



Traditional and Complementary Medicine Blueprint 2018-2027 Health Care

Traditional and Complementary Medicine Division
Ministry of Health Malaysia



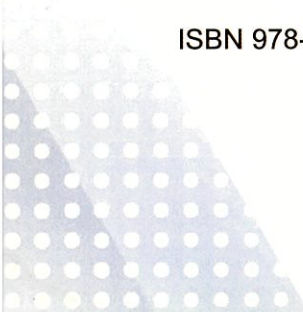
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FOREWORD BY THE MINISTER OF HEALTH MALAYSIA



In the past decade, the World Health Organization (WHO) had taken great effort to maximise the health potential of T&CM and its contribution towards Universal Health Coverage (UHC). With this, they have published *The Regional Strategy for Traditional Medicine in the Western Pacific (2011-2020)* and the *WHO Traditional Medicine Strategy (2014-2023)* that have supported and guided Member States in developing suitable policies and action plans that will strengthen the role of T&CM in keeping populations healthy. Following the direction of the WHO, Malaysia recognises the contribution of T&CM towards sustainable well-being and considers it as one of the components of UHC, along with other

health services provided in the country.

The National T&CM Blueprint 2018-2027 (Health Care) thereby marks the beginning of a new era of progress and development for T&CM in Malaysia. First, it represents the passion and continuous commitment by the Ministry of Health to regulate and professionalise the practice and practitioners of T&CM in the country. Second, the Blueprint provides the direction T&CM needs to strengthen its position on the basis of strong scientific evidence in the national health care system and to bring us close to our National Health Care goals. Third, it encourages the organic expansion of T&CM services. I believe the integration of T&CM and modern medicine across all levels of healthcare will serve the betterment of the nation and lead to the achievement of UHC as well as our goals for Sustainable Development (SDG).

The implementation of this Blueprint needs collective efforts and strong collaboration between the public, private sector and non-government organisations. As such, it is my fervent hope that all stakeholders work hand in hand to realise the strategies and action plans that are established in the Blueprint to propel us to the future that is envisioned for T&CM in Malaysia.

A handwritten signature in black ink, consisting of stylized, flowing letters that appear to be 'S' and 'S' followed by a large loop.

Datuk Seri Dr. S. Subramaniam
Minister of Health Malaysia

FOREWORD BY SECRETARY GENERAL OF HEALTH



It is my pleasure to usher the arrival of the National T&CM Blueprint 2018-2027 (Health Care) which presents a significant milestone in the history of development for T&CM in Malaysia.

I am pleased to learn that this Blueprint is a culmination of inputs and aspirations from various Ministries, government agencies, academic institutions, professional bodies, non-government organisations (NGO) and the private sector. The multidisciplinary approach taken to develop the Blueprint has produced a well-rounded action plan that will optimise the contribution of T&CM in achieving the National

Health Care goals of the country.

We need to continue to break through our professional silos and embrace new ways of thinking in order to deal with the increasing complexity of the modern health care environment. By incorporating the concept of the National Blue Ocean Strategy (NBOS) into our efforts, we can inculcate new shifts in perspective and strategy that will create sustainable solutions to our health care issues and make the impossible possible for T&CM. I believe Malaysia will see unparalleled growth and unprecedented international recognition when the public, private sector and NGOs are able to intensify collaboration, work collegially and communicate effectively across traditional disciplinary boundaries.

To end this note, I would like to express my sincere appreciation to all stakeholders who have walked alongside the Ministry through an exciting journey of developing the National T&CM Blueprint 2018-2027 (Health Care). Special thanks to T&CM Division, Ministry of Health Malaysia for their unwavering commitment and perseverance in making this Blueprint a success.



Dato' Seri Dr. Chen Chaw Min
Secretary General of Health

FOREWORD BY DIRECTOR-GENERAL OF HEALTH MALAYSIA



The National T&CM Blueprint 2018-2027 (Health Care) was developed in cognizance of the three unique features of T&CM in Malaysia which are: (1) highly diversified practice areas; (2) strong ethno-cultural ownership; and (3) the provision of services that are dominated by the private sector. These features will exert a strong influence on the progress and future development of T&CM in Malaysia.

The diversity of T&CM practice areas recognised in Malaysia would pose a challenge to our legislative efforts. I am pleased to note that the Blueprint proposes a phased approach in the implementation of the T&CM Act 2016 and emphasizes on the concept of “appropriateness” when developing legislation and suitable health care models for T&CM. A “one size fits all” concept is definitely not suitable for T&CM in Malaysia as it is not possible to have a single management approach that would apply uniformly across each practice area.

The strong sense of ethno-cultural ownership provides us the opportunity to take advantage of these cultural factors to mobilize and empower the community towards achieving the National Health Care goals. With this, our message can be effectively directed to their hearts and into their minds.

Private sector domination in terms of provision of T&CM services calls for a reexamination of the modus operandi for managing health care delivery where the Ministry of Health have always been the major provider for modern health care services. As such, managing T&CM service delivery which is private-sector driven demands a different set of skills and concepts.

To end this foreword, I would like to express my utmost gratitude to all the stakeholders who had committed their time and effort to contribute their input which were invaluable to the successful preparation of this Blueprint. Also, special thanks to the T&CM Division, Ministry of Health Malaysia for being the driving force behind the development of the Blueprint and in spearheading the T&CM industry into a new era of professionalisation.

Thank you.



Datuk Dr Noor Hisham Abdullah
Director-General of Health Malaysia

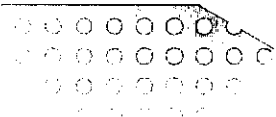
EXECUTIVE SUMMARY

In Malaysia, traditional and complementary medicine (T&CM) has been used for many centuries to maintain the health and quality of life of Malaysians. T&CM experienced a breakthrough in the 90s when the Government of Malaysia decided to pursue the development and regulation of the practice and practitioners of T&CM in the country which made Malaysia one of the very few countries to have enacted such legislation. Since then, progress had blossomed on many fronts of T&CM notably in the areas of capacity building in research, governance, education and the regulation of T&CM products.

As these developments become increasingly complex, intense and diversified, there is urgent growing need to look at the bigger picture, to think long term and to take concerted actions. The T&CM Blueprint will therefore serve this purpose.

The goal of the T&CM Blueprint is to facilitate the regulation, integration and economic development of the T&CM industry so that it can contribute optimally to the national health care system, meet economic and socio-cultural goals, maximise health systems' reach towards universal health coverage and enhance the total well-being of all Malaysians. This document, in particular, focuses on the health care perspectives of T&CM while the economic and socio-cultural perspectives are addressed in a separate document.

The Ministry of Health Malaysia has undertaken the relevant engagements and discussions with stakeholders to develop the T&CM Blueprint since 2015. This Blueprint was produced after a series of engagements with key stakeholders from the industry which include various government agencies, T&CM practitioner bodies, institutions of higher education and the private sector. This was in view of the necessity to have a national masterplan to support and coordinate T&CM related matters whilst also providing input on T&CM for the Eleventh Malaysia Plan 2016-2020.



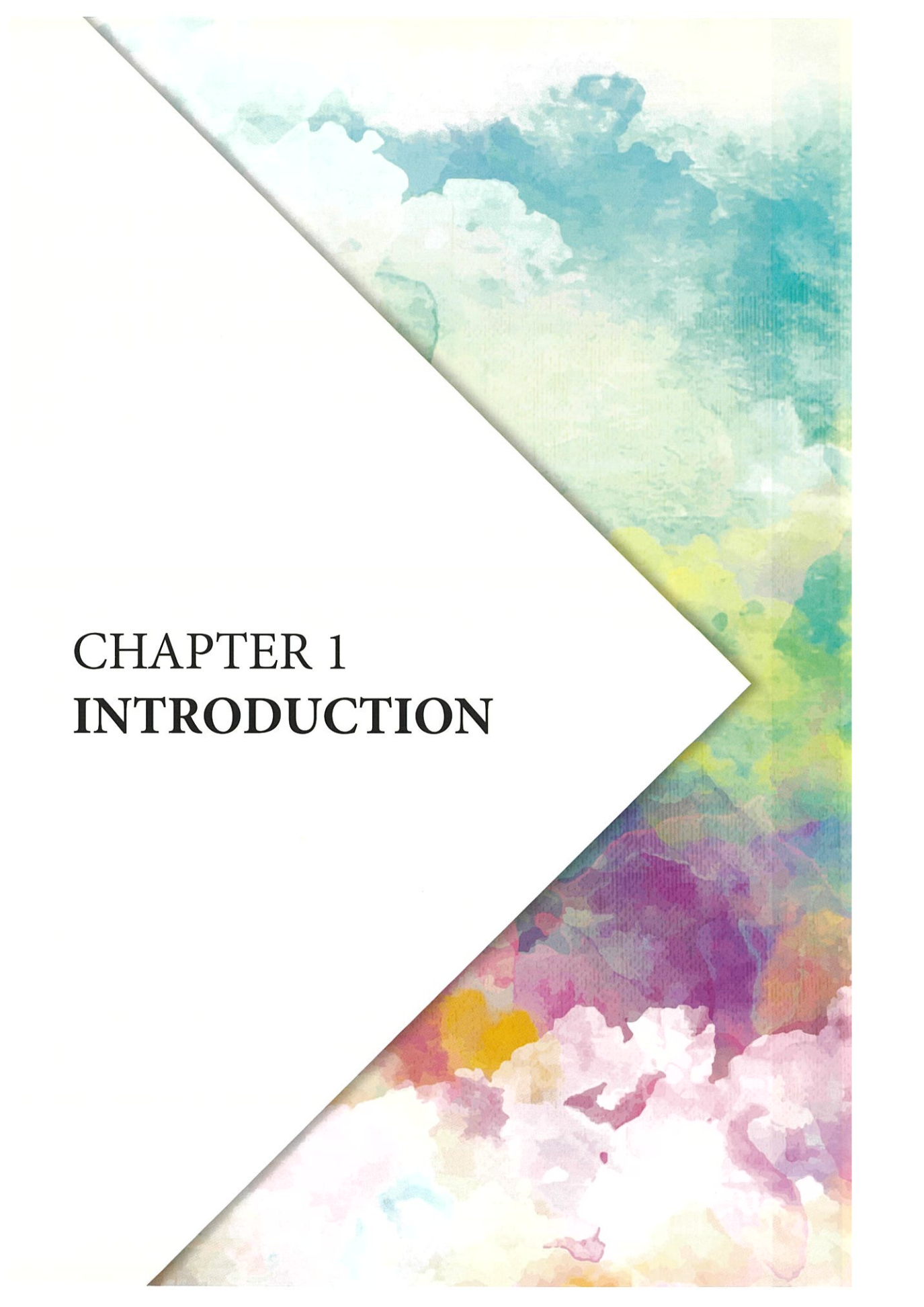
As a result of these engagements, 17 challenges faced by the T&CM industry were identified and categorised into four areas: practice, education and training, medicinal materials and products, and research. In response to these challenges, six general directions were tailored to meet emerging health care needs and to address the issues and challenges of the industry.

The Blueprint further proposes 22 strategies and 52 action plans that are aligned with these general directions. It will cover an implementation period of 10 years and an interim review will be conducted after 5 years.

The T&CM Division, Ministry of Health Malaysia will serve as the secretariat to ensure that the activities and outcomes to be achieved follow the timeline proposed in the action plan. Biannual meetings will be conducted to discuss progress by the implementing agencies and to address any issues and challenges faced during the course of implementation. These meetings shall be chaired by the Deputy Director General of Health (Medical), Ministry of Health Malaysia.

ABBREVIATION

APC	Annual Practising Certificate
CME	Continuous Medical Education
COA	Certificate of Analysis
DCA	Drug Control Authority
DRGD	Drug Registration Guidance Document
DSD	Department of Skills Development
EPP	Entry Point Project
Globinmed	Global Information Hub on Integrated Medicine
GLP	Good Laboratory Practice
HHR	Health Human Resources
HMRC	Herbal Medicine Research Centre
IMR	Institute for Medical Research
IP	Intellectual Property
MMC	Malaysian Medical Council
MOA	Ministry of Agriculture & Agro-Based Industry
MOH	Ministry of Health
MOHE	Ministry of Higher Education
MOHR	Ministry of Human Resources
MQA	Malaysian Qualifications Agency
MQF	Malaysian Qualifications Framework
MSC	Malaysian Skills Certificate
MSQH	Malaysian Society for Quality in Health
MyIPO	Intellectual Property Corporation of Malaysia
MyTKDL	Malaysian Traditional Knowledge Digital Library
NGO	Non-governmental organisation
NHMS	National Health and Morbidity Survey
NIH	National Institutes of Health
NKEA	New Key Economic Areas
NMRR	National Medical Research Registry
NOSS	National Occupational Skills Standards
NPRA	National Pharmaceutical Regulatory Agency
NSR	National Specialist Register
OTC	Over-The-Counter
PHC	Primary Health Care
R&D	Research and Development
SLDN	National Dual Training System
SME	Subject Matter Expert
SOP	Standard Operating Procedure
T&CM	Traditional and Complementary Medicine
T&CMD	Traditional and Complementary Medicine Division
TCM	Traditional Chinese Medicine
TIM	Traditional Indian Medicine
TM	Traditional Medicine
TMM	Traditional Malay Medicine
UHC	Universal Health Coverage
WHO	World Health Organization

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CHAPTER 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

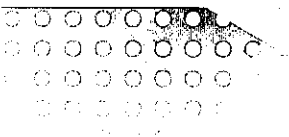
1.1: T&CM in Malaysia

1.1.1: Practice of T&CM

Traditional and complementary medicine (T&CM) in Malaysia has three unique features. Firstly, T&CM in Malaysia is highly diversified in terms of heritage, history, language, philosophy, ethnic origin, geographical distribution and stages of development of each practice. Secondly, T&CM is strongly linked to the culture and heritage of each ethnic group in Malaysia. Thirdly, the provision of T&CM services in Malaysia is dominated by the private sector (mainly sole proprietors) with limited involvement of the public sector.

In the T&CM Act 2016 [Act 775], the practice of T&CM is defined as a “form of health-related practice designed to prevent, treat or manage ailment or illness or preserve the mental and physical well-being of an individual and includes such practices as traditional Malay medicine (TMM), traditional Chinese medicine (TCM), traditional Indian medicine (TIM), Islamic medical practice, homeopathy, and complementary therapies, but excludes medical and dental practices used by medical and dental practitioners respectively.” Noting that the modalities of T&CM practised in Malaysia are so varied, it is not possible to have a single management approach, model or set of standards that would apply uniformly across each modality. Thus, identifying an appropriate legislative framework for T&CM in Malaysia is one of the Ministry of Health’s (MOH) principal challenges in order to regulate and professionalise the different T&CM practices.

