1		
		GMT 304	Surgeri I	8	1	1	1	1	1	1	1	1		
	6	GMT 303	Pediatrik I	8	1	1	1	1	1	1	1	1		
		GMT 306	Obstetrik dan Ginekologi	8	1	1	1	1	1	1	1	1		
4	7	GMT 408	Ortopedik I	7	1	1	1	1	1	1	1	1		
		GMT 409	Psikiatri I	7	1	1	1	1	1	1	1	1		
		GMT 412	Otorinolaringologi	3	1	1	1	1	1	1	1	0		
		GMT 411	Oftalmologi	3	1	1	1	1	1	1	1	1		
		GMT 416	Pengenalan Perubatan Tradisional & Integratif	1	1	1	0	1	1	1	0	0		
	8	GMT 414	PerubatanPreventif	4	1	1	1	1	1	1	1	1		
		GMT 415	Neurosains Klinikal	3	1	1	1	1	1	1	1	0		
		GMT 410	Perubatan Keluarga	7	1	1	1	1	1	1	1	1		

YEAR	SEM	Code	Course Name	Credit Unit	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	T&L	ASSESS-MENT
		GMT 407	Kajian Komuniti & Kes Keluarga (Residensi Komuniti)	6	1	1	1	1	1	1	1	1		
	9	GMT 505	PerubatanPenyakit Dalam II	6	1	1	1	1	1	1	1	1	CBL, Clinical Teaching, Seminar, Lecture, Oncall, Ward works, Clinical Procedures	SBA, SBQ, Clinical Viva, Supervisor Reports
		GMT 504	Surgeri Umum II	6	1	1	1	1	1	1	1	1		
		GMT 503	Pediatrik II	6	1	1	1	1	1	1	1	1		
		GMT 506	Obstetrik & Ginekologi II	6	1	1	1	1	1	1	1	1		
	10	GMT 517	Perubatan Kecemasan	4	1	1	1	1	1	1	1	1		
		GMT 518	Anestesiologi dan Rawatan Rapi	2	1	1	1	1	1	1	1	1		
		GMT 508	Ortopedik II	3	1	1	1	1	1	1	1	1		
		GMT 509	Psikiatri II	3	1	1	1	1	1	1	1	1		

P01 Knowledge

- Knowledge (MyG1)
- Medical knowledge (MDS1)

P02 Psychomotor & practical skills

- Practical skills (MyG2)
- Clinical skills (MDS2)
- Clinical decision (MDS3)
- Clinical management (MDS4)

P03 Interpersonal skill & social responsibility

- Social skills and responsibilities (MyG3)
- Establishing rapport with patients and planning their care (MDS6)
- Appreciating the social and cultural background of patients (MDS7)

P04 Ethical & Professionalism

- Values, attitude, professionalism (MyG4)
- Conduct professionally (MDS5)

P05 Communication, leadership & teamworking skills

- Communication (MyG5)
- Leadership (MyG6)
- Teamwork (MyG7)

P06 Problem solving & scientific skills

- Problem solving (MyG8)
- Scientific skills (MyG9)

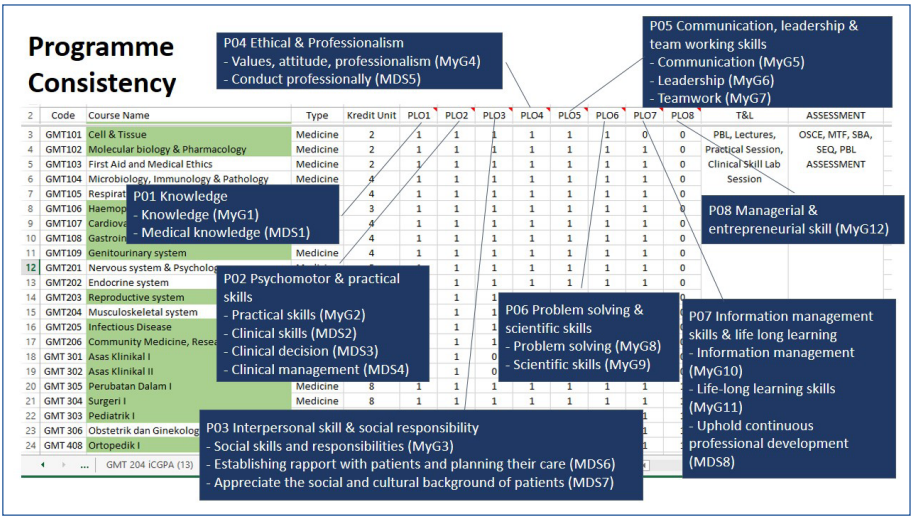
P07 Information management skills & lifelong learning

- Information management (MyG10)
- Lifelong learning skills (MyG11)
- Uphold continuous professional development (MDS8)

P08 Managerial & entrepreneurial skill (MyG12)

The USM Medical Degree Programme is an integrated programme that uses the spiral model. The five-year programme is divided into two phases: phase I pre-clinical, which is the year 1 and year 2; and phase II clinical, which is year three up to year five. All courses are core courses. The phase 1 year 1 courses are coded as GMT 101 to GMT 109 and the year 2 courses as GMT 201 to GMT 206. The credit unit, learning outcomes, teaching and learning and assessment methods are tabulated above.

