

**WHO GUIDELINES FOR  
QUALITY ASSURANCE  
OF  
TRADITIONAL MEDICINE  
EDUCATION  
IN THE WESTERN PACIFIC REGION**



**World Health  
Organization**

**Western Pacific Region**

**WHO GUIDELINES FOR  
QUALITY ASSURANCE OF  
TRADITIONAL MEDICINE EDUCATION  
IN THE WESTERN PACIFIC REGION**

WHO Library Cataloguing in Publication Data

WHO guidelines for quality assurance of traditional medicine education in the Western Pacific Region.

1. Medicine, Traditional.
2. Education, Medical -- standards.

ISBN 92 9061 199 5 (NLM Classification: WB 50)

© World Health Organization 2005

All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Publications of the World Health Organization can be obtained from Marketing and Dissemination, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 2476; fax: +41 22 791 4857; email: [bookorders@who.int](mailto:bookorders@who.int)). Requests for permission to reproduce WHO publications, in part or in whole, or to translate them – whether for sale or for noncommercial distribution – should be addressed to Publications, at the above address (fax: +41 22 791 4806; email: [permissions@who.int](mailto:permissions@who.int)). For WHO Western Pacific Regional Publications, request for permission to reproduce should be addressed to Publications Office, World Health Organization, Regional Office for the Western Pacific, P.O. Box 2932, 1000, Manila, Philippines, Fax. No. (632) 521-1036, email: [publications@wpro.who.int](mailto:publications@wpro.who.int)

# TABLE OF CONTENTS

Foreword	5
Introduction	7
Quality assurance in traditional medicine education	7
Use of the Regional guidelines	7
PART A	
Guidelines for basic traditional medicine education	11
Mission and objectives of basic traditional medicine education	11
Mission	11
General objectives	11
Objectives relating to knowledge	12
Objectives relating to skills	13
Objectives relating to attitudes as they affect professional behaviour	14
Educational programme	15
Educational principles	15
Design and implementation of the curriculum	16
Organization of topics and integration of the curriculum	17
Special health topics requiring emphasis	17
Elective periods	17
Teaching and learning methods	18
Clinical teaching settings	18

Assessment of educational outcomes	19
Student selection and support	20
Methods of student selection	20
Student support and facilities	20
Mechanisms for exit to alternative courses	21
Personal development of students	21
Academic staff/Faculty	21
Educational resources	22
Teaching facilities	22
Facilities in other teaching centres including hospitals	22
Research	22
Monitoring, evaluating and changing the curriculum	23
Governance and administration	24
Administration and structure within the university	24
Relationship of the TM schools with government health departments	24
Relationship with affiliated institutions and the community	25
Continuous renewal of TM schools	26
<b>PART B</b>	
Framework for establishing a quality assurance system	27
Definition of quality assurance	27
Quality assurance system	27
Benefits of quality assurance by accreditation	28
Best practice in quality assurance systems	29
Procedures in quality assurance of TM education	30
Annex 1: The WFME International Standards - Ammended for Traditional Medicine	33
Annex 2: Guideline for collecting data	59

# FOREWORD

Traditional medicine is now increasing in the Region and many doctors apply techniques used by traditional medicine in their daily practices. Academic education in traditional medicine has been offered in universities in China, Japan and the Republic of Korea for many years. Recently, more universities in other countries such as Australia and Hong Kong have introduced full-time degree courses on traditional medicine.

It is a great challenge to bring education on traditional medicine into university education systems. Compared to modern medicine, formal education on traditional medicine in universities has a very short history. Following increasing interests and utilization of traditional medicine by the public, the need for qualified practitioners becomes one of the key issues for ensuring the quality of services and safety of consumers. The introduction of licensing of practice of traditional medicine by governments in the Region also requires good education system on traditional medicine. A review of the 50 years' experience on formal education on traditional medicine in China and the Republic of Korea, and the identification of challenges faced by newly-established education on traditional medicine in more Western style countries will be useful for improving quality of education on traditional medicine in universities. The basic principle and new concept used by modern medical education could be introduced to education on traditional medicine.

Consequently, the Regional Committee of the WHO Regional Office for the Western Pacific, during its fifty-second session held in Brunei Darussalam from 10 to 15 September 2001, endorsed the Regional Strategy for Traditional Medicine. The Regional Strategy indicates the need to establish appropriate standards for traditional medicine for practice and products and recommends that training and education on traditional medicine in university medical schools and related educational establishments be provided.

By application of principles and criteria of the WHO Guidelines for Quality Assurance of Traditional Medicine Education in the Western Pacific Region, we aim to encourage national governments to adopt a quality assurance process in traditional medicine education in the Region.

Shigeru Omi, MD, Ph.D.  
Regional Director

# INTRODUCTION

## **Quality assurance in traditional medicine education**

The World Health Organization (WHO) has been actively advocating reform and improved medical education to meet the changing needs of health care. For the past three to four decades, WHO has intensified its efforts and has collaborated with a number of organizations and institutions at both global and regional levels to carry out activities aimed at improving human resources for health through better quality education. Significant among these are the growth of the Network of Community-oriented Institutions for the Medical and Health Sciences, the World Federation for Medical Education (WFME) conferences on medical education and their regional preparation and follow-ups, the global consensus consultation on quality in medical education, the establishment of centres for health personnel education, fellowships and numerous training workshops on medical education.