The enforcement of the T&CM Act 2016 on 1st August 2016 and the formation of the T&CM Council on 16th January 2017 represented Malaysia’s steadfast approach in regulating and professionalising the T&CM industry. This important milestone complemented the Ministry’s achievements in developing T&CM such as the formation of the Herbal Medicine Research Centre (HMRC) under the Institute for Medical Research (IMR) in 2000 and the establishment of the T&CM Division (T&CMD) in 2004 (refer Appendix 1). The Ministry has also established T&CM Units in selected public health care facilities that offer T&CM services for specific indications. Legislative systems were also established



to monitor and regulate T&CM-related areas such as practice, practitioners, education and training as well as products (refer Appendix 2).

1.1.2: National Policy of T&CM

Malaysia launched the National Policy of T&CM in 2001 and revised it in 2007. The National Policy stated that T&CM shall be an important component of the Malaysian health care system. It will co-exist with modern medicine and contribute towards enhancing the health and quality of life of all Malaysians. Four main components for T&CM development were identified under the National Policy. These include (1) practice, (2) education and training, (3) raw materials and products and (4) research.

The general directions of the National Policy are as follows.

- To promote appropriate and relevant integration of T&CM into the Malaysian health care system in order to achieve a holistic approach towards enhancing health and quality of life.
- To professionalise T&CM practices and practitioners to improve safety and quality of treatment.
- To strengthen relevant legislation and regulatory control to ensure better safety and quality in all aspects of T&CM.
- To formalise T&CM education for T&CM practitioners, health care providers and the public.
- To strengthen research capacity to support the regulation, development and professionalisation of T&CM.

1.1.3: National Health and Morbidity Survey (NHMS) 2015

The overall prevalence of ever used T&CM with consultation was 29.25% (95% CI: 27.66-30.89) with significantly more females using T&CM (32.75%) (95%CI: 30.52-35.06) compared to males (26.05%) (95% CI: 24.13-28.06). There was no difference between urban compare to rural areas.

The findings of the NHMS 2015 demonstrated a significant level of utilisation and demand for T&CM in the health care management of our nation. Its widespread popularity has encouraged the Malaysian government to play a proactive role in ensuring the safe and proper use of

T&CM and to further explore the potential of T&CM in improving overall health outcomes of Malaysians.

1.2: T&CM from the World Health Organization's (WHO) Perspective

The Declaration of Alma Ata (1978) stated that “primary health care (PHC) relies, at local and referral levels, on health workers including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as **traditional practitioners** as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community”.

Since then the WHO has produced strategic reports that emphasise the important role of T&CM in overall health care management. These include the **Regional Strategy for Traditional Medicine in the Western Pacific (2011–2020)** and the **WHO Traditional Medicine Strategy (2014–2023)**.

The Regional Strategy for Traditional Medicine in the Western Pacific (2011–2020) provides guidance and principles for countries, stakeholders and the WHO on how to maximise the potential and ensure the proper use of T&CM in the Region. On the other hand, the WHO Traditional Medicine Strategy (2014–2023) was developed as a framework to guide and encourage countries to integrate T&CM into the national health care system. It acknowledges the potential of T&CM in improving individual health and its contribution towards universal health coverage (UHC) for all.

In 2016, the Western Pacific Region, WHO published the Universal Health Coverage: Moving towards Better Health – Action Framework for the Western Pacific Region. This document also emphasised the importance of ensuring safe and quality use of T&CM and to optimise its contribution towards UHC.

Aligned with WHO directions, Malaysia is exploring suitable models that facilitate appropriate integration of T&CM and modern medicine to optimise health care outcomes.

1.3: Development of the T&CM Blueprint

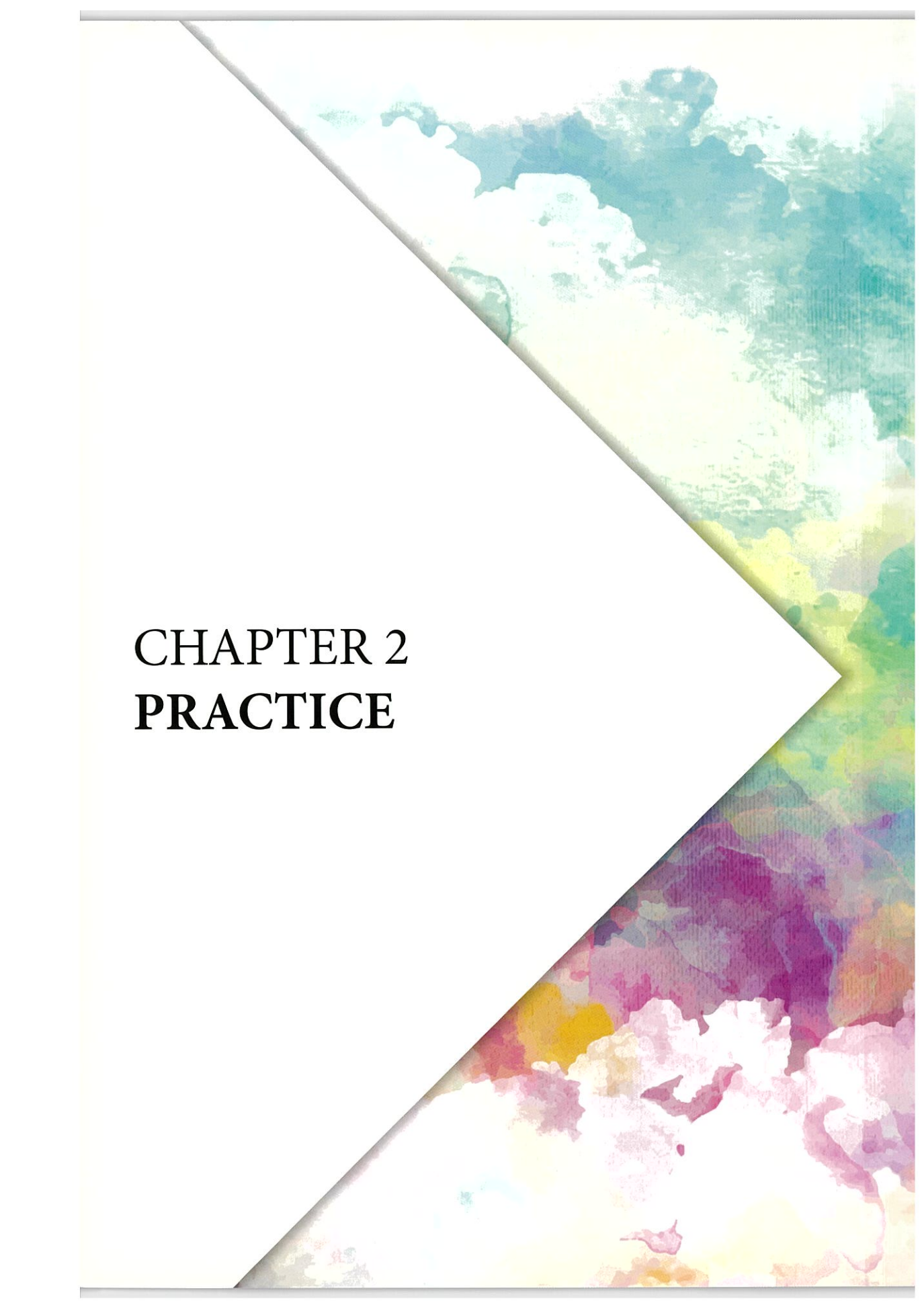
The goal of the T&CM Blueprint is to facilitate the regulation, integration and economic development of the T&CM industry in Malaysia so that it can contribute optimally to the national health care system, meet economic and socio-cultural goals, maximise health systems' reach towards UHC and enhance the total well-being of all Malaysians. The direction and objectives of the Blueprint are guided by the National Policy of T&CM and are tailored to meet emerging health care needs and to address the issues and challenges of the industry.

The general directions of the T&CM Blueprint (Health Care) is listed in Table 1.

T&CM Blueprint 2018-2027	
Practice	• Professionalise the practices and practitioners of T&CM for the attainment of health care, economic and socio-cultural goals • To optimise the integration of T&CM practices into the Malaysian health care system for the attainment of health care, economic & socio-cultural goals • To optimise the T&CM health care delivery structure
Education and Training	• Professionalise T&CM education and training for all stakeholders
Medicinal Materials and Products	• Appropriate regulation of T&CM medicinal materials for the attainment of health care goals
Research	• To optimise the contribution to T&CM R&D towards health care goals

Table 1: Key components of T&CM for development under the T&CM Blueprint 2018-2027

The T&CM Blueprint (Health Care) will cover an implementation period of 10 years. An interim review shall be conducted after 5 years. The following chapters provide an overview of the issues and challenges, the strategies and plan of action reflecting the four main components for the development of T&CM.

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CHAPTER 2

PRACTICE

CHAPTER 2: PRACTICE

2.1: Overview

The T&CM industry in Malaysia appears to have grown steadily and continuously over recent years. Whilst there are limited data to define the size of the T&CM industry, there is clear, growing and widespread use of T&CM. Its breadth and potential are reflected in the following market information.

- According to the database of the T&CMD, 16,050 local T&CM practitioners have registered with the eight T&CM practitioner bodies appointed by the MOH prior to enforcement of the T&CM Act. It is believed that there are many more unregistered practitioners in the market.
- The supply market for T&CM is growing to meet increasing demands. Of the 246 Drug Control Authority (DCA) licensed manufacturers in 2017 (up to June), 136 are licensed traditional medicine manufacturers (National Pharmaceutical Regulatory Agency (NPRA), 2017).
- The T&CMD mapped approximately 13,000 premises providing T&CM services in the country. They are largely established by the private sector (e.g. private universities, non-governmental organisations (NGOs), clinics, hospitals, private practitioners etc.)

To support appropriate growth of the T&CM industry there is a need for further professionalisation and systematic development of the practices and practitioners of T&CM. An enhanced professionalisation of the T&CM industry can be evaluated by the following criteria:

- Well-declared ethical values
- Recognised qualifications and competencies
- Well-established professional bodies
- Appropriate regulatory framework for practice, education and product approval
- Engagement in research

As such, the enforcement of the T&CM Act 2016 on 1st August 2016 is an important milestone to the Ministry's efforts in regulating the industry and

ensuring safe and quality T&CM services are accessible to all Malaysians. The Act also brings the Ministry a step closer to a vision of harmonious, safe and effective co-existence of T&CM and modern medicine to enhance the health and quality of life of all Malaysians. Hence, the full implementation of the T&CM Act 2016 will occur in key stages over the next 10 years. (Appendix 3 provides more information on the scope of the Act and the regulatory responsibilities of the T&CM Council).

The Ministry is also keen to facilitate progress in integrating T&CM services in the public and private health care sectors. In the public sector, T&CM services are partially integrated through the establishment of T&CM units in selected public health care facilities (refer Appendix 4). As for the private sector, there exists a complete separation between the provision of modern medicine and T&CM services due to legal restraints.

2.2: Issues and Challenges

The current issues and challenges faced by the T&CM industry in the area of practice are as follows:

A. Difficulty in ensuring effective implementation of the T&CM Act 2016 and the introduction of statutory regulation of T&CM practitioners

The implementation of the T&CM Act 2016 is challenged by (1) the complexity and diversity of T&CM practices in Malaysia, (2) the lack of trained personnel, (3) the lack of facilities to conduct residency training and (4) the absence of suitable mechanisms for registering T&CM practitioners without formal training. These challenges will be addressed using a phased approach whereby the regulation of different T&CM practice areas will be assessed based on readiness and risks.

B. T&CM premises are not adequately regulated

Appropriate mechanisms for regulating and monitoring T&CM premises have yet to be identified and implemented. The current law does not adequately regulate T&CM premises.

C. Lack of sufficient/ relevant baseline data to facilitate policy formulation and policy support

Policy formulation should be based on well-founded information or data. Without substantial information (e.g. actual demand, patient information, diseases treated using T&CM, number of practitioners, record systems etc), evidence-based policies cannot be made and implemented. The lack of data may also have resulted in the exclusion of T&CM from several national master plans such as national health human resource (HHR) planning.

D. Insufficient participation of T&CM in secondary and tertiary health care and the potential contribution of T&CM is not fully assessed

T&CM health care delivery is skewed towards PHC with minimal participation at secondary and tertiary levels. To date, there is only one TCM hospital in the country with inpatient services. This may be due to the undefined role or positioning of T&CM at various levels of health care and the inadequate study of the potential contribution of T&CM towards better health outcomes. This may also indirectly contribute to unclear career pathways and undefined roles of the T&CM practitioner in the health care system.

E. Absence of a strategic framework for the integration of T&CM into the national health care system

Malaysia has yet to establish a strategic framework that will guide and facilitate the integration of T&CM into the national health care system. The current incorporation of T&CM services in public health care facilities is conducted without a proper integration plan. This is not sustainable in terms of financial and manpower support. T&CM units in the public sector are also facing issues in meeting with current hospital settings or requirements (e.g. Malaysian Society for Quality in Health (MSQH) standards, employment of practitioners, patient's record keeping, compliance to hospital's accreditation requirement etc.).