8. PROGRAMME OVERALL CONSISTENCY



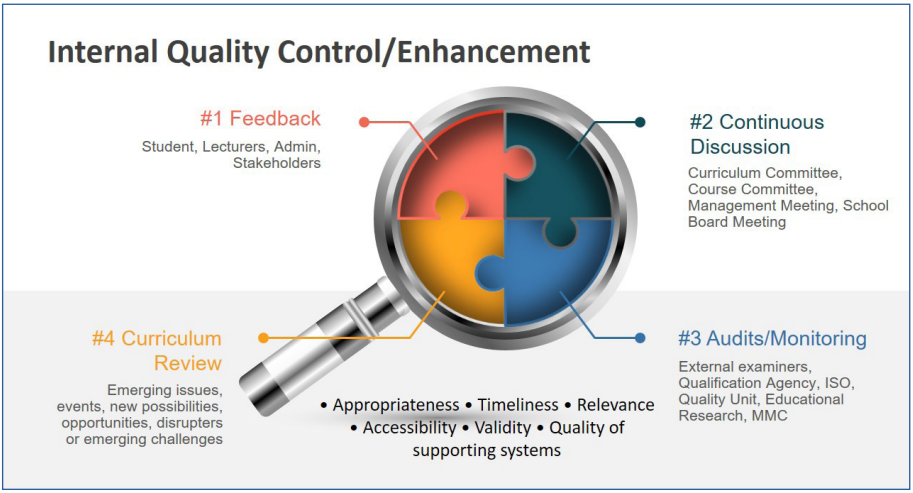
2	Code	Course Name	Type	Kredit Unit	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	T&L	ASSESSMENT
3	GMT101	Cell & Tissue	Medicine	2	1	1	1	1	1	1	0	0	PBL, Lectures, Practical Session, Clinical Skill Lab Session	OSCE, MTF, SBA, SEQ, PBL ASSESSMENT
4	GMT102	Molecular biology & Pharmacology	Medicine	2	1	1	1	1	1	1	1	0		
5	GMT103	First Aid and Medical Ethics	Medicine	2	1	1	1	1	1	1	1	0		
6	GMT104	Microbiology, Immunology & Pathology	Medicine	4	1	1	1	1	1	1	1	0		
7	GMT105	Respirat		4	1	1	1	1	1	1	1	0		
8	GMT106	Haemop		3	1	1	1	1	1	1	1	0		
9	GMT107	Cardiova		4	1	1	1	1	1	1	1	0		
10	GMT108	Gastroin		4	1	1	1	1	1	1	1	0		
11	GMT109	Genitourinary system	Medicine	4	1	1	1	1	1	1	1	0		
12	GMT201	Nervous system & Psycholog				1	1	1	1	1	1	0		
13	GMT202	Endocrine system				1	1	1	1	1	1	0		
14	GMT203	Reproductive system				1	1							
15	GMT204	Musculoskeletal system				1	1							
16	GMT205	Infectious Disease				1	1							
17	GMT206	Community Medicine, Resea				1	1							
18	GMT 301	Asas Klinikal I				1	0							
19	GMT 302	Asas Klinikal II				1	0							
20	GMT 305	Perubatan Dalam I	Medicine	8	1	1	1	1	1	1	1			
21	GMT 304	Surgeri I	Medicine	8	1	1	1	1	1	1	1			
22	GMT 303	Pediatrik I									1			
23	GMT 306	Obstetrik dan Ginekolog									1			
24	GMT 408	Ortopedik I									1			

The overall consistency of the programme is illustrated above, with all programme outcome achieved as the students undergo all the courses throughout the 5-year programme.

9. INTERNAL QUALITY CONTROL/ENHANCEMENT

Various methods are used to monitor the effectiveness of the revised curriculum with the addition of patient safety competencies. First and foremost is the feedback from the students and lecturers involved. The feedback includes appropriateness and the relevance of the visible patient safety competencies in the curriculum as well as methods of monitoring the students' practical session handling the patient safety components and methods of assessment. Feedback

from the administration on the burden of administrative work, and feedback from stakeholders and graduates in relation to patient safety competencies, will also be used.



There will also be an ongoing discussion among members in the respective course committees as well as in the curriculum committee with regard to the revised curriculum and other related academic issues. Audits and monitoring will be held to ensure the process of teaching and learning are according the Doctor of Medicine (USM) programme curriculum. Management meetings and school board meetings will facilitate and endorse the revised programme implementation.

10. OTHER RELEVANT ASPECTS

Implementation of MOOC-PS needs to consider a few factors. This includes enabling factors to ensure the development of MOOC including the technical support as well as content experts. The readiness and acceptance of students as well as the academic staff needs to be explored further. The end outcome is not replacing the current teaching and learning activities, but acting as a complement in order to achieve the essential competencies for the future doctors to serve the nation.