In the last two decades, world interest in traditional medicine has grown substantially, with many countries initiating efforts to better integrate and regulate these practices and therapeutic products. As a consequence of this growth in interest and consumption of traditional medicine products and clinical services there has also been a significant expansion in education programmes that focus on traditional medicine. However, to date most traditional medicine education programmes have operated in relative isolation within their own countries, and are often less well established than their orthodox medical counterparts, especially in the West. With increased international exchange and collaboration it is clear



that traditional medicine programmes can benefit from internationally accepted guidelines to quality assurance.

The need for quality assurance programmes for medical education worldwide has been recognized by the WFME, which has developed International Standards in Medical Education. The WFME standards provide a general quality assurance instrument for medical education that can be used by medical schools to identify their own needs and those of the communities they serve, to assess their strengths and weaknesses, and to consider their potential for reorientation to existing and emerging health imperatives. These international standards can be equally applied to traditional medicine education programmes and have been modified in this document to suit traditional medicine.

In 1988, the WHO Western Pacific Regional Office supported the formation of the Association for Medical Education in the Western Pacific (AMEWPR). Through various meetings of this association and through WHO workshops, the AMEWPR developed the WHO Guidelines for Quality Assurance of Basic Medical Education in the Western Pacific Region. The present document, WHO Guidelines for Quality Assurance of Traditional Medicine Education in the Western Pacific Region, is an amendment of the original version for basic medical education and was developed by a WHO Western Pacific Regional Office Working Group of traditional medicine educators in Melbourne, Australia in 2003. It provides guidelines on educational standards as well as a framework for establishing a quality assurance system.

## **Use of the Regional guidelines**

The WHO Guidelines for Quality Assurance of Traditional Medicine Education in the Western Pacific Region focuses on good practices in traditional medicine (TM) education and quality assurance. It is organized in two parts.

Part A provides recommendations for good educational practices that would enable traditional medicine schools in the Western Pacific Region (and elsewhere internationally) not only to meet acceptable standards at a basic level in each broad area, but also to develop further the quality of their programmes in line with consensus about best practice. The guidelines are complementary to the WFME international standards, which have been adjusted slightly to accommodate TM education. The international standards define basic and quality development standards across nine broad areas divided into 37 sub-areas. Each sub-area has operationally defined criteria that serve as performance indicators for quality assurance in TM education. Irrespective of the state of development

of the TM education system in a country, each TM school can use the operational guidelines to measure itself. The international guidelines given in Annex 1 can also be used as a template to develop national versions of the standards. The guidelines cover the same areas as the international standards, namely:

- mission and objectives,
- educational programme,
- assessment of students,
- student selection and support,
- academic staff,
- educational resources,
- programme evaluation,
- governance and administration, and
- continuous renewal.

In Part B of the guidelines, a framework is provided for establishing a quality assurance system at national, subregional or regional levels. The framework relies on peer review. Hence, those countries with only one or a few TM schools may wish to participate in regional quality assurance systems, with the decision arising from the evaluation process separately ratified in each individual country.



## **PART A**

# **GUIDELINES FOR BASIC TRADITIONAL MEDICINE EDUCATION**

Approaches to traditional medicine (TM) education need to be compatible with the health care system and the needs of the community, which vary from country to country. The guidelines below acknowledge that diversity between TM schools is desirable. Thus, the educational guidelines define the prerequisites for basic TM education in broad outline only. TM schools are expected to define their own educational objectives, which should be broadly consistent with those contained in these guidelines.

## **I. MISSION AND OBJECTIVES OF BASIC TM EDUCATION**

### **Mission**

Traditional medicine schools need to define their overall mission and objectives and make these known to their constituencies after consultation with major stakeholders in the parent university, the community and government. TM schools should then be responsible for developing and implementing curricula appropriate to their mission.

### **General objectives**

- (1) The overall goal of TM education is to produce broadly educated TM graduates with an appropriate foundation for general health practice in

TM and further studies in other specialties as appropriate, as well as for careers in public health, research, or health service administration.

- (2) Knowledge should be firmly based on the philosophy and theory of TM and scientific principles, and graduates should have developed appropriate learning and clinical skills, cultural values and professional attitudes.
- (3) Graduates in TM should be competent to practise safely, ethically and effectively under supervision while undergoing further vocational training to become independent practitioners. Graduates should be willing and trained to continue to develop their knowledge and skills throughout their professional careers.
- (4) Because the scope of knowledge relating to TM is growing, and because many aspects of practice are changing, emphasis in TM education should be placed on the principles underlying, critical thinking, decision-making and practical skills based on evidence and experience.
- (5) The quality of each TM school will ultimately be judged by the ability of its graduates to perform responsibly in the roles the community requires of its practitioners. This requires responsiveness to changing needs and a commitment to a lifetime of continuing education.