2.3: Strategy

A. Implement a phased approach to the introduction of statutory regulation of T&CM practitioners

- i. Establish designated T&CM practitioner bodies
- ii. Initiate registration of T&CM practitioners
- iii. Develop Code of Professional Conduct for registered T&CM practitioners
- iv. Develop criteria for new recognised practice areas (to determine the suitability and readiness of practices to be regulated)
- v. Develop an online system that will provide public access to the list of registered T&CM practitioners
- vi. Develop and implement online certification system for T&CM practitioners
- vii. Review and revise the T&CM Act 2016

B. Develop an appropriate regulatory framework and guidelines to regulate and monitor T&CM premises

- i. Review the status of T&CM premises in both public and private sectors and analyse the issues pertaining to the establishment and regulation of T&CM premises
- ii. Develop a guiding document for T&CM premises in identified service delivery and practice areas
- iii. Formulate a regulatory framework and transitional plan as well as propose legislative amendments if required

C. Acquire adequate data to promote and support evidence-based policy formulation and decision-making

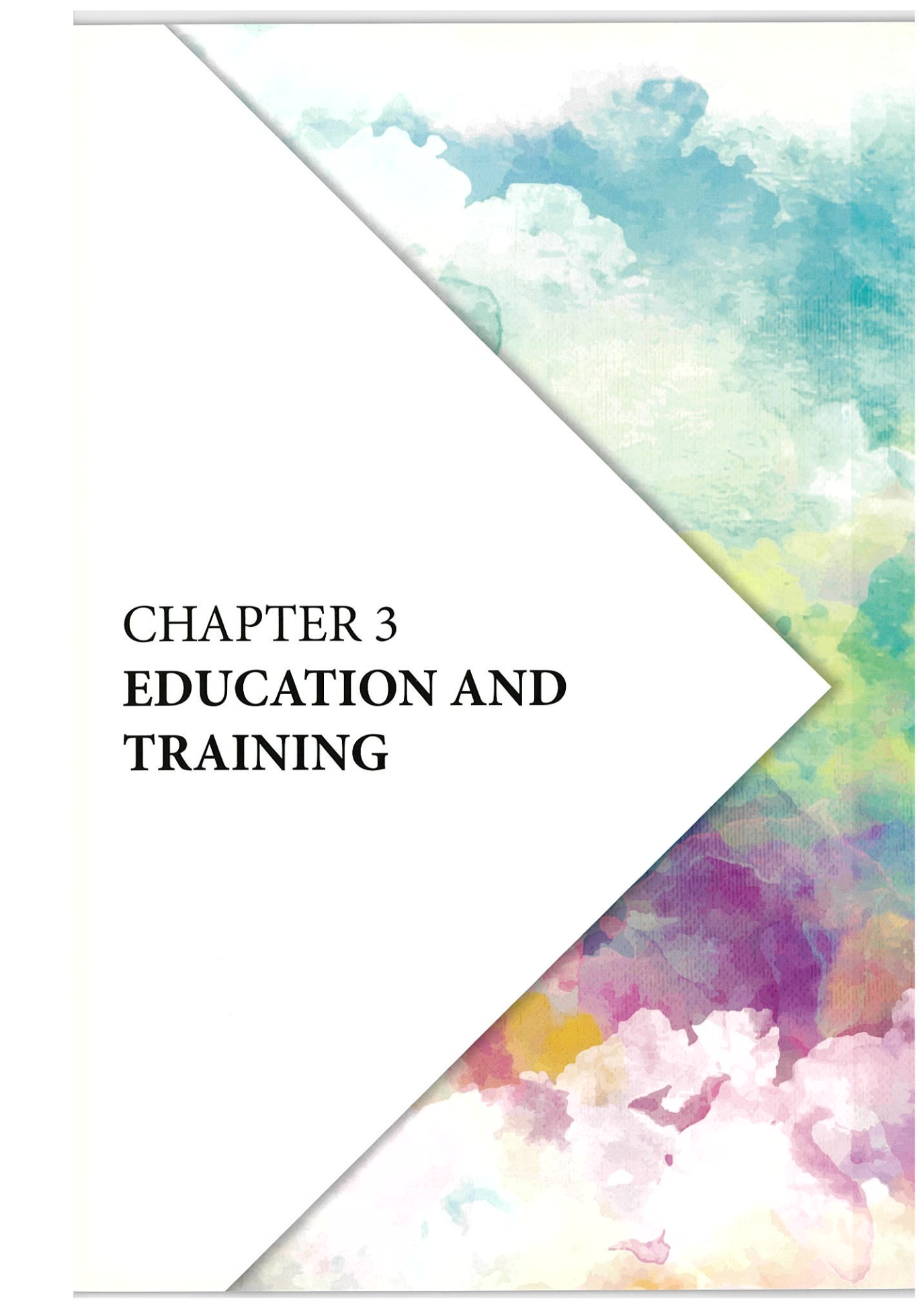
- i. Conduct comprehensive baseline studies on identified recognised practice areas to have a thorough understanding of the landscape of the practices (e.g. practitioner profile, practice, medicinal materials used, education and clinical institutions, professional bodies, available literature and historical records of its development in Malaysia)
- ii. Use data to further guide the implementation and revision of the National Policy of T&CM

D. Optimise T&CM health care delivery in primary, secondary and tertiary services.

- i. Study and evaluate the role of T&CM in health management and health promotion at various health care levels. This data will guide development of T&CM services in various health care settings
- ii. Study and evaluate the potential contributions of T&CM in the prevention and treatment of the country's top disease burden. The identification of the potential contributions of T&CM in optimising health outcomes and reducing disease burden shall include but not be limited to dengue fever, cardio-cerebral vascular diseases, cancer, diabetes and psychiatric conditions

E. Plan and develop appropriate integration models to optimise the contribution of T&CM in health care management.

- i. Analyse the status of integration and develop a suitable strategic framework, model and plan for integration (into public and private sector). The strategic framework should include aspects such as definition of concepts, stages, pathway and level of integration, management of care, funding, referral, healthcare service delivery, space availability, feedback mechanism, governance of multidisciplinary team as well as the perspectives of key health payers (e.g. consumers, government, insurers etc.).
- ii. Optimise integration and improve the quality of T&CM services offered in the public sector.



CHAPTER 3

EDUCATION AND

TRAINING

CHAPTER 3: EDUCATION AND TRAINING

3.1: Overview

T&CM education evolved in 2010 when private institutions of higher education began offering T&CM programmes accredited by the Malaysian Qualifications Agency (MQA). Formal T&CM education is an important milestone toward standardising and professionalising the practice of T&CM, ensuring the safety and quality of T&CM services and toward enhancing public confidence. In the past, T&CM education was largely informal without fixed curricula or established institutions of learning. Knowledge and skills were handed down through oral communication and apprenticeship.

With reference to the Malaysian Qualifications Framework (MQF) (Appendix 5), two pathways have been identified for the development of T&CM programmes. These include the skills pathway and the higher education (academic) pathway. The T&CMD of the MOH plays a role in providing technical support in the development of these programmes.

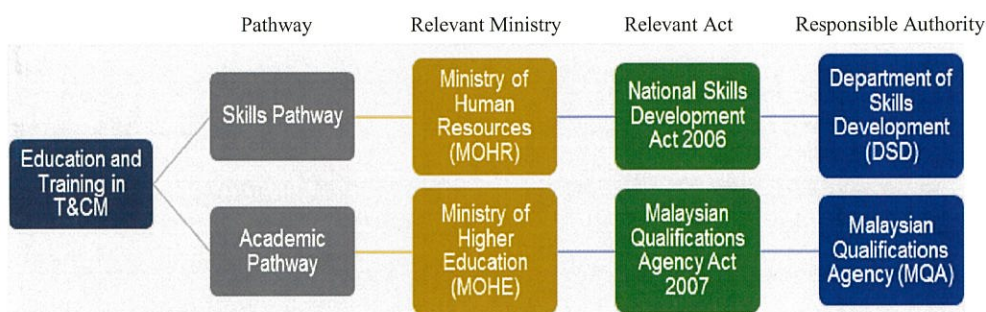


Figure 1: Skills and higher education pathways for T&CM

Development of T&CM Higher Education in Malaysia

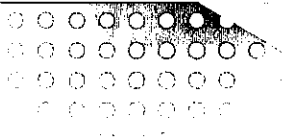
As shown in Table 2, 9 standards for diploma (3) and degree (6) level programmes in T&CM have been developed in collaboration with the MQA.

Bachelor Programme	Diploma Programme
• Bachelor of Traditional Chinese Medicine (Acupuncture) • Bachelor of Traditional Chinese Medicine • Bachelor of Homeopathy • Bachelor of Malay Medicine • Bachelor of Ayurveda Medicine • Bachelor of Chiropractic	• Diploma in Malay Massage • Diploma in Traditional Chinese Medicine (Acupuncture) • Diploma in Islamic Medicine

Table 2: List of programme standards for T&CM published by the MQA (adopted from the Malaysian Qualifications Agency, 2010)

The programme standards set the minimum requirement for T&CM programmes offered by institutions of higher education in Malaysia (MQA, 2010). They are adapted from standards established by the countries of origin for T&CM practices such as traditional Chinese medicine (TCM) from China and traditional Indian medicine (TIM) from India. To ensure these standards are relevant to the Malaysian education environment, continuous assessments and improvements are conducted over time by the MQA. The greatest challenge is in the establishment of suitable programme standards for homegrown practices and practices without international benchmarks or country of origin.

To date, there are 10 private institutions of higher education offering T&CM courses at diploma and/ or degree levels (Appendix 6).



Development of T&CM Skills Training in Malaysia

In the development of T&CM programmes under the skills pathway, the T&CMD has collaborated with the Department of Skills Development (DSD) and industry experts to develop the National Occupational Skills Standards (NOSS). NOSS is a specification of competencies expected of a skilled worker employed in Malaysia in a defined occupational area. The Malaysian Skills Certificate (MSC) is then awarded to those who qualify. The MSC may be awarded via three routes, namely:

i. Training in accredited centres

Accredited centres refer to providers of skills training approved by the DSD to manage skills training based on the NOSS and to offer the MSC for certain sectors and skill levels.

ii. Industry-oriented training

This relates to apprenticeship training under the National Dual Training System (SLDN) conducted in industry and skills training institutes.

iii. Accreditation of prior achievement

A candidate may qualify for the MSC based on past experience (work or training) without sitting for an exam. Candidates are however required to submit evidence of their acquired skills which will be reviewed by officers appointed by the DSD.

T&CM health human resources (HHR)

In order to build the country's HHR for T&CM, further data and policy support are required to advance the safety and quality of services offered by T&CM practitioners. Although basic data on T&CM HHR (e.g. T&CM workforce distribution, practitioner per population ratio etc.) will be more readily available when the national registry for T&CM practitioners has been established, this will take time as the statutory regulation of T&CM practitioners has yet to be initiated and enforced. As a consequence of the lack of reliable data to estimate current needs and future demand for T&CM, the development of T&CM HHR may not be sufficiently incorporated into the Master Plan for Human Resources for Health 2016-2030 and other documents by the MOH.

3.2: Issues and Challenges

A. Lack of appropriate mechanisms to ensure proper accreditation of T&CM courses

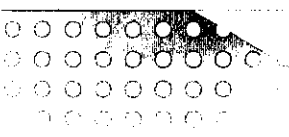
The diversity of T&CM practices in Malaysia, each with its unique philosophies and at different stages of development, presents challenges to the formalisation of education and training. Suitable mechanisms need to be established (e.g. formation of a Joint Technical Committee under the T&CM Council) to assist the identification of appropriate standards for T&CM practices and to ensure accreditation processes for T&CM courses are conducted properly and effectively.

B. Inadequacy of existing education and training in T&CM

Despite the emphasis on formal education, many T&CM practices still rely on informal education and training systems. These practices are either passed down through successive generations or offered through non-accredited education programmes.

For T&CM practices with established programme standards and courses, there are several challenges that need to be addressed.

- i. The relevance and standards of these programmes and courses need to be determined relative to current needs and demand. There appears to be unfulfilled demand for postgraduate and bridging courses for T&CM practitioners who seek to progress further from the skills to the academic pathway. The absence of local institutions offering postgraduate coursework and research programmes in T&CM need to be addressed with appropriate policies that support further development and encourage uptake.
- ii. The adequacy of existing courses to impart the necessary skills and knowledge to produce competent T&CM practitioners should be reviewed, including ensuring sufficient practical and theoretical components.
- iii. The adequacy of courses to equip T&CM graduates with the relevant inter-professional skills to communicate effectively with modern medical and allied health care practitioners should be reviewed.

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- iv. The choice of language used as a medium for teaching T&CM courses may affect student uptake due to their inability to meet language requirements (e.g., proficiency in Arabic is required for a Diploma in Islamic Medicine) and may also impact on teaching materials and standards.
 - v. Institutions of higher education that offer T&CM courses may require additional support to overcome potential shortage of T&CM trained academic personnel and the lack of academic resources to deliver courses effectively (e.g. training facilities, grants and library resources).

C. Low levels of knowledge and awareness of T&CM

i. Medical and other health care providers

The incorporation of T&CM education components into the curricula of medical and other health care professionals is highly encouraged to enhance the dissemination of accurate information on T&CM, promote the appropriate use of T&CM and strengthen mutual understanding and trust from the early stages of professional development. Although it is underlined in the National Policy of T&CM, it is not mandatory and such arrangements are left to the initiative of medical education providers.

The content and delivery of T&CM education as part of continuing professional development of the medical and other health care workforce also needs to be strengthened to promote mutual understanding. Although the MOH actively organises seminars and discourses on T&CM, established platforms or forums for engagement and knowledge sharing are limited. Established programmes for continuing medical education (CME) for health care providers have yet to be created. There is a need for continuous assessment and evaluation of existing and future educational activities to ensure they meet current needs, are effective and achieve the indicated outcomes.

ii. Public servants, including regulators, administrators and related professionals

Government officers who deal with T&CM-related matters (e.g. regulatory departments, T&CM Units) are not sufficiently trained and

equipped with the necessary skills and knowledge to formulate effective regulations, policies or conduct research on T&CM.

iii. General public

The public requires accurate and adequate information on T&CM practices and products to make well-informed decisions. An assessment of public awareness and knowledge of T&CM is required to advise the way forward in formulating and implementing suitable programmes and activities that will enhance well-informed decisions.

D. Unclear career pathways and low student intakes

Unclear career pathways for T&CM professionals in both the public and private sectors is associated with:

- i. Undefined roles of T&CM practitioners in the health care system;
- ii. The lack of a public service scheme for T&CM practitioners;
- iii. The absence of data on the demand and supply of T&CM HHR which in turn hinders proper planning of graduate flow by T&CM education providers to meet market demands; and
- iv. Low student intakes for T&CM courses which affects the long-term sustainability and prospect of T&CM education providers.