CHAPTER 8. Case studies – design, redesign and implementation

8A. UNIVERSITY OF MALAYA

Hong Wei-Han, Foong Chan Choong, Vinod Pallath, Jamuna Vadivelu
University of Malaya and Universiti Sains Malaysia were the two implementing universities in the Medicine Subject-Area Group (SAG). As the implementing universities, each was tasked with the first step towards designing or redesigning the medical curriculum. This phase was mapped onto the agreed TASEMed Framework with the other universities in the ASEAN region.

8a.1. University of Malaya's Experience

Patient safety was the topic chosen to be included in the redesign of the medical curriculum. The process of redesigning the curriculum was done step-by-step following the Tuning methodology. The initial phase involved outlining the existing medical curriculum, including the duration and level of the programme as well as the progression for further study. This step enabled the creation of an overview, ensuring the suitability of re-design at different levels and its impact on progression to further study.

In line with the Ministry of Health Malaysia Action Plan 2016 -2020, one of the areas of Thrust 2 is Strengthening Health System Governance and Organisational Capacity. One of the strategic measures is enhancing safety for patients and healthcare personnel. Recent literature showed that the Ministry of Health Malaysia is putting more emphasis on the care of the patient, specifically in reducing harm to patients. With the increasing feedback for improvements from the society, medical schools will need to play a vital role in cultivating good habits and teaching medical students in bridging the gaps in quality of care and patient safety. Hence, curriculum in medical schools needs to address patient safety in their training programme.

Preparing skilled, trained and empowered healthcare professionals is necessary to increase patients' satisfaction, engagement and participation in the process of their care. The competencies of a medical graduate may have to be redefined. Confounding needs such as increasing medico-legal issues, patient empowerment through social media, expansion of health tourism and digital health trading, cost of treatment, biomedical development and increasing technological options can be addressed with inter-professional collaboration to maintain positive clinical work environment to deliver best care practices.

With more than 98% of the graduates from the Bachelor of Medicine and Bachelor of Surgery (MBBS) programme entering medical practice upon graduation, patient safety is an important element of medical practice. Hence, embedding this area in the medical curriculum will ensure medical practitioners are well equipped with the relevant knowledge, skills and attitude in safe medical practices. This will result in patient satisfaction, engagement and participation in the care process.

8a.2. Mapping TASEMed Framework to the University of Malaya Medical Programme

The competencies which were agreed upon with the Medicine SAG were mapped onto the learning outcomes of the medical programme in the University of Malaya to ensure coherence and alignment.

The fundamental components of medical training in facilitating the provision of quality patient care are knowledge and skills, ethics and professionalism and communication and quality assurance. The Medicine SAG has identified generic and specific competencies that are required for safe and quality patient care. Based on the current MBBS programme, the domains put forward in the TASEMed Framework correspond to the course learning outcomes. **Table 1** below summarises the coincidences and differences of the meta-profile and the medical curriculum in the University of Malaya.

Table 1: Summary on the Coincidences and Differences of the Meta-profile and the Medical Curriculum in the University of Malaya

Domains	Coincidences	Differences
Patient care.	– Implemented variably across all departments – Patient care is of the utmost importance.	No differences.
Family, community & population care.	– Implemented variably across all departments and is one of the themes in the programme	No differences.
Ethics & professionalism.	– Implemented variably across all departments during clinical immersions. – Health law and ethics are addressed.	– Little importance is placed on having role models for the students. The focus should be on how students learn, i.e. having a role model for the students. – Ultimately, the students' behaviour is the most important focus and supersedes all other domains. – Ethics and professionalism between departments requires consistency. The delivery of this domain to produce the desired outcome and the governance of this area is still a gap that needs to be addressed.
Knowledge & skills.	– Implemented variably across all departments for pre-clinical and clinical years.	Overemphasis on the knowledge component.
Communication.	– Implemented variably during clinical immersion. – Communication skills workshops are organised for students.	No differences.
Quality assurance.	– Accreditation process is carried out. – Audits are conducted on an ongoing basis.	– Quality assurance can include patient education, cost benefits, cost efficiency. An in-depth description of quality vs costs vs effectiveness and health economics is proposed.

8a.3. Implementation of Redesign Curriculum

Throughout the stages of UMMP, the patient safety module is implemented according to themes [Note: the UMMP is organised into four themes which are basic and clinical sciences, patient-doctor, population medicine, and personal and professional development]. There

has been much emphasis on knowledge and skills in the programme. However, the areas of ethics and professionalism have to be emphasised as this area always exists as a hidden curriculum. The patient safety module adds value and ensures that students are formally taken through important professional knowledge, skills and attitude that is required in healthcare. The programme's consistency is preserved by aligning the new module's outcomes to overall programme outcomes. Elements of patient safety were addressed in the medical curriculum. However, there was no structured, well-defined module that aligned to key elements of the competencies (knowledge, skills and attitude). The re-designed curriculum has addressed these deficiencies. The Tuning survey and WHO Curriculum Guide on Patient Safety formed the basis of the development of this module. The components of the module are integrated across the five stages (i.e. Stages 1, 2, 3.1, 3.2 and 3.3) of the curriculum. A Patient Safety committee was set up to reconsider the existing content in the curriculum and redesign the Patient Safety curriculum to ensure that the myriad content and competencies required is scaffolded over the years of study.