### **Objectives relating to knowledge**

Graduates completing TM education should have knowledge of the following areas:

- (1) The philosophy and theory of TM and relevant biological, behavioural and social sciences at a level sufficient to understand the basis for general health practice, and to incorporate the advances in knowledge that will occur over their working life.
- (2) The normal structure, function and development of the human body, and the mind and the spirit at all stages of life, their interactions and the factors that may disturb them.
- (3) Holistic approach to health enhancement, health promotion and the treatment and prevention of disease, as well as the importance of practicing and modelling self-care.

- (4) The aetiology, pathology, symptoms and signs, natural history, and prognosis of common mental and physical ailments in children, adolescents, adults and the aged from both a TM and modern medical perspective and an adequate knowledge of the conditions that require urgent treatment and/or referral.
- (5) Common diagnostic procedures, their uses and limitations from both a TM and modern medical perspective.
- (6) Management of common conditions with TM interventions that may include herbal, acupuncture, physical, nutritional, psychological and other therapies.
- (7) Adequate knowledge of maternal, child and family health.
- (8) The principles of public health, health education, disease prevention, amelioration of suffering and disability, rehabilitation, and the care of the dying.
- (9) Cultural and social factors affecting human relationships, the psychological well-being of patients and their families, and the interactions between humans and their social and physical environment.
- (10) Systems of provision of health care including their advantages and limitations, the costs associated with health care, the principles of efficient and equitable allocation of finite resources, and methods of meeting the health care needs of disadvantaged groups within the community.
- (11) The principles of ethics that relate to health care and the legal responsibilities of the TM profession.

### **Objectives relating to skills**

Graduates completing TM education should have developed the following skills to an appropriate level for their stage of training:

- (1) The ability to take a tactful, accurate, organized and problem-focused personal health history from a TM perspective, and a modern medicine perspective where appropriate.

- (2) The ability to perform an accurate physical and mental state examination.
- (3) The ability to choose the appropriate and practical clinical skills to apply in a given situation.
- (4) The ability to interpret and integrate the patient's medical history and physical examination findings to arrive at an appropriate diagnosis or differential diagnosis.
- (5) The ability to select the most appropriate and cost-effective diagnostic procedures.
- (6) The ability to formulate a holistic management plan, and to plan management in concert with the patient.
- (7) The ability to communicate clearly, considerately and sensitively and interact appropriately with patients, families, other health professionals and the community.
- (8) The ability to counsel sensitively and effectively, and to provide information in a manner that ensures patients, families and communities, where appropriate, can be truly informed when consenting to any procedure.
- (9) The ability to recognize serious illness and to manage and refer as appropriate in common emergency situations.
- (10) The ability to practise selective public health measures and to interpret health evidence in a critical and scientific manner, and to use libraries and other information resources to pursue independent inquiry relating to health problems.

### **Objectives relating to attitudes as they affect professional behaviour**

During basic TM education, students should acquire the following professional attitudes, which are regarded as fundamental to TM practice:

- (1) Respect for every human being, with an appreciation of the diversity of human background and cultural values.
- (2) An appreciation of the traditions and philosophical foundations of TM,

and the complexity of ethical issues related to human life and death including the allocation of scarce resources.

- (3) A desire to ease pain and suffering.
- (4) An awareness of the need to communicate with patients, their families and communities, and to involve them fully in planning the management of their health conditions.
- (5) A desire to achieve the optimal patient, family and community care, for the least cost to allow maximum benefit from the available resources.
- (6) Recognition that the health interests of the patient, family and the community are paramount.
- (7) A willingness to work effectively and appropriately in a team with other health care professionals.
- (8) An appreciation of the responsibility to maintain standards of TM practice at the highest possible level throughout a professional career.
- (9) An appreciation of the need to recognize when health problems exceed their capacity to deal with it safely and efficiently and of the need to refer to others for help when this occurs.
- (10) A realization that it is not always in the interests of patients, families and communities to do everything that is technically possible to make a precise diagnosis or to attempt to modify the course of an illness.
- (11) A commitment to appropriate reporting of adverse events related to the practice of TM and other health care modalities being used concurrently.

## **II. EDUCATIONAL PROGRAMME**

### **Educational principles**

There are many ways to achieve the goals and objectives of basic TM education outlined above. The minimum foundation for TM training requires a combination of knowledge, skills and attitudes. These attributes cannot be defined



simply as lists of factual knowledge, practical skills or attitudes as many competencies are related to more abstract qualities.

The challenge for all TM schools is to teach sufficient factual knowledge and practical skills, and also to encourage students to be enquiring, analytical and to develop desirable professional attitudes. Attempts should be made throughout the course to inculcate scrupulous ethical principles and to nurture and encourage the development of appropriate attitudes and professional conduct in the caring for patients, in relating to patients' families and to others involved in the care of patients.

TM schools should encourage student participation in the education process through self-directed learning and provide opportunities for studying some areas in-depth and for clinical experience in a range of settings.

Any traditional medical training must include a significant period of time devoted to personal contact with patients. During this time, the student has the opportunity to