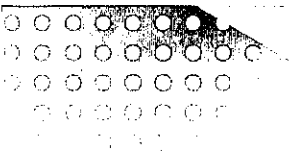
3.3: Strategy

A. Develop appropriate mechanisms to ensure accreditation of T&CM courses are conducted properly and effectively

- i. Establish Joint Technical Committee (JTC) under the T&CM Council to carry out this function

B. Improve and strengthen the education and training of T&CM practitioners

- i. Review and revise existing MQA programme standards for T&CM courses to meet current needs
- ii. Facilitate establishment of bridging courses that will allow T&CM practitioners to progress from the skills pathway to the academic pathway
- iii. Develop appropriate policy support to encourage the establishment of postgraduate coursework and research programmes in T&CM
- iv. Develop programme standards for T&CM postgraduate courses

- 
- v. Encourage and facilitate local/ international collaboration to strengthen T&CM teaching capacity and resources in Malaysia

C. Improve and strengthen T&CM knowledge amongst medical and other health care providers to promote mutual understanding

- i. Identify practical and effective ways to facilitate incorporation of T&CM education components into the curricula of other health care providers
- ii. Encourage organisation of suitable activities (e.g. forum, seminar, conference etc) to promote knowledge sharing and communication
- iii. Engage with relevant stakeholders to facilitate development of CME on T&CM with specific learning objectives/ outcomes

D. Equip and strengthen the capacity and competency amongst regulators, administrators and related professionals

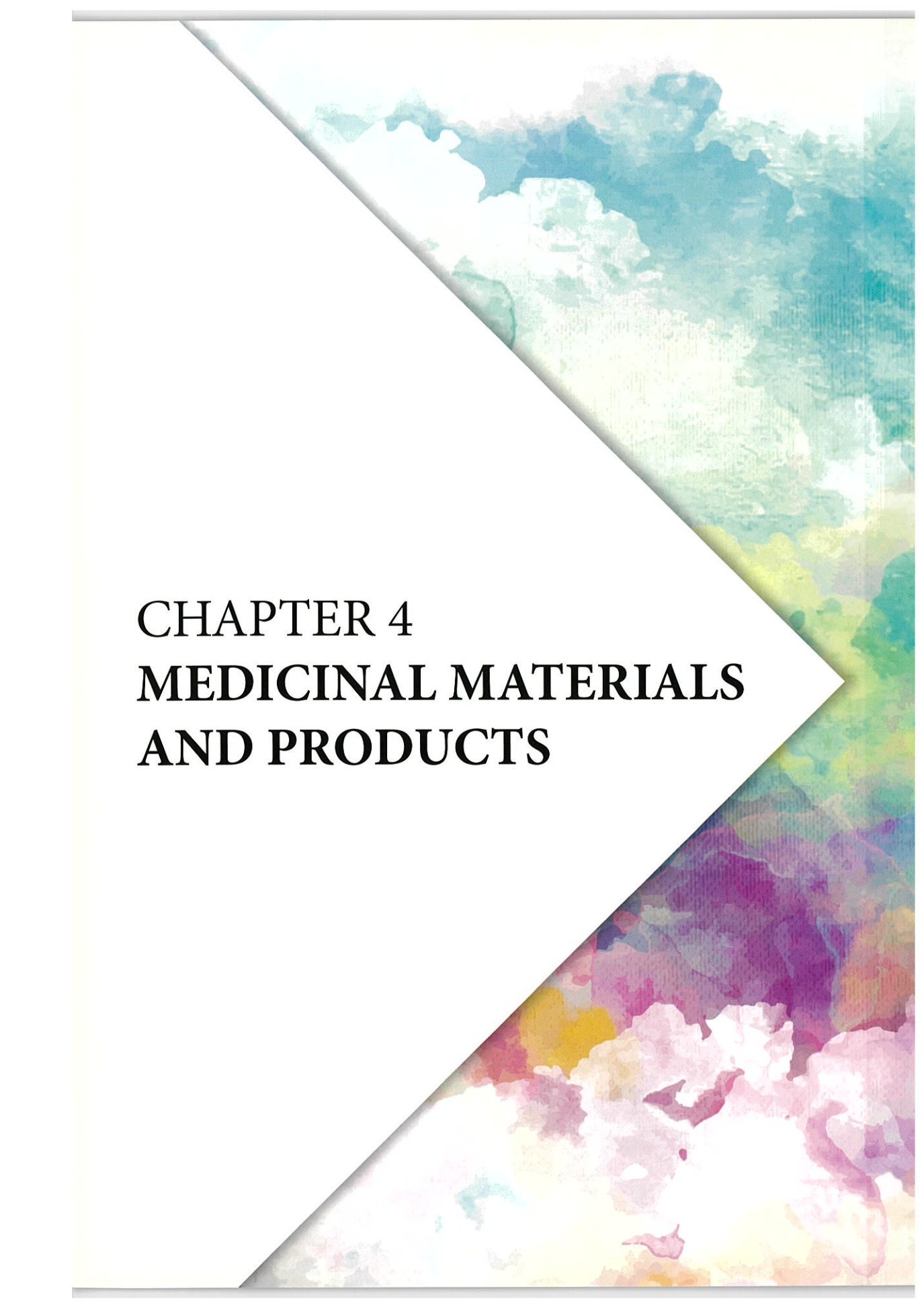
- i. Develop appropriate in-house training programmes to equip public officers with relevant skills and knowledge
- ii. Explore training opportunities with local/ international institutions

E. Increase and strengthen public knowledge and awareness of T&CM

- i. Study and assess the level of public knowledge and awareness of T&CM
- ii. Develop consumer information on the proper use of T&CM
- iii. Enhance awareness on the T&CM Act 2016 and the safe use of T&CM

F. Strengthen and professionalise T&CM HHR

- i. Study the demand and supply of T&CM HHR and formulate strategies that support T&CM HHR planning
- ii. Develop suitable career pathways for T&CM HHR in the public sector which includes T&CM practitioners, other health care professionals with T&CM expertise as well as regulators/ administrators in T&CM-related areas



CHAPTER 4

MEDICINAL MATERIALS

AND PRODUCTS

CHAPTER 4: MEDICINAL MATERIALS AND PRODUCTS

4.1: Overview

The adequate and appropriate regulation of T&CM products is emphasised in the National Policy of T&CM to ensure optimal safety and quality. In January 1992, Malaysia initiated the registration of T&CM products followed by the licensing of T&CM manufacturers and importers in January 1999. The current legislation and regulations that govern T&CM products in Malaysia include but are not limited to the following:

- Sale of Drugs Act 1952;
- Control of Drugs and Cosmetics Regulations 1984;
- Dangerous Drugs Act 1952;
- Poisons Act 1952;
- Medicines (Advertisement & Sale) Act 1956;
- Patents Act 1983;
- Wildlife Conservation Act 2010 [Act 716]; and
- International Trade in Endangered Species Act 2008 [Act 686]

These legislative acts also apply to the regulation of pharmaceutical products and veterinary drugs in Malaysia. Patents Act 1983 and its regulations which govern the grant and validity of patent rights for inventions in Malaysia will only become relevant and applicable subject to the criteria of patentability.

As such, T&CM products are subjected to similar criteria for regulation, surveillance, pharmacovigilance, licensing and adverse drug reaction reporting that has been established for pharmaceutical products.

However, there is a need for T&CM-specific provisions to ensure the safety and quality of T&CM products. For example, the Control of Drugs and Cosmetics Regulations 1984 stipulated that all T&CM products need to be registered with exemption given to traditional preparation containing plants, animal parts or mineral substance or a mixture of these substances of natural origin that is produced only through drying, without any treatment/ process involved. Furthermore, extemporaneous preparation that has been prepared and given directly to the patient by any T&CM practitioner during the course of treatment is also exempted. Yet these exempted portions of

T&CM medicinal materials are most commonly prescribed by the T&CM practitioners. Also, several medicinal materials considered important to the practice of T&CM are restricted from use. This presents a challenge to T&CM practitioners in terms of accessibility to their tools of trade.

It is appropriate to review the current T&CM product regulation and consolidate experiences acquired over recent years. Any policy changes will need to continue to provide the highest assurance of safety and quality and capture the potential benefits of T&CM medicines.

4.2: Issues and challenges

A. Appropriateness and adequacy of the current product regulatory system

i. Issues related to current regulation

The present laws are designed to regulate pharmaceutical products in Malaysia. In the design of current legislation specific requirements for T&CM are unlikely to have been adequately considered including level of claims expressed in T&CM concept and terminology, methods for processing, handling, storing, quality control, etc. For example, the quality of *Daodi*ⁱ TCM medicinal materials is predicated by geographical determinants, cultivation and processing.

ii. Issues related to medicinal claims

Currently, medicinal claims based on T&CM philosophy of use are not allowed. The claims permitted for T&CM products based on traditional use and limited to low level claims. Such restrictions may lead to inaccurate descriptions and indications of T&CM products. This may in turn lead to less than optimal product safety and efficacy.

ⁱ *Daodi* medicinal material is defined as “medicinal material that is produced and assembled in specific geographic regions with designated natural conditions and ecological environment, with particular attention to cultivation technique, harvesting and processing.” These factors are purported to lead to improved quality and clinical effects surpassing those of same botanical origin produced from other regions. (Zhao et al., 2012).

iii. Issues related to prohibited/ banned ingredients

Some ingredients (mostly botanical) that are important and frequently used in the practice of T&CM are listed under the Poison Act 1952 or banned/ restricted ingredients list in Drug Registration Guidance Document (DRGD). T&CM preparations containing such ingredients are not approved for use for safety reasons. It is, however, important to note that ingredients used in the practice of T&CM are traditionally subjected to specific preparative processes that will minimise toxicity for safe consumption. Prohibition of some ingredients may warrant review.

iv. T&CM medicinal materials are not directly regulated

There is no proper mechanism in place to monitor and regulate (1) the quality of T&CM medicinal materials on import, export and distribution, and (2) the personnel involved in these activities, including importers, exporters, wholesalers, dealers, retailers and individuals who dispense T&CM medicinal materials. Mechanisms are needed to ensure that quality is maintained throughout the supply chain without sole reliance on end product testing.

B. The need to develop resources and capacity in the industry, government and tertiary sectors (i.e. university, research institute, etc.) to strengthen quality assurance of T&CM medicinal materials and products

There is limited expertise, infrastructure and support available for the study and evaluation of T&CM medicinal materials and products. For example, existing laboratory facilities and infrastructure are unable to readily verify if a T&CM product adheres to the specifications on its Certificate of Analysis (COA). Quality assurance is also inhibited by the lack of a comprehensive national pharmacopeia. There is also a need to improve existing procedures for procuring herbal medicines for T&CM Units in public health care facilities to better safeguard the quality of those purchased and used.

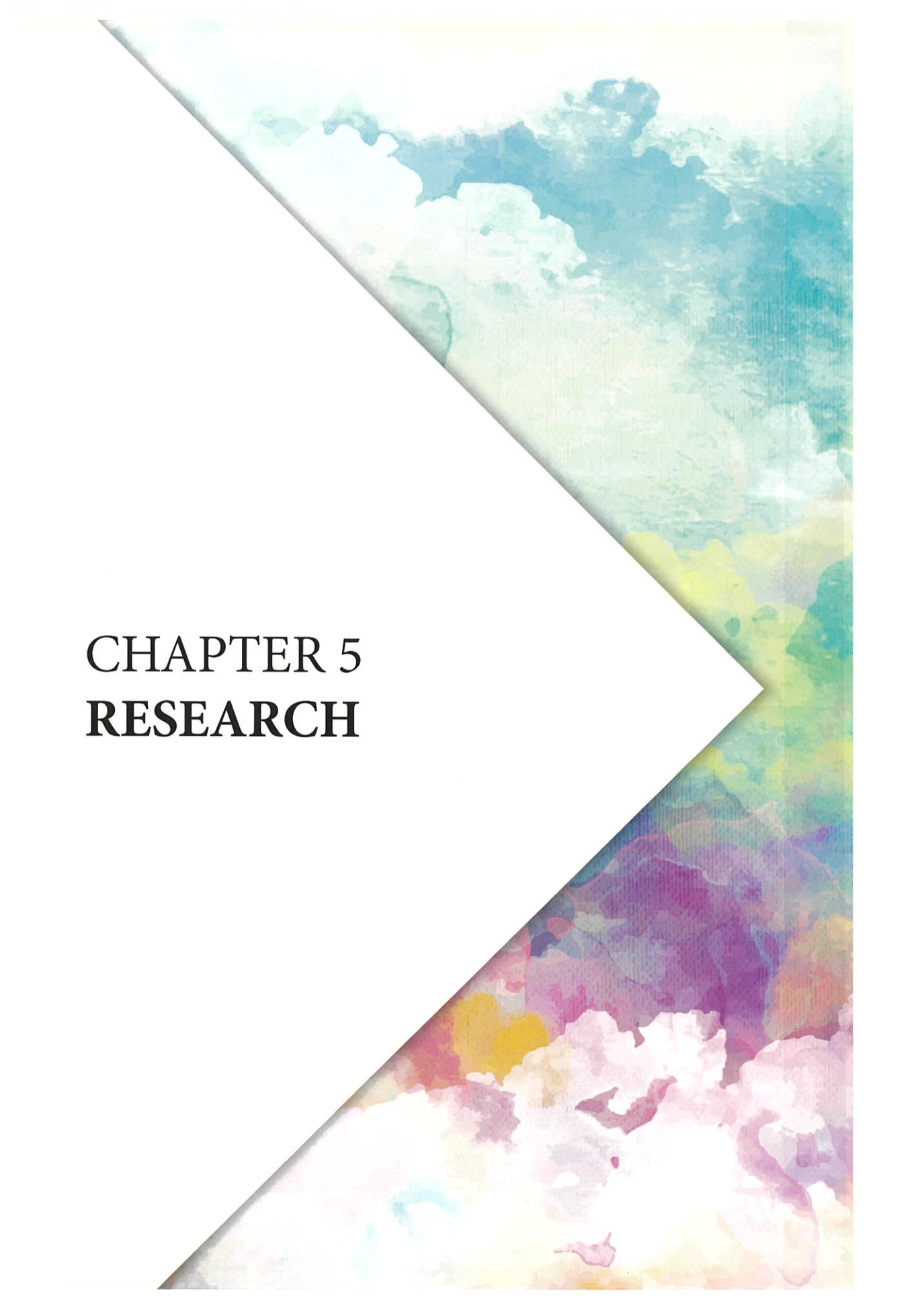
4.3: Strategy

A. Strengthen the regulatory system for T&CM products and medicinal materials

- i. Study the strengths and weaknesses of the existing regulatory system to guide the design of an appropriate regulatory framework for T&CM products and medicinal materials
- ii. Evaluate the current supply chain of T&CM medicinal materials (e.g. import, export, distribution, handling etc.)
- iii. Explore suitable mechanisms to improve quality assurance and address other issues raised in the distribution and handling of T&CM medicinal materials

B. Strengthen quality assurance of T&CM products and medicinal materials

- i. Engage with various stakeholders to encourage and support the development of the required resources and capabilities to undertake quality assurance testing
- ii. Allocate sufficient resources to develop a comprehensive national T&CM pharmacopoeia
- iii. Develop an essential list of herbal medicines to be utilised in T&CM units at public health care facilities (with clear specifications and approval mechanisms)



CHAPTER 5

RESEARCH

CHAPTER 5: RESEARCH

5.1: Overview

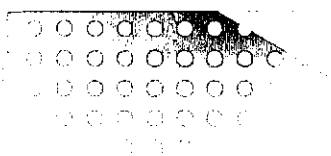
Research and development (R&D) is crucial to support the safe integration of T&CM in Malaysia. This is to ensure that the utilisation of T&CM is supported by evidence. There are two main areas in which researches are being conducted: herbal medicine and T&CM practices.