In Stage 1 (Year 1) of medical school, students are given an online hand hygiene module, taught the importance of infection control, trained in scrubbing, gowning and gloving activities. They also undertake a basic life support course similar to the Advanced Cardiac Life Support (ACLS) module. In Stage 2 (Year 2), students are taught the importance of patient identification, sample collection and sample labelling. Procedural skills on administration of intravenous injections and fluids, and sharps and needle stick injuries are also taught to ensure students adhere to the safety issues relating to the use and disposal of sharps, and common errors while handling sharps. Students also undertake a basic life support course similar to the Paediatric Advanced Life Support (PALS) module in this stage. In Stage 3 (Year 3 to Year 5), students are entering different clinical postings. Various lectures encompassing complexity of patient care, teamwork, confidentiality of patients, preventing harm and improving medication safety are addressed. In addition, students will undertake an interprofessional module (i.e. medical and pharmacy students) on prescribing skills in collaboration with the Department of Pharmacy.

8a.4. Internal Quality Control

The University of Malaya Medical Programme (UMMP) has its internal quality control processes. Students' feedback is collected regarding each

teaching activity for learning blocks (preclinical) as well as clinical postings. Subsequently, the student feedback is presented and discussed with coordinators (lecturers) during regular block review meetings. Next, a summary of block review meetings is presented and discussed during curriculum and management meetings. Revisions and improvements are discussed and decided during these meetings. Overall, the UMMP is audited, assessed and accredited by its external examiners, the university's Quality Management and Enhancement Unit (QMEC), the national Malaysian Medical Council and Malaysian Qualifications Agency, and complies with international standards (ISO 9001:2015). Following the institutional policy, specifically for the revised Patient Safety module, student feedback will be collected for individual topics to evaluate its effectiveness. Student feedback will be considered, together with input from the coordinators (lecturers) as well as all teaching staff involved, to improve on its implementation in subsequent years.

8b. Universiti Sains Malaysia

Nor Azwany Yaacob, Nik Ahmad Zuky Nik Lah, Muhd Al-Aarifin Ismail, Nurhanis Syazni Roslan, Muhamad Saiful Bahri Yusoff

Implementation of the Massive Open Online Course for Patient Safety (MOOC-PS) for the Medical Degree Programme, Universiti Sains Malaysia

Introduction

The Medicine SAG Group had used the Tuning 10-steps methodology to identify the gaps in medical education for the SEA. Tuning Asia Southeast Medical Competence Framework (TASEMed) meta-profile was later produced for patient safety in patient care as the guide for curricular design or revision. Universiti Sains Malaysia (USM) SAG has reviewed our existing curriculum, matched with our degree profile and programme outcomes. We have decided to enrich our programme using the Massive Open Online Course for Patient Safety (MOOC-PS).

Implementation process

1. Established guidelines and manual reference

The USM Medical Degree Programme teaching and learning topics were matched with the WHO Curriculum Guide for patient safety (1) and The Malaysia Patient Safety Guidelines (2). Topics related to pa-

tient safety were identified. The faculty members who teach the topics were also identified.

2. Curriculum design consideration

The USM Medical Degree Programme is an integrated programme which uses the SPICES Curriculum.

The medical school is located in Kubang Kerian, Kelantan. Since its inception, it adopts SPICES model (3) as the curriculum strategy. The abbreviation stands for student-centred, problem-based learning, integrated, community-oriented, systematic and elective. Split into three phases, this is a 5-year medical course. Phase I consists of first and second-year medical students. In this pre-clinical phase, the students learn basic science subjects with the integration of clinical application (particularly related to pathogenesis) based on the body systems. Phase II consists of third, fourth and fifth-year medical students. In these clinical years, the students learn clinical sciences through various clinical department rotations (e.g., internal medicine, general surgery, orthopaedic).

The patient safety teaching in this spiral-model integrated system starts with the introduction of the principle of safety and harm to the year 1 students at the beginning of phase I under the GMT 103 Medical Ethics course. The vertical integration is that these principles of patient safety will be revisited more deeply as the application of it into the clinical setting at the beginning of phase II clinical in year 3, under the clinical foundation GMT 301 and 302 courses. Besides the vertical integration, there is also horizontal integration where the principles of safety and harm will be revisited in every problem-based learning (PBL) activity throughout the two years of phase I. The students will be guided to understand the safety and harm principles in each clinical scenario given in the PBLs. Meanwhile, based on the spiral curriculum model, the application of safety and harm principles will be emphasised in phase II clinical year 3 to 5 through repeated case-based learning (CBL) activities in clinical postings. However, the main concern is whether the students will be able to appreciate and understand all this input as part of patient safety practice in patient care.