Malaysia has achieved significant milestones in herbal R&D with the establishment of the Herbal Medicine Research Center (HMRC) at the Institute of Medical Research (IMR) in 2000, the Global Information Hub on Integrated Medicine (GlobinMed) in 2007 and the National Committee on R&D for Herbal Medicine in 2002. The type of research encompassed literature/ systematic review, preclinical laboratory based experiments and clinical research. Since 2011, the effort by Entry Point Project 1 (EPP1), New Key Economic Areas (NKEA) to establish high value herbal products have led to the expansion of the Malaysian Herbal Monograph activities, establishment of the Good Laboratory Practice (GLP) Laboratory for *in vitro* and *in vivo* tests and the involvement of industries into herbal research.

Whereas the researches into T&CM practices are mainly surveys and observational types of studies. Two main surveys regarding the utilisation of T&CM modalities were conducted in 2004 and 2014. Several observational studies have looked into the Malay postnatal therapies, documentation of the traditional Malay medicine (TMM) in Peninsular Malaysia, transliteration and translation of the old manuscript (*Kitab Tib*) of the TMM and others.

On top of that, Intellectual Property Corporation of Malaysia (MyIPO) has initiated a database known as the Malaysian Traditional Knowledge Digital Library (MyTKDL) to compile traditional knowledge and biological resources information, although there is no specifically enacted legislation that governs traditional knowledge at this point of time.

Currently, there is a collection of 1,435 data containing information on the rich fauna and flora of the country as well as the elements of traditional knowledge and biological resources in MyTKDL. A proper intellectual property (IP) infrastructure that begins with the repository of database is vital



to preserve our traditional knowledge and biological resources so that it does not misappropriated by the 'bio-piracy' individuals and corporations.

There is a further need to create conducive research environments, establish suitable mechanisms for research and improve shared knowledge between practitioners of T&CM and modern medicine to unlock the full potential of T&CM.

5.2: Issues and Challenges

A. Research pathway for herbal products

Currently, the herbal product development in Malaysia is closely following the pharmaceutical drug development pathway. There are issues that may not be able to be addressed, for example the elucidation of all compounds in the herbal extracts, the identification of all active ingredients, the requirement for a full battery of toxicology studies when the herbs has safely been used as food by the population for ages.

B. The regulation for herbal product development and registration

In conjunction with the research pathway, the categorisation of the herbal product and the level of claims allowed have been slowing the rate of the herbal product development.

C. Inadequate emphasis given to T&CM research

Despite the high utilisation of T&CM in Malaysia, the overall investment for T&CM research is low because of a perceived lack of importance as a national research priority. Based on data from the National Medical Research Registry (NMRR) from 2006-2017, only 37 out of 16,487 medical research studies approved by the NMRR related to T&CM (NMRR, 2017). These studies were largely small-scale studies addressing patient satisfaction and quality of life improvements. Hence, providing the necessary stimulus (such as monetary allocations and the creation of conducive research environments) should be considered to encourage overall participation in T&CM research.

D. Absence of national research priorities in T&CM and inadequacy of research conducted

Several issues and challenges faced in this area are:

- i. There are currently no champions for setting the R&D direction for T&CM research in the country and to coordinate research collaboration between the public and private sectors
- ii. Existing research on T&CM is largely focused on herbal product development and less on the actual practice of T&CM
- iii. There is a need to establish appropriate research methodologies to study T&CM
- iv. There is a lack of high quality research that supports the development of evidence-based policies and efficient decision-making processes
- v. The poor dissemination of research findings in T&CM calls for improved mechanisms to share of contemporary research data

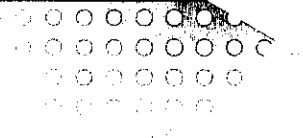
E. Insufficient expertise, capacity and resources for T&CM R&D

The local capacity for conducting T&CM research is inadequate. The overall interest and participation of T&CM practitioners in research is low and those that are interested tend to lack the skills and knowledge to conduct high quality research. Insufficient support and encouragement for T&CM research have also led local institutions of higher education to neglect building research capacity and resources. Financial incentives such as grants and scholarships need to be considered to accelerate T&CM research.

F. Research innovation and IP

There are two prevailing issues in this area:

- i. The current regulatory framework does not encourage T&CM R&D and innovation in Malaysia. Traditional practice knowledge is often in the public domain and, in the absence of standard mechanisms of IP protection; new mechanisms need to be found to encourage innovative research, including data protection for industry
- ii. Awareness of IP protection and the importance of documenting traditional knowledge is low especially among indigenous communities in Malaysia. There is a need to provide guidance and encouragement of indigenous T&CM practitioners to support the preservation of traditional knowledge and resources as well as to prevent exploitation



5.3: Strategy

A. Encourage methodology development for herbal products

- i. Further methodology development for a more comprehensive and suitable pathway for the R&D of herbal products

B. Review of current regulations for herbal product development and registration

- i. The level of claim and the type of evidence required for the production of high value herbal products need to be reviewed

C. Encourage participation in T&CM research by creating a conducive research environment and support

- i. Promote and strengthen resource allocation for T&CM research

D. Establish research priorities for T&CM R&D in Malaysia

- i. Liaise with relevant stakeholders to develop a mechanism such as the formation of a national research committee to determine research priorities in T&CM and propose recommendations on identified issues

E. Strengthen research in T&CM that contributes to evidence-based policy formulation

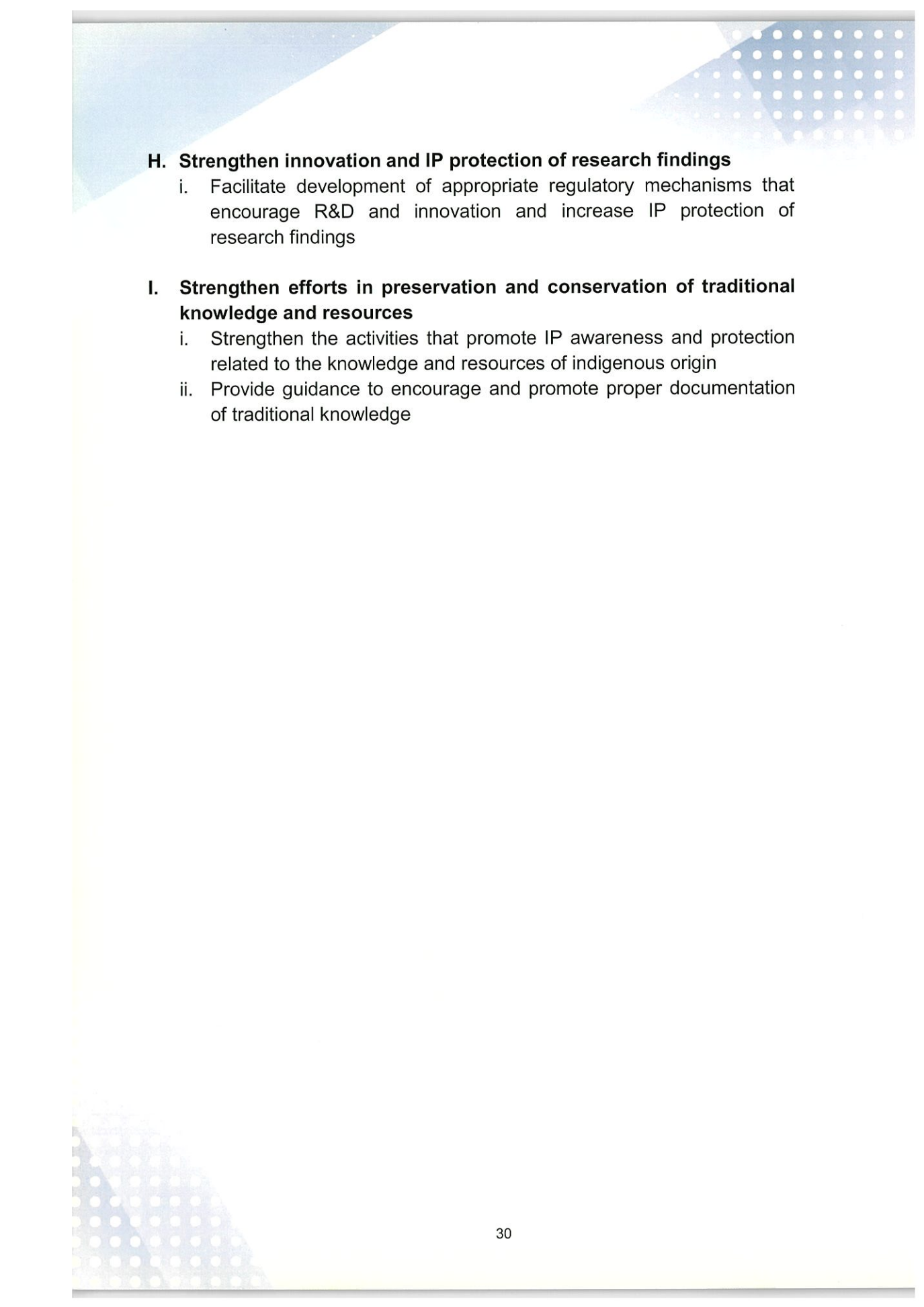
- i. Incorporate T&CM as a study component in relevant national health surveys
- ii. Strengthen capacity for translating research findings into evidence-based policies

F. Promote and improve dissemination of research findings

- i. Encourage organisation of national/ international activities (e.g. conference) to share research findings
- ii. Facilitate establishment of a T&CM research registry

G. Strengthen local research capabilities

- i. Facilitate establishment of national/ international collaborations and networks to support T&CM R&D
- ii. Facilitate establishment of public-private partnerships that optimise the use of existing expertise, capacity and resources for conducting research
- iii. Encourage higher degree research in the tertiary sector

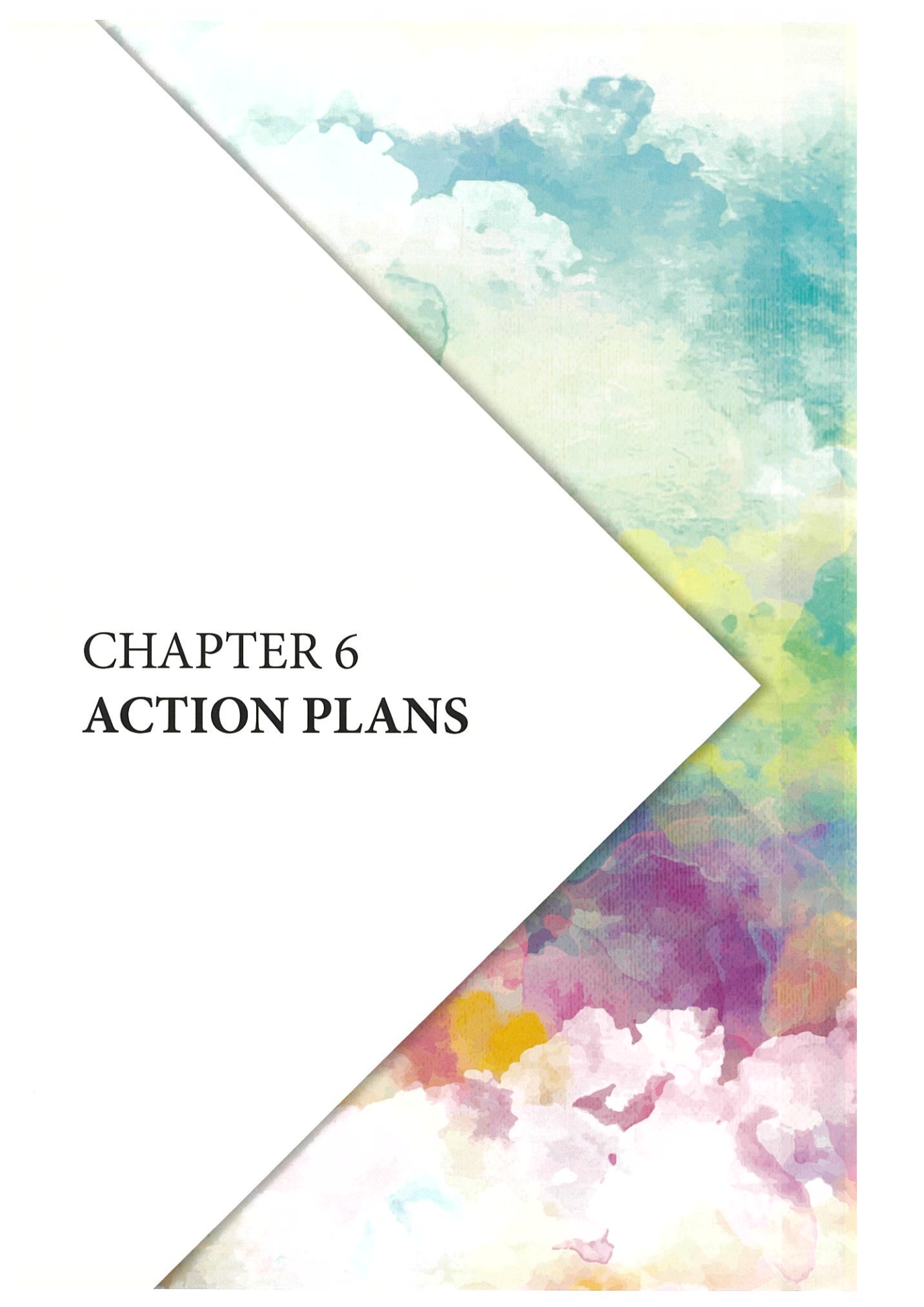


H. Strengthen innovation and IP protection of research findings

- i. Facilitate development of appropriate regulatory mechanisms that encourage R&D and innovation and increase IP protection of research findings

I. Strengthen efforts in preservation and conservation of traditional knowledge and resources

- i. Strengthen the activities that promote IP awareness and protection related to the knowledge and resources of indigenous origin
- ii. Provide guidance to encourage and promote proper documentation of traditional knowledge



CHAPTER 6

ACTION PLANS

CHAPTER 6: ACTION PLANS

The following tables outline action plans for each of the aspects of T&CM requiring development. These include the recommended activities, output indicators, target timelines and agencies for implementation. These tables are arranged in a manner that readily demonstrates the links between the action plans, guiding strategies and the principal issues/ challenges.

PRACTICE

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
A. Difficulty in ensuring effective implementation of the T&CM Act 2016 and the introduction of statutory regulation of T&CM practitioners	The implementation of the T&CM Act 2016 is challenged by (1) the complexity and diversity of T&CM practices in Malaysia, (2) the lack of trained personnel, (3) the lack of facilities to conduct residency training and (4) the absence of suitable mechanisms for registering T&CM practitioners without formal training.	Implement a phased approach to the introduction of statutory regulation of T&CM practitioners	(i) Establish designated T&CM Practitioner Bodies	Designated T&CM Practitioner Bodies appointed	2018	Ministry of Health (MOH): T&CM Council
			(ii) Initiate registration of T&CM practitioners	Registration commences	2018-2019	MOH: T&CM Council
			(iii) Develop Code of Professional Conduct for registered T&CM practitioners	Code of Professional Conduct developed	2018	MOH: T&CM Council
			(iv) Develop criteria for new recognised practice areas	Criteria developed	2018	MOH: T&CM Division, T&CM Council

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
			(v) Develop an online system that will provide public access to the list of registered T&CM practitioners	System established	2022	MOH: T&CM Council , T&CM Division
			(vi) Develop and implement online certification system for T&CM practitioners	System established	2025	MOH: T&CM Council , T&CM Division
			(vii) Review and revise T&CM Act 2016	Review completed and required revisions enacted	2023-2025	MOH: T&CM Council , Legal Advisor Office, T&CM Division, Medical Practice Division
B. T&CM premises are not adequately regulated	Appropriate mechanisms for regulating and monitoring T&CM premises have yet to be identified and implemented. The current law does not adequately regulate	Develop an appropriate regulatory framework and guidelines to regulate and monitor T&CM premises	(i) Review the status of T&CM premises in both public and private sectors and analyse the issues pertaining to the establishment and	Analysis report	2018-2019	MOH: T&CM Division , Medical Practice Division Local Council

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	T&CM premises.		regulation of T&CM premises			
			(ii) Develop a guiding document for T&CM premises in identified service delivery and practice areas	Interim guidelines for T&CM premises	2018-2019	MOH: T&CM Division , Medical Practice Division Local Council
			(iii) Formulate a regulatory framework and transitional plan as well as propose legislative amendments if required	(i) Regulatory framework and translational plan	2020-2022	MOH: T&CM Division , T&CM Council, Legal Advisor Office, Medical Practice Division Local Council
				(ii) Introduction of regulations covering T&CM premises	2022-2027	
C. Lack of sufficient/ relevant baseline data to facilitate policy formulation and policy support	Policy formulation should be based on well-founded information or data. The lack of data has resulted in the exclusion of T&CM from several national master	Acquire adequate data to promote and support evidence-based policy formulation and	(i) Conduct comprehensive baseline studies on identified recognised practice areas to have a thorough	Baseline report	2020-2027	MOH: T&CM Division , T&CM Council, National Institutes of Health (NIH)

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	plans.	decision-making	understanding of the landscape of the practices			
			(ii) Use data to further guide the implementation and revision of the National Policy of T&CM	National Policy revised and published	2024-2025	MOH: T&CM Division
D. Insufficient participation of T&CM in secondary and tertiary health care and the potential contribution of T&CM is not fully assessed	T&CM health care delivery is skewed towards PHC with minimal participation at secondary and tertiary levels. This may be due to the undefined role or positioning of T&CM at various levels of health care and the inadequate study of the potential contribution of T&CM towards better health outcomes. This may indirectly contribute to unclear career pathways	Optimise T&CM health care delivery in primary, secondary and tertiary services	(i) Study and evaluate the role of T&CM in health management and health promotion at various health care levels	Study report	2018-2022	MOH: T&CM Division , T&CM Council, NIH, Disease Control Division, Medical Development Division, Family Health Development Division, Public Health Development Division, Health Education Division
			(ii) Study and evaluate the potential	Study report	2018-2022	MOH: T&CM Division , T&CM Council, NIH,

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	and undefined roles of the T&CM practitioner in the health care system.		contributions of T&CM in the prevention and treatment of the country's top disease burden			Disease Control Division
E. Absence of a strategic framework for the integration of T&CM into the national health care system	Malaysia has yet to establish a strategic framework that will guide and facilitate the integration of T&CM into the national health care system.	Plan and develop appropriate integration models so as to optimise the contribution of T&CM in health care management	(i) Analyse the status of integration and develop a suitable strategic framework, model and plan for integration	(i) Analysis report	2018-2020	MOH: T&CM Division , T&CM Council, NIH, Disease Control Division, Medical Development Division, Family Health Development Division, Public Health Development Division, Health Education Division
				(ii) Strategic framework for integration developed	2018-2020	
				(iii) Integration model recommended	2018-2020	
				(iv) Integration planning proposed	2018-2020	
			(ii) Optimise integration and improve the quality of T&CM services	(i) Recruitment of registered T&CM practitioners to	2020-2022	MOH: T&CM Division , Human Resource Division, Procurement and

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
			offered in public sector	work in T&CM units		Privatisation Division, Finance Division, Legal Advisor Office
				(ii) Appropriate medical record keeping system for T&CM services developed and implemented	2020-2023	MOH: T&CM Division , Medical Development Division, relevant hospitals
				(iii) T&CM units comply to hospital's accreditation requirements	2020-2023	MOH: T&CM Division , Medical Development Division, relevant hospitals
				(iv) Service scheme for T&CM practitioners in public sector established	2020-2024	MOH: T&CM Division , Human Resource Division Public Service Department

EDUCATION AND TRAINING

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
A. Lack of appropriate mechanisms to ensure proper accreditation of T&CM courses	The diversity of T&CM practices in Malaysia, each with unique its philosophies and at different stages of development presents challenges to the formalisation of education and training.	Develop appropriate mechanisms to ensure accreditation of T&CM courses are conducted properly and effectively	Establish Joint Technical Committee (JTC) under the T&CM Council to carry out this function	JTC established	2018	MOH: T&CM Council , T&CM Division Ministry of Higher Education (MOHE): Malaysian Qualifications Agency (MQA)
B. Inadequacy of existing education and training in T&CM	The relevancy and adequacy of existing programme standards and courses offered to fulfil the current needs and demand.	Improve and strengthen the education and training of T&CM practitioners	(i) Review and revise existing MQA programme standards for T&CM courses to meet current needs	Identified programme standards reviewed and revised	2018-2020	MOHE: MQA Higher Education Institutions MOH: T&CM Division, T&CM Council
	There appears to be an unfulfilled demand for postgraduate and bridging courses for T&CM practitioners who seek to progress further from the skills to the academic pathway.		(ii) Facilitate establishment of bridging courses that will allow T&CM practitioners to progress from the skills pathway to the academic pathway	Bridging courses developed for relevant T&CM practices	2020-2024	Higher Education Institutions MOH: T&CM Division, T&CM Council Ministry of Human Resources (MOHR): Department of Skills Development (DSD)

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	Institutions of higher education that offer T&CM courses may require additional support to overcome potential shortage of T&CM trained academic personnel and the lack of academic resources to deliver courses effectively.					MOHE: MQA
			(iii) Develop appropriate policy support to encourage the establishment of postgraduate coursework and research programmes in T&CM	Increased number of local institutions offering postgraduate studies	2020-2022	MOHE: MQA MOH: T&CM Division, T&CM Council Higher Education Institutions
				Increased number of postgraduate courses conducted	2022-2027	Higher Education Institutions MOH: T&CM Division, T&CM Council MOHE: MQA
			(iv) Develop programme standards for T&CM postgraduate courses	Programme standards developed for identified T&CM practices	2020-2022	MOHE: MQA MOH: T&CM Division, T&CM Council Higher Education Institutions

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
			(v) Encourage and facilitate local/ international collaboration to strengthen T&CM teaching capacity and resources in Malaysia	Establishment of collaborative efforts/ projects	2020-2027	Higher Education Institutions MOH: T&CM Division MOHE: MQA
C. Low levels of knowledge and awareness of T&CM	<u>Medical and other health care providers</u> The incorporation of T&CM education components into the curricula of medical and other health care professionals is highly encouraged to enhance the dissemination of accurate information on T&CM, promote the appropriate use of T&CM and strengthen mutual understanding and trust from the early stages of professional	Improve and strengthen T&CM education of medical and other health care providers to promote mutual understanding	(i) Identify practical and effective ways to facilitate incorporation of T&CM education components into the curricula of other health care providers	Study report	2019-2021	MOH: T&CM Division , NIH, councils and divisions that regulate the respective health care providers MOHE: MQA Higher Education Institutions
				Increased number of institutions that incorporate T&CM education into the curricula of other health care providers	2022-2027	Higher Education Institutions MOH: T&CM Division, councils and divisions that regulate the respective health care providers MOHE: MQA

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	development. The content and delivery of T&CM education as part of continuing professional development of the medical and other health care workforce also needs to be strengthened to promote mutual understanding.		(ii) Encourage organisation of suitable activities (e.g. forum, seminar, conference etc.) to promote knowledge sharing and communication	Increase in relevant activities each year	on-going (2018-2027)	MOH: T&CM Division Higher Education Institutions
			(iii) Engage with relevant stakeholders to facilitate development of CME on T&CM with specific learning objectives/ outcomes	Increase in T&CM CME activities	on-going (2018-2027)	MOH: T&CM Division
	<u>Public servants including regulators, administrators and related professionals</u> Government officers who deal with T&CM-related matters are not sufficiently trained and equipped with the	Equip and strengthen the capacity and competency amongst regulators, administrators and related professionals.	(i) Develop appropriate in-house training programmes to equip public officers with relevant skills and knowledge	Increase in officers trained	on-going (2018-2027)	MOH: T&CM Division
			(ii) Explore training opportunities with local/ international	Increase in officers trained	on-going (2018-2027)	MOH: T&CM Division

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	necessary skills and knowledge to formulate effective regulations, policies or conduct research on T&CM.		institutions			
	<u>General public</u> The public requires accurate and adequate information on T&CM practices and products to make well-informed decisions.	Increase and strengthen public knowledge and awareness of T&CM	(i) Study and assess the level of public knowledge and awareness on T&CM	Study report	2019-2020	MOH: T&CM Division , NIH
			(ii) Develop consumer information on the proper use of T&CM	Consumer information/ pamphlet developed	2019-2020	MOH: T&CM Division , Health Education Division
			(iii) Assume proactive roles in enhancing awareness on the T&CM Act 2016 and the safe use of T&CM	Activities organised on an annual basis	on-going (2018-2027)	MOH: T&CM Division
D. Unclear career pathways and low student	Unclear career pathways for T&CM professionals in both the public and private	Strengthen and professionalise T&CM health human resources	(i) Study the demand and supply of T&CM HHR and formulate strategies that	(i) Study report	2020-2022	MOH: T&CM Division , NIH

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
intakes	sectors is associated with:	(HHR)	support T&CM HHR planning	(ii) T&CM HHR planning incorporated into the national HHR masterplan	2022-2024	MOH: Planning Division , T&CM Division,
	(i) Undefined roles of T&CM practitioners in the health care system		(ii) Develop suitable career pathways for T&CM HHR in the public sector which includes T&CM practitioners, other health care professionals with T&CM expertise as well as regulators/ administrators in T&CM-related areas	(i) Guidelines for credentialing T&CM practitioners and other health care personnel	2018-2023	MOH: T&CM Division
	(ii) Lack of a public service scheme for T&CM practitioners			(ii) Guidelines to accreditate T&CM subject matter experts (SMEs)	2018-2024	MOH: T&CM Division , Human Resource Division Public Service Department
	(iii) The absence of data on the demand and supply of T&CM HHR which in turn hinders proper planning of graduate flow by T&CM education providers to meet market demands			(iii) Guidelines to recognise T&CM specialists	2018-2025	MOH: T&CM Division , Human Resource Division Public Service Department
	(iv) Low student intakes for T&CM courses which affects the long-term sustainability and prospect of T&CM education providers					

MEDICINAL MATERIALS AND PRODUCTS

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
A. Appropriateness and adequacy of current product regulatory system	<u>Issues related to current regulation</u> In the design of current legislation specific requirements for T&CM are unlikely to have been adequately considered.	Strengthen the regulatory system for T&CM products and medicinal materials	(i) Study the strengths and weaknesses of the existing regulatory system to guide the design of an appropriate regulatory framework for T&CM products and medicinal materials.	Study completed and appropriate modifications to the regulatory framework identified	2018-2020	MOH: National Pharmaceutical Regulatory Agency (NPRA) , T&CM Division, T&CM Council
	<u>Issues related to medicinal claims</u> Medicinal claims based on T&CM philosophy of use are not allowed. The claims permitted for T&CM products based on traditional use and limited to low level claims.			Registration system appropriate to T&CM products (e.g. based on philosophy of use) developed and implemented	2020-2027	MOH: NPRA , T&CM Division, T&CM Council
	<u>Issues related to prohibited/ banned ingredients</u> Some important					

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	medicinal materials that are frequently used in the practice of T&CM are listed under the Poisons List or banned/ restricted ingredients list in DRGD.		(ii) Evaluate the current supply chain of T&CM medicinal materials (e.g. import, export, distribution, handling etc.)	Study conducted	2022-2025	MOH: T&CM Division , NPRA, Institute for Medical Research (IMR) Ministry of Agriculture and Agro Based Industry (MOA)
	<u>T&CM medicinal materials are not directly regulated</u> There is no proper mechanism in place that monitor or regulate (1) the quality of T&CM medicinal materials on import, export and distribution, and (2) the personnel involved in these activities and dispense T&CM medicinal materials		(iii) Explore suitable mechanisms to improve quality assurance and address other issues raised in the distribution and handling of T&CM medicinal materials	Improve quality assurance and regulatory oversight of T&CM medicinal materials	2024-2027	MOH: T&CM Division , NPRA, Pharmacy Enforcement Division, IMR MOA