3. The Massive Open Online Course for Patient Safety (MOOC-PS)

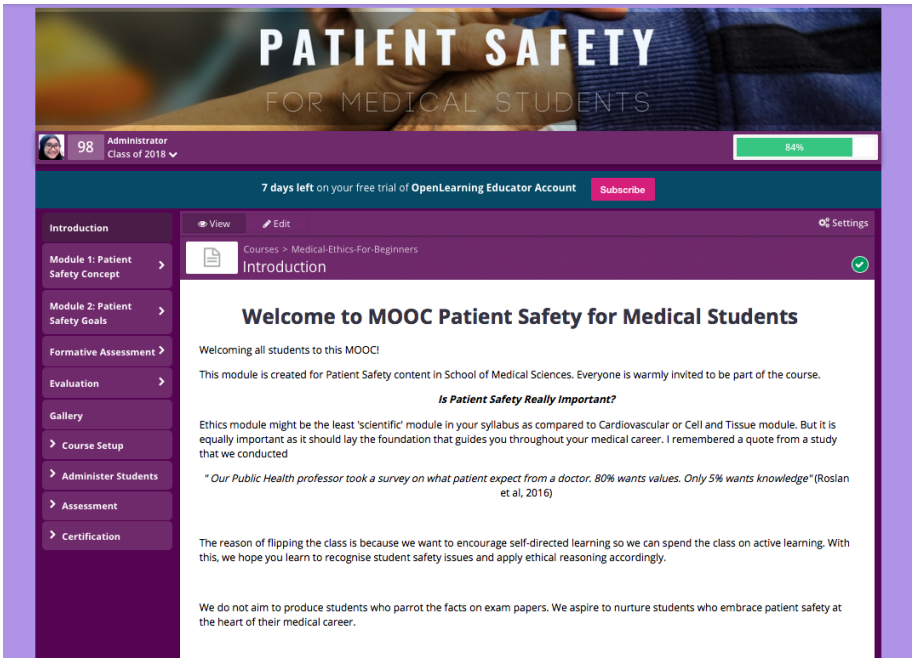
The objectives of the MOOC-PS are to enable the students, at the end of the study, to:

i. demonstrate awareness of the professional obligations of doctors in ensuring patient safety.

ii. practice medicine according to patient safety goals.
iii. demonstrate sensitivity to ethical considerations and ethical behaviour in the medical profession.

MOOC allows many students to participate at one given time. This will be in contrast with the current system where students will register for a particular course only for the specific semester and will be out of the course when they move into another semester. This open system will allow students to participate regardless of the year of the study. As this is an online course, the students and the facilitators, who are the lecturers, only need a computer or smartphone with internet access to follow the course. This is hoped to be a platform for students to revisit the patient safety concept and application to help them appreciate their experiential learning as part of patient safety implementation.

Initially the course was divided into three modules. However after discussion with experts, it was then changed into two modules. The first module refers to the Patient Safety Concept where the main focus is to discuss theory the concepts of patient safety. The second module refers to Patient Safety Goals.



These modules will be delivered in multiple modalities and include reading materials, case studies, videos, tasks, assignments and reflections. There will also be forum discussion where the students, especially the clinical students, will be able to share clinical cases they dealt with in their clinical postings, and discuss the patient safety issues that arose. This will allow the pre-clinical students to appreciate the importance of patient safety as well as its application in a real-life setting. These discussions will also be guided by the medical lecturers and the clinicians, who are registered as facilitators of this course. Hence, this module is not a replacement of the current teaching and learning, but rather is a complementary input to enhance understanding and nurture the professional behaviour of future doctors. Each topic will have assessments in the form of e-quizzes or assessments of the reflection and tasks. On completion of this MOOC-PS, the students will be given a certificate of completion.

4. Enabling factors

The implementation of the MOOC-PS was supported by several enabling factors. Firstly, the memorandum of agreement of USM with open learning provided the platform for this course to be developed. Secondly, the Centre of Development of Academic Excellence (CDAE) USM provided technical support as well as manpower for the online course. The availability of trained staff on the main USM campus as well as the Health Campus among the academicians, adds to the support to develop this course. Thirdly, the pool of experts on patient safety, i.e. the lecturers in the relevant topics, as well as experienced clinicians, will be able to feed the content of the course.

5. Evaluation of course

The evaluation of the course will be done using the validated, internationally accepted System Usability Questionnaire.