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
B. The need to develop resources and capacity in the industry, government, and tertiary sectors (i.e. university, research institute etc.) to strengthen quality assurance of T&CM medicinal materials and products	i) There is limited expertise, infrastructure and support available for the study and evaluation of T&CM products.	Strengthen the quality assurance of T&CM products and medicinal materials.	(i) Engage with various stakeholders to encourage and support the development of required resources and capabilities to undertake quality assurance testing.	Improvement in quality assurance of T&CM products	2020-2025	MOH: NPRA , T&CM Division, MOSTI
	ii) Insufficient funding to establish a comprehensive national pharmacopeia		(ii) Allocate sufficient resources to develop a comprehensive national T&CM pharmacopoeia	Funding allocated	2018-2027	MOA MOH: NPRA, T&CM Division, IMR, MOSTI
	iii) There is a need to improve the existing procurement procedures of herbal medicines used in T&CM units to ensure quality of herbal medicines purchased.		(iii) Develop an essential list of herbal medicines to be utilised in T&CM units at public health care facilities (with clear specification and approval mechanism)	Essential list developed	2018-2020	MOH: NPRA, T&CM Division , Pharmaceutical Services Divisions

RESEARCH

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
A. Research pathway for herbal products	Herbal product development in Malaysia is closely following the pharmaceutical drug development pathway	Encourage methodology development for herbal products	Further methodology development for a more comprehensive and suitable pathway for the R&D of herbal products	Increased number of herbal products that has undergone R&D	2020-2025	MOH: Institute for Medical Research (IMR) , National Pharmaceutical Regulating Agency (NPRA)
B. The regulation for herbal product development and registration	Categorisation of the herbal product and the level of claims allowed have been slowing the rate of the herbal product development	Review of current regulations for herbal product development and registration	Review the level of claim and the type of evidence required for the production of high value herbal products	Changes to the level of claim and the type of evidence required for the production of high value herbal products	2020	MOH: National Committee on R&D for Herbal Medicine (NRDHM) , NPRA
C. Inadequate emphasis given to T&CM research	Despite the high utilisation of T&CM in Malaysia, the overall investment for T&CM research is low because of a perceived lack of importance as a	Encourage participation in T&CM research by creating a conducive research environment and support	Promote and strengthen resource allocation for T&CM research	Increased budget allocated for T&CM research	2020-2025	MOH: T&CM Division , National Institutes of Health, MOH, Ministry of Science, Technology and Innovation (MOSTI) Higher Education Institutions

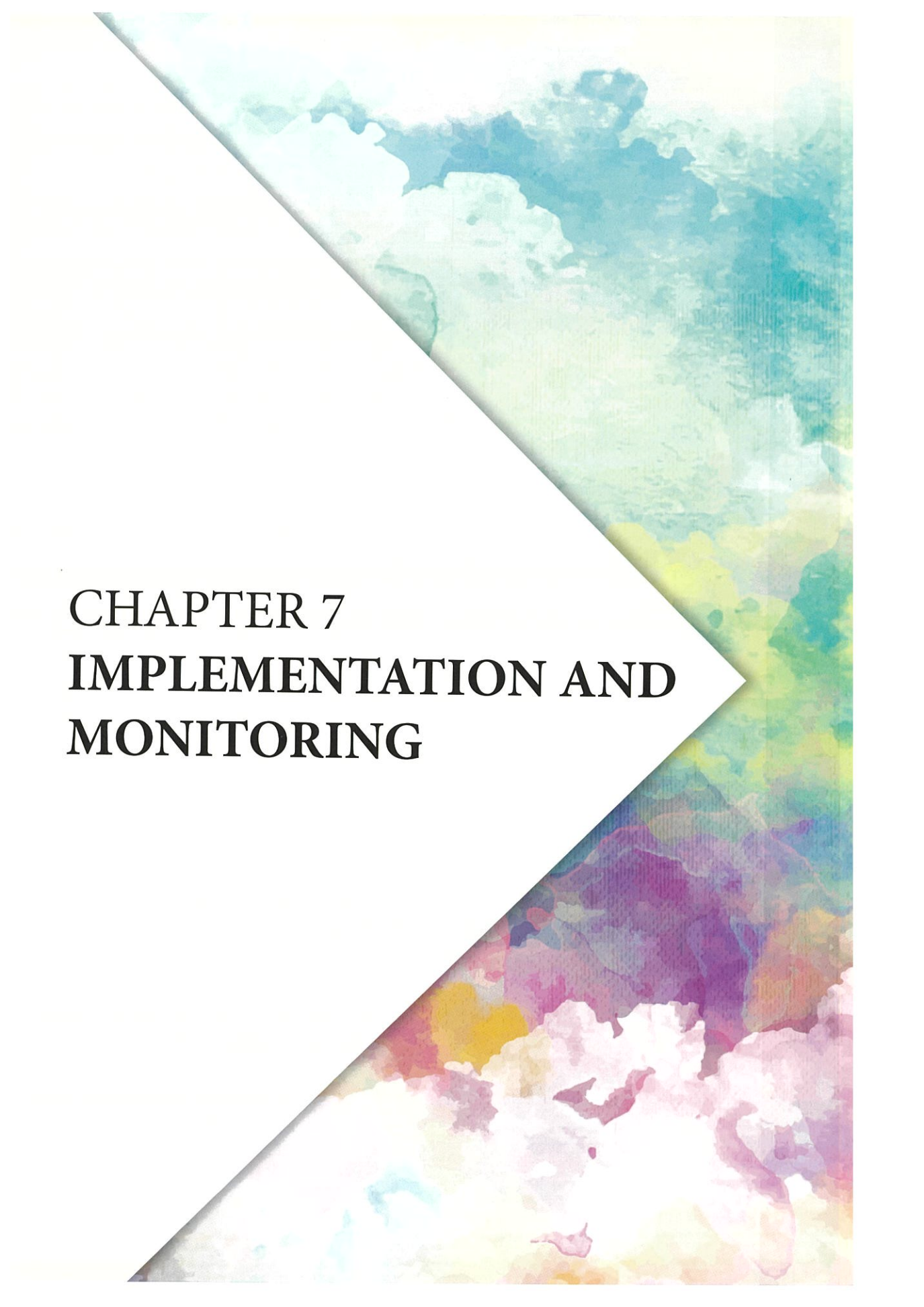
Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	national research priority					
D. Absence of national research priorities in T&CM and inadequacy of research conducted	(i) There are currently no champions for setting the R&D direction for T&CM research in the country and to coordinate research collaboration between the public and private sectors	Establish research priorities for T&CM R&D in Malaysia	Liaise with relevant stakeholders to develop a mechanism such as the formation of a national research committee to determine research priorities in T&CM and propose recommendations on identified issues	(i) Mechanism(s) developed	2019-2020	MOH: T&CM Division , NIH MOSTI MOA Higher Education Institutions
	(ii) Existing research on T&CM is largely focused on herbal product development and less on the actual practice of T&CM (iii) There is a need to establish appropriate research methodologies to study T&CM			(ii) List of research priorities produced	2020-2022	

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	(iv) There is a lack of high quality research that supports the development of evidence-based policies and efficient decision-making processes	Strengthen research in T&CM that contributes to evidence based policy formulation	(i) Incorporate T&CM as a study component in relevant national health surveys.	Number of research with T&CM components incorporated	on-going (2018-2027)	MOH: NIH, T&CM Division MOSTI Higher Education Institutions
			(ii) Strengthen capacity for translating research findings into evidence-based policies.	Increase in relevant research contributing to policy formulation	on-going (2018-2027)	MOH: T&CM Division , NIH MOSTI Higher Education Institutions
	(v) The poor dissemination of research findings in T&CM calls for improved mechanisms to share contemporary research data	Promote and improve dissemination of research findings	(i) Encourage organisation of national/ international activities (e.g. conference) to share research findings	Number of activities organised	on-going	MOH: T&CM Division , NIH MOSTI MOA Higher Education Institutions
			(ii) Facilitate establishment of a T&CM research registry	National registry developed	2022-2027	MOH: T&CM Division , NIH MOSTI Higher Education Institutions

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
E. Insufficient expertise, capacity and resources on T&CM R&D	The local capacity for conducting T&CM research is inadequate.	Strengthen local research capabilities	(i) Facilitate establishment of national/ international collaborations and networks to support T&CM R&D	Number of collaborations initiated	2022-2027	MOH: T&CM Division , NIH MOSTI MOA Higher Education Institutions
	The overall interest and participation of T&CM practitioners in research is low and those that are interested tend to lack the skills and knowledge to conduct high quality research.		(ii) Facilitate establishment of public-private partnerships that will optimise the use of existing expertise, capacity and resources for conducting research	Number of partnerships initiated	2022-2027	MOH: T&CM Division , NIH MOSTI MOA Higher Education Institutions
	Insufficient support and encouragement for T&CM research		(iii) Encourage higher degree research (PhD, Master) in tertiary sector	Steady growth in number of higher degree researchers	2020-2027	Higher Education Institutions MOH: T&CM Division, NIH MOSTI MOA
F. Research innovation and Intellectual Property (IP)	(i) The current regulatory framework does not encourage T&CM R&D and	Strengthen innovation and IP protection of research	Facilitate development of appropriate regulatory mechanisms that encourage R&D	Relevant regulatory reform that encourages	2022-2027	Intellectual Property Corporation of Malaysia (MyIPO) MOH: T&CM Division,

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
	innovation in Malaysia. Traditional practice knowledge is often in the public domain and, in the absence of standard mechanisms of IP protection	findings	and innovation and increased IP protection of research findings	R&D investment		MOSTI
	(ii) Awareness of IP protection and the importance of documenting traditional knowledge is low especially among indigenous communities in Malaysia	Strengthen efforts in preservation and conservation of traditional knowledge and resources	(i) Strengthen activities that promote IP awareness and protection related to the knowledge and resources of indigenous origin	Number of outreach activities organised	on-going (2018-2027)	MOH: T&CM Division Ministry of Natural Resources and Environment (NRE) Ministry of Agriculture and Agro Based Industry (MOA) Sabah Biodiversity Centre (SaBC) Sarawak Biodiversity Centre (SBC) MyIPO, MOSTI

Issues and Challenges	Brief Description	Strategy	Action Plan			
			Activity	Output Indicator	Target Timeline	Implementing Agency
			(ii) Provide guidance to encourage and promote proper documentation of traditional knowledge	Number of outreach activities organised	on-going (2018-2027)	MOA SaBC SBC MyIPO MOH: T&CM Division, NIH NRE

The background of the page is an abstract watercolor illustration. A diagonal line from the top-left to the bottom-right divides the image. The upper-left triangle is white, serving as a backdrop for the chapter title. The upper-right triangle is filled with soft, blended watercolor washes of light blue, teal, and pale green. The lower-right triangle features more vibrant and varied colors, including shades of purple, magenta, pink, and hints of yellow and orange, also in a watercolor style.

CHAPTER 7

IMPLEMENTATION AND

MONITORING

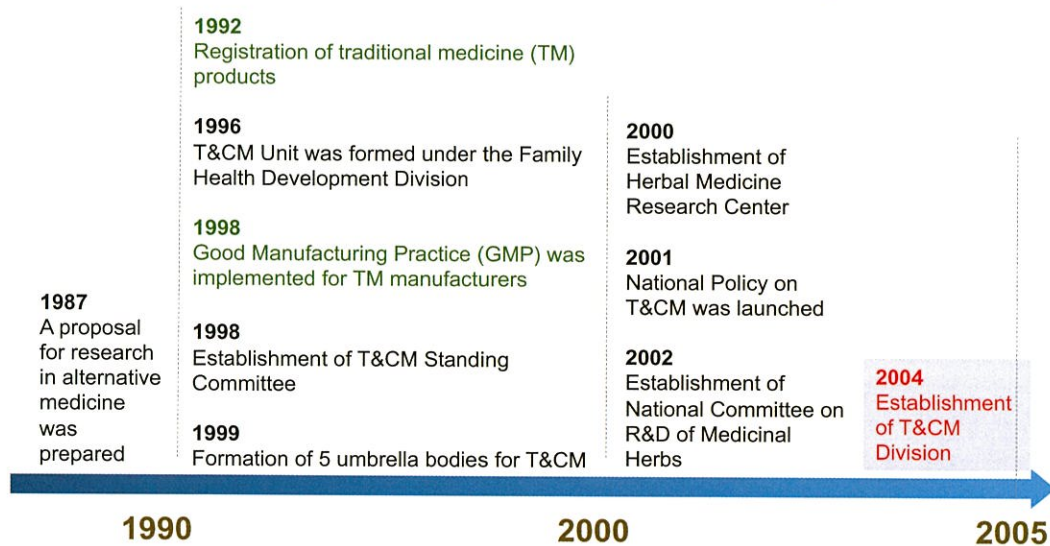
CHAPTER 7: IMPLEMENTATION AND MONITORING

This Blueprint is designed to guide an implementation period of 10 years, from 2018-2027. At the fifth year of implementation, an interim review will be conducted to assess the status of implementation and performance, to ensure the relevance of the proposed strategic actions and to make suitable revisions to the action plans in accordance to current recommendations and findings of studies.

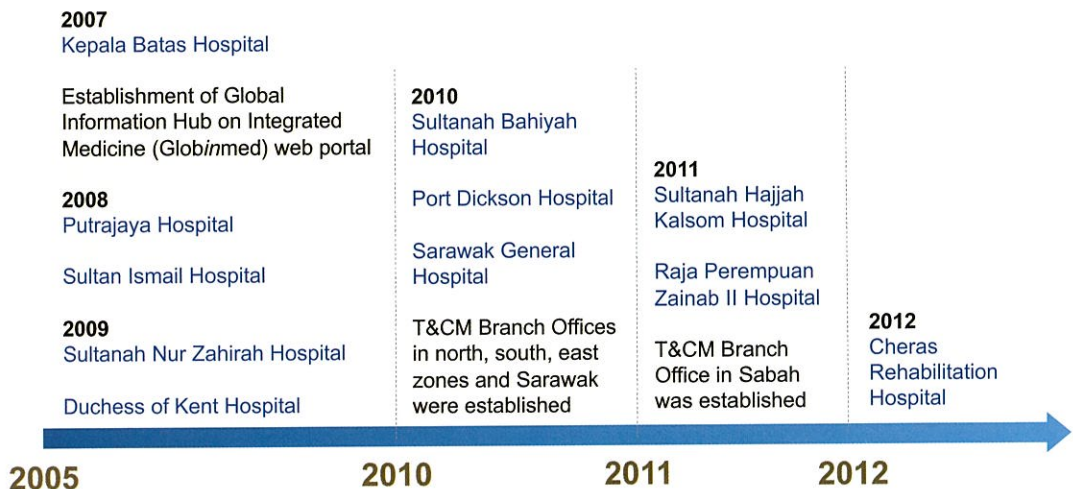
The T&CMD will serve as the secretariat to ensure that the activities and outcomes to be achieved follow the timeline proposed in the action plan. Biannual meetings will be conducted to discuss progress by the implementing agencies and to address any issues and challenges faced during the course of implementation. These meetings shall be chaired by the Deputy Director General of Health (Medical), Ministry of Health Malaysia.