MOOC-PS Development process

1. Survey on student acceptance to the online course

A Google form was distributed via a WhatsApp group through students' representatives to all year 1 to 5 medical students in October 2018. Fifty-four responses were collected after 2 weeks. The findings were as follows:

Table 1: Summary of background information (n=54)

	n(%)
Gender	
Male	14 (25.9)
Female	40 (74.1)
Ethnicity	
Malay	37 (68.5)
Chinese	6 (11.1)
Indian	8 (14.8)
Others	3 (5.6)
Year of study	
1	31 (57.4)
2	1 (1.85)
3	12 (22.2)
4	0 (0)
5	10 (18.5)
I am aware of what the online course is (n=53)	
Yes	37 (69.8)
Not Sure	12 (22.6)
No	5 (9.4)
I access the internet from my	
Mobile phone	17 (31.5)
School internet	16 (29.6)
Hostel internet	21 (38.9)
I use the internet to	
Download material for learning	24 (44.4)
Find learning aids	20 (37.0)
Social media	9 (16.7)
Update news	1 (1.9)
My overall rating in ICT skills & competencies is	
Beginner	9 (16.7)
Intermediate	45 (83.3)

Table 2: Agreement on online course

	Disagree n(%)	Not sure n(%)	Agree n(%)
Study through online course (n=55)	9 (16.7)	21 (38.2)	25 (45.4)
Using the online course to supplement my study (n=54)	1 (1.8)	10 (18.5)	43 (79.6)
Participation in supplementary-only courses will take away from my preparation time for the examination (n=56)	5 (8.9)	27 (48.2)	24 (42.8)
Reading materials provided by online courses will be helpful for learning (n=54)	2 (3.7)	5 (9.2)	47 (87.0)
Reading materials provided by online courses before formal face-to-face teaching will be helpful for learning (n=54)	3 (5.6)	5 (9.2)	46 (85.2)
Assignments through online courses will help me to learn subjects better (n=54)	10 (18.5)	17 (31.5)	27 (50.0)
e-quizzes provided by online courses will help me to perform self-assessment (n=55)	5 (9.1)	7 (12.7)	43 (78.2)
Participation in online forum discussion is beneficial for learning (n=55)	8 (14.5)	21 (38.2)	26 (47.3)
Sharing my experience online is a good way of learning (n=54)	7 (13.0)	22 (40.7)	25 (46.3)
Online courses are a good approach for independent learning (n=55)	3 (5.4)	9 (16.4)	43 (78.2)
I'm ready to improve my ICT skills and competencies (n=54)	3 (5.6)	8 (14.8)	43 (79.6)
I have enough time to participate in online courses in addition to the current study load (n=55)	16 (29.1)	18 (32.7)	21 (38.2)

2. Capacity building: Development of MOOC-PS team

All lecturers involved with the selected patient safety topics were invited to participate in a workshop on 4 November 2018. This workshop aimed to introduce the Tuning Academy curriculum design and MOOC-PS plan. The workshop provides revised MOOC-PS plan details. All lecturers involved were listed and appointed as experts for patient safety MOOC at the Tuning Asia-Southeast (TASE) Medicine.

The learning outcomes for the workshop were as follows:

1. Understand the TUNING concept
2. Understand MOOC patient safety module concept
3. Develop MOOC material for patient safety module

DAY 1: 4 November 2018

TIME	TOPICS	SPEAKER
0830	Registration	Secretariat
0845	Welcome remark	Dean
0900	TUNING around the world	AP Dr M Saiful
0930	Introduction to MOOC patient safety module	AP Dr M Saiful
1000	Tea break	
1030	Introduction to MOOC	Facilitator
1100	Hands-on – How to develop the content of MOOC	Facilitator
1300	Lunch break	
2.30 – 4.30 pm	Group Content Development I	Facilitators Participants

DAY 2: 5 November 2018

TIME	TOPICS	SPEAKER
0900	Group Content Development II	Facilitators Participants
1030	Tea Break	
1100	Group Content Development III	Facilitators Participants
1300	Lunch break	
2.30 – 4.30 pm	Group Progress Presentation	Facilitators Participants
430 pm	Closing remark	AP Dr M Saiful

3. Module Implementation

This module covers the courses run at different stages throughout medical studies. These courses are:

1. GMT 103 Medical ethics course for year 1 students
2. GMT 205 Infectious diseases for year 2
3. GMT 301 & 302 Foundation courses for year 3
4. GMT 414 Preventive medicine for year 4

A range of teaching and learning methods including lectures, problem-based learning, field visits, group assignment, role play, student seminars and ward-based assignments are suggested to achieve the LO. The LO for each activity should be used as a guide to assess the adequacy of achievement of the stated competencies.

An integrated approach is recommended in this module. These include:

i. teaching both in clinical and non-clinical settings
ii. inter-professional healthcare involvement
iii. country and regional specific examples
iv. examples to illustrate concepts from clinical cases and routine practice
v. continuous reinforcement of ethical aspects across the curriculum
vi. specific topics handled by relevant departments in their course teaching
vii. communication skills as an integral part of the practice ethics prior to and during the teaching of medical ethics
viii. inclusion of relevant ethical issues during student assessments in other settings

4. List of Experts:

The following are the experts who volunteer to participate as the content developer for the revised patient safety content:

No.	Participant	Email	Affiliation
1	Dr Nurhanis Syazni Roslan	nurhanis_syazni@usm.my	Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kota Bharu, Kelantan, Malaysia.
2	Dr Ahmad Fuad Abdul Rahim	fuad@usm.my	
3	Dr Rosniza Abd. Aziz	rosethics@gmail.com	
4	Prof Madya Dr Muhamad Saiful Bahri Yusoff	msaiful_bahri@usm.my	
5	Prof Madya Dr Nor Azwany Yaacob	azwany@usm.my	Department of Community Medicine, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kota Bharu, Kelantan, Malaysia.
6	Prof Dr Shaiful Bahari Ismail	shaifulb@usm.my	Department of Family Medicine, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kota Bharu, Kelantan, Malaysia.

No.	Participant	Email	Affiliation
7	Prof Madya Dr Norhayati Mohd Noor	hayatikk@usm.my	
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9	Prof Madya Dr Rosediani Muhamad	rosesyam@usm.my	
10	Dr Azlina Ishak	drzalinakk@usm.my	
11	Prof Dr Mohtar Ibrahim	mohtar@usm.my	Department of Ophthalmology, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kota Bharu, Kelantan, Malaysia.
12	Dr Maya Mazuwin Yahya	mazuwin@usm.my	Department of Surgery, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kota Bharu, Kelantan, Malaysia.
13	Dr Siti Rahmah Hashim Isa Merican	rahmahkck@usm.my sitimerican@gmail.com	
14	Dr Wan Zainira Wan Zain	zainira@usm.my	
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5. The Revised Patient Safety Structure, Content & Expert: The Patient Safety MOOC

During the workshop, all patient safety related content was extracted from the current curriculum. The content was presented to the experts and feedback was sought from them to rearrange the content. The following were the consensus results of the experts post-discussion:

Module 1: Patient Safety Concept

No	Topic	Resource person
1.	Medical Ethics	Dr Nurhanis Syazni AP Dr Nor Azwany
2.	Professionalism	Dr Nurhanis Syazni AP Dr Nor Azwany
3.	Interprofessionalism	AP Dr Nor Azwany
4.	Communication Skills	Prof Dr Shaiful Bahari Ismail
5.	Patient Autonomy	Prof Dr Mohtar Ibrahim Dr Maya Mazuwin Yahya
6.	Confidentiality	Prof Dr Hans Amin Van Rostenberghe Dr Amry A. Rahim
7.	Patient rights	Prof Dr Hans Amin Van Rostenberghe
8.	Equity and social justice	AP Dr Badrisyah Idris
9.	Informed consent	Prof Dr Hans Amin Van Rostenberghe
10.	Patient safety and error, include prevention of errors & management of errors	AP Dr Nor Azwany
11.	Evidence-Based Medicine	Prof Dr Hans Amin Van Rostenberghe AP Dr Nor Azwany Pn Nurul Azurah
12.	Legal procedures, ethics, negligence	AP Dr Md. Salzihan Dr Rosniza
13.	Etiquette and manners during clinical examination	Prof Dr Shaiful Bahari Ismail
14.	Approach to good consultation (including dealing with errors)	AP Dr Norhayati Mohd Noor
15.	Decision making	Dr Mohd Zulfakar Mazlan
16.	Approach to sensitive issues	Dr Faridah Mohd. Zin
17.	Truth telling and breaking bad news	AP Dr Rosediani Muhamad

Module 2: Patient Safety Goals

No	Topic	Resource person
1.	Principles of infection control	AP Dr Siti Suraiya Md. Noor
2.	Adverse drug reaction and drug interaction	Dr Nik Nor Izah Nik Ibrahim
3.	Principle of blood transfusion and its clinical application	AP Dr Rapiaah Mustaffa
4.	Pre-transfusion testing	AP Dr Noor Haslina Mohd Noor
5.	Complication of blood transfusion	Dr Wan Haslindawani Wan Mahmood
6.	Principles of prescribing patient education and compliance	Dr Azlina Ishak
7.	Aseptic techniques	Pn Haslinda Dan
8.	Standard precaution for infection control	Prof Dr Habsah Hasan
9.	Sterilisation and disinfection	Prof Dr Habsah Hasan

6. Learning Outcomes and Patient Safety Content Matric

The patient safety topics were mapped to the six patient safety learning outcomes, as follows:

Module 1: Patient Safety Concept

Topic	PSG 1	PSG 2	PSG 3	PSG 4	PSG 5	PSG 6
Medical Ethics	/	/	/	/	/	
Professionalism	/	/	/	/	/	/
Interprofessionalism	/	/	/	/	/	/
Com. Skills	/	/	/	/	/	/
Patient Autonomy	/	/	/	/	/	/
Confidentiality	/	/	/	/	/	
Patient rights	/	/	/	/	/	/
Equity and social justice	/	/	/	/	/	
Informed consent	/	/	/	/	/	
Patient safety and error, including prevention of errors & management of errors	/	/	/	/	/	/
EBM	/	/	/	/	/	/
Legal procedures, ethics, negligence	/	/	/	/	/	/
Etiquette and manner during clinical examination	/	/	/	/	/	/
Approach to good consultation (including dealing with errors)	/	/	/	/	/	/
Decision making	/	/	/	/	/	/
Approach to sensitive issues	/	/	/	/	/	/
Truth telling and breaking bad news	/	/	/	/	/	/

Learning outcomes:

PSG 1 – Identify correct patient
PSG 2 – Effective communication & hand-over
PSG 3 – Prevent medical errors
PSG 4 – Safe surgery saves lives
PSG 5 – Prevention in control infection
PSG 6 – Reduce patient falls

Module 2: Patient Safety Goals

Topic	PSG 1	PSG 2	PSG 3	PSG 4	PSG 5	PSG 6
Principle of infection control					/	
Adverse drug reaction and drug interaction			/			/
Principle of blood transfusion and its clinical application	/	/			/	
Pre-transfusion testing	/	/		/	/	
Complication of blood transfusion	/	/		/	/	
Principles of prescribing patient education and compliance	/	/	/			/
Aseptic techniques				/	/	
Standard precaution for infection control				/	/	
Sterilisation and disinfection				/	/	

Learning outcomes:

PSG 1 – Identify correct patient
PSG 2 – Effective communication & handover
PSG 3 – Prevent medical errors
PSG 4 – Safe surgery saves lives
PSG 5 – Prevention in control infection
PSG 6 – Reduce patient falls

7. The Immediate Feedback

At the end of the workshop, a WhatsApp group for MOOC Patient Safety was created to facilitate the content development process. The immediate feedback obtained from the experts was positive and the revised patient safety content was perceived as a better and systematic version as compared to the previous structure (i.e., unstructured and unsystematic). Most importantly, this effort has received positive support from the Dean as he is one of the experts who will be involved in developing the MOOC Patient Safety content. Even more so, during the recent pre-curriculum review workshop, patient safety was included and clearly stated in the programme educational objective and programme learning outcomes, and this recommendation will be considered by the curriculum review committee in September 2019.

CHAPTER 9: Conclusions

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Jean-Francois Schved

The Tuning Asia – South East (TASE) project involved nine universities from Southeast Asia and three universities from Europe. The TASE project focused on curricular reform and aimed to institutionalise the Tuning Methodology in the practice of higher education institutions in Southeast Asia by building of a framework of comparable, compatible and transparent programmes of studies in universities, and developing a reference point for the medicine subject.

Implementing Tuning Methodology, 13 generic competencies and 14 specific competencies were identified, and the 27 competencies were perceived as important competencies by four stakeholders (academics, employers, students and graduates). Based on the 27 competencies, a meta-profile for Southeast Asia Medical Competence was developed (TASE Medicine Framework), consisting of six domains that include patient care, family-community-population care, ethics and professionalism, knowledge and skills, communication, and quality assurance.

There was a high degree of convergence between the meta-profile and degree profiles of each participating university. The domains of Knowledge and Skills, and Communication matched up fully. However, for the three other domains, namely Ethics and Professionalism, Family, Community and Population Care, and Patient Care, one or two competencies in the domain were identified as needing reinforcement. In total, 7 of the 27 competencies in the meta-profile (26%) were perceived a needing strengthening in the respective degree profiles. The meta-profile was sufficiently robust and holistic, and hence the profile could be considered as a common tool for all medical schools in Southeast Asia to describe the competencies in their degree profiles. This is encouraging because Southeast Asia is a region with diverse cultural and social backgrounds.

The analysis of convergences resulted in each university initiating a process to strengthen its respective degree profile by re-designing or re-analysing the domains/competencies that require further attention. The student workload analysis revealed that the total hours required to complete the course is aligned with the current practice of different institutions (720-800 hours per semester). The total 50 hours per week, comprising 17 hours of contact hours (35%) and 33 hours of independent works (65%), is realistic. For 1 contact hour should provide 2 hours of independent work. Nevertheless, the definition of student workload across the participating institutions was varied and, therefore, harmonisation of the definition should be explored in the future. Throughout the Tuning Methodology process, at least 50% of the programme was completely revised based on the feedback and analysis, and the revised programmes were found to be realistic and deliverable in the respective institutions, improving the constructive alignment of the programme design, learning activities and assessment, and the programme was revised based on a clear and traceable process.

Two implementing universities successfully implemented the revised programmes and demonstrated positive outcomes. Based on these experiences and evidence, the Tuning Methodology is a practical, systematic and transparent tool for determining competencies, designing a curriculum, reviewing and improving curricula, and redesigning programmes. Furthermore, the Tuning Methodology has successfully changed and improved the educational practices in the participating universities through a smart collaboration and partnership.

The following are several recommendations to ensure the sustainability of the Tuning Methodology in the ASEAN region:

i. Establishing the tuning community of practice in the ASEAN region, in which one of the participating universities can be selected as the host for this initiative. Through this initiative the Tuning community of practice will share their experience with the other universities in ASEAN countries.
ii. Dissemination of Tuning Methodology outcomes in ASEAN can be made through publication as a reference point for others to follow to initiate the educational change in their setting.
iii. AUN can play active roles by becoming the platform for the Tuning community of practice, hence various activities can be carried out for educational change in the ASEAN region.
iv. The Tuning Methodology should be promoted and used as a tool to improve ASEAN Higher Education.

TASE MEDICINE G

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