CHRONOLOGY OF T&CM DEVELOPMENT IN MALAYSIA

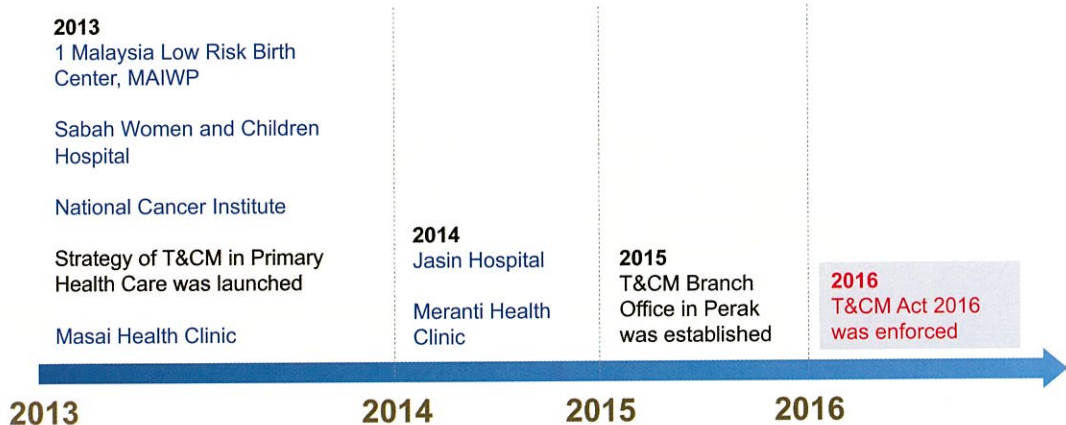
Important Milestones in the Development of T&CM in Malaysia



Important Milestones in the Development of T&CM in Malaysia



Important Milestones in the Development of T&CM in Malaysia



Note: National Pharmaceutical Control Bureau (NPCB) is currently known as the National Pharmaceutical Regulatory Agency (NPRA)

REGULATORY AUTHORITY IN T&CM

T&CM Sectors in Malaysia

Areas			Education and Training	
	Practice	Practitioner	Skills Sector	Higher Education Sector
Regulations	Traditional and Complementary Medicine Act 2016		National Skills Development Act 2006	Malaysian Qualifications Agency Act 2007
Regulatory Authority	T&CM Council		Department of Skills Development	Malaysian Qualifications Agency
	T&CM Division (as Secretariat to the Council)		Ministry of Human Resources	Ministry of Higher Education
	Ministry of Health			

T&CM Sectors in Malaysia

Areas				
	Products		Research	
Regulations	Sales of Drugs Act 1952 Poison Act 1952 Dangerous Drugs Act 1952			
Regulatory Authority	Drug Control Authority (DCA)		National Committee on Research and Development of Medicinal Herbs	
	National Pharmaceutical Regulatory Agency (NPRA)		National Institutes of Health (NIH)	
	Ministry of Health		Ministry of Health	

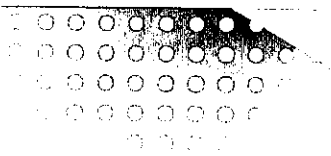
SCOPE OF THE T&CM ACT 2016 [ACT 775]

This act provides for the establishment of the Traditional and Complementary Medicine Council to regulate the traditional and complementary medicine services in Malaysia and to provide for matters connected therewith.

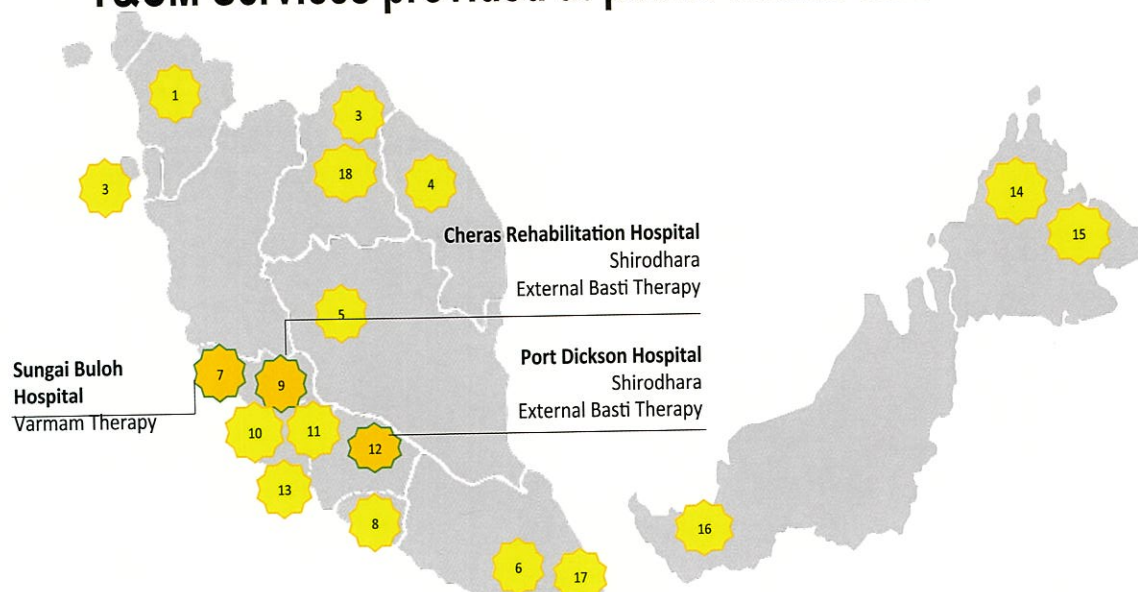
THE FUNCTION AND POWERS OF THE T&CM COUNCIL

The Council shall have the following functions:

- i. To advise the Minister on matters of national policy relating to traditional and complementary medicine practice;
- ii. To establish the eligibility requirements for each practice area;
- iii. To recognise qualifications conferred by any institutions of higher learning established under any written law in Malaysia or any institutions of higher learning recognised and authorized by an countries outside Malaysia for the purpose of registration under this Act;
- iv. To specify the appropriate academic qualifications or recognised skills certificate issued pursuant to the National Skills Development Act 2006 [Act 652] which are or is necessary before a person may apply to be a registered practitioner;
- v. To specify the necessary apprenticeship and training requirements including rules for undergoing apprenticeship, the scope of responsibilities and permitted conduct or activities of apprenticeship, duration of apprenticeship and post-qualification apprenticeship.
- vi. To register individuals who will provide traditional and complementary medicine services to the public;
- vii. To issue practicing certificates to registered practitioners who have satisfied the prescribed conditions and paid the prescribed fees;
- viii. To develop codes of professional conduct, rules relating to the professional conduct of registered practitioners, including penalties for breach of such codes or rules;
- ix. To develop, undertake, prescribe and mandate any matter relating to or connected with the practice of traditional and complementary medicine or the professionalism of such practice;

- 
- x. To specify, provide for and administer a complaints procedure and process;
 - xi. To develop rules upon which registered practitioners are to refer their patients to medical practitioners or dental practitioners, as the case may be;
 - xii. To obtain such relevant information from practitioners, and to provide the same to the Minister;
 - xiii. To carry out such functions as may be specified by this Act; and
 - xiv. To carry out all such other activities as may be directed by the Minister and such direction shall be consistent with the purposes of this Act.

T&CM Services provided at public health care facilities



1	Sultan Bahiyah Hospital	7	Sungai Buloh Hospital	13	National Cancer Institute
2	Raja Perempuan Zainab II Hospital	8	Jasin Hospital	14	Duchess of Kent Hospital
3	Kepala Batas Hospital	9	Cheras Rehabilitation Hospital	15	Likas Hospital
4	Sultanah Nur Zahirah Hospital	10	Putrajaya Hospital	16	Sarawak General Hospital
5	Sultanah Hajjah Kalsom Hospital	11	1Malaysia Low-Risk Maternity Center Putrajaya	17	Masai Health Clinic
6	Sultan Ismail Hospital	12	Port Dickson Hospital	18	Meranti Health Clinic

MALAYSIAN QUALIFICATIONS FRAMEWORK: QUALIFICATIONS AND LEVELS

Education programmes in Malaysia are categorised according to eight levels of qualifications and three sectors (pathways) in the Malaysian Qualifications Framework (MQF), each supported by lifelong learning.

MQF Levels	Sectors			Lifelong Learning
	Skills	Vocational and Technical	Higher Education	
8			Doctoral Degree	Accreditation of Prior Experiential Learning (APEL)
7			Masters Degree	
			Postgraduate Certificate & Diploma	
6			Bachelors Degree	
			Graduate Certificate & Diploma	
5	Advanced Diploma	Advanced Diploma	Advanced Diploma	
4	Diploma	Diploma	Diploma	
3	Skills Certificate 3	Vocational and Technical Certificate	Certificate	
2	Skills Certificate 2			
1	Skills Certificate 1			

LIST OF PRIVATE INSTITUTIONS OF HIGHER EDUCATION OFFERING T&CM COURSES IN MALAYSIA

(No public institutions currently deliver T&CM higher education)

No.	Institutions	Courses	Code
1.	INTI International University	Bachelor of Traditional Chinese Medicine (Hons)	A8767
2.	Management and Science University	Diploma in Traditional Chinese Medicine	A10021
		Bachelor in Traditional Chinese Medicine (Hons)	A10057
3.	Southern University College	Bachelor in Traditional Chinese Medicine 3+2 in collaboration with Tianjin University of Traditional Medicine, China.	A10709
		Bachelor of Traditional Chinese Medicine (Hons)	MQA/PA07016 (provisional accreditation)
4.	Universiti Tunku Abdul Rahman (UTAR) Sungai Long Campus	Bachelor of Chinese Medicine (Hons)	A11119
		Master of Medical Science (Chinese Medicine)	MQA/PA5352 (provisional accreditation)
5.	International Medical University (IMU)	Bachelor of Science (Honours) Chinese Medicine	A10260
		Bachelor of Science (Hons) Chiropractic	A9294
		Master in Clinical Chiropractic	MQA/PA8846 (provisional accreditation)
6.	Cyberjaya University College of Medical Sciences (CUCMS)	Bachelor of Homeopathic Medical Sciences (Hons)	A9621
7.	International Institute of Management and Technology (IIMAT)	Diploma in Traditional Chinese Medicine	MQA/PA07211 (provisional accreditation)
		Bachelor in Traditional Chinese Medicine (4.5+0) in collaboration with Fujian University of Traditional Chinese Medicine, China.	MQA/PA02396 (provisional accreditation)
8.	Xiamen University Malaysia	Bachelor of Medicine in Traditional Chinese Medicine	MQA/PA05710 (provisional accreditation)
9.	Institute of Physical Science, Culture & Arts (IPSCA)	Diploma in Malay Massage	MQA/PA4645 (provisional accreditation)
10.	Lincoln University College	Diploma in Traditional Chinese Medicine	MQA/PA0331 (provisional accreditation)

Source: <http://www2.mqa.gov.my/mqr/english/eakrResult.cfm> (dated 2nd October 2017)

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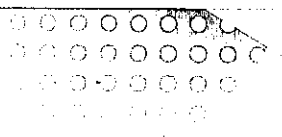
ACKNOWLEDGEMENT

- **World Health Organization (WHO)**
- **Ministry of Health (MOH)**
 - Director General of Health
 - Deputy Director General of Health (Medical)
 - Deputy Director General of Health (Public Health)
 - Deputy Director General of Health (Research and Technical Support)
 - Allied Health Sciences Division
 - Clinical Research Centre
 - Disease Control Division
 - Family Health Development Division
 - Global Health Unit, Office of the Deputy Director General of Health (Public Health)
 - Health Education Division
 - Herbal Medicine Research Centre, Institute for Medical Research
 - Institute for Health Behavioral Research
 - Institute for Health Systems Research
 - Institute for Public Health
 - Malaysia Health Promotional Board
 - Malaysia Healthcare Travel Council
 - Medical Development Division
 - Medical Practice Division
 - National Pharmaceutical Regulatory Agency
 - Pharmacy Policy and Strategic Planning Division
 - Pharmacy Practice & Development Division
 - Planning Division
 - Policy and International Relations Division
 - Public Health Development Division
- **Ministry of Agriculture and Agro-Based Industry**
 - Malaysian Agricultural Research and Development Institute (MARDI)
 - Herbal Development Division

- **Ministry of Domestic, Trade, Co-Operatives and Consumerism**
 - Policy and Strategic Planning Division
 - Intellectual Property Corporation of Malaysia (MyIPO)
- **Ministry of Higher Education**
 - Malaysian Qualifications Agency
- **Ministry of Human Resources**
 - Department of Skills Development
 - Policy Division
- **Ministry of International Trade and Industry**
 - Service Sector Development
- **Ministry of Natural Resources and Environment**
 - Forest Research Institute Malaysia (FRIM)
- **Ministry of Science, Technology and Innovation**
 - Policy and Strategic Coordination Division
- **Ministry of Tourism and Culture**
 - Policy Division (Culture)
 - Tourism Licensing Division
 - Tourism Policy and International Relations Division
- **Biotropics Malaysia Berhad**
- **Clinical Research Malaysia**
- **Cyberjaya University College of Medical Sciences**
- **Federation of Chinese Physicians and Acupuncturists Associations Malaysia**
- **Federation of Chinese Physicians and Medicine Dealers Associations of Malaysia**
- **Federation of Complementary and Natural Medical Associations Malaysia**
- ***Gabungan Pertubuhan Pengamal Perubatan Tradisional Melayu Malaysia***
- **Institute of Physical Science, Culture & Arts**
- **International Islamic University Malaysia**
- **International Medical University**

- **INTI International University**
- **Malaysia Organisations of Pharmaceutical Industries**
- **Malaysian Association of Traditional Indian Medicine**
- **Malaysian Chinese Medical Association**
- **Malaysian Medical Homeopathic Council**
- ***Persatuan Perubatan, Pengubatan dan Kebajikan Islam Malaysia***
- **Tung Shin Hospital**
- **Universiti Tunku Abdul Rahman**
- **Zenotec Pharma Sdn. Bhd.**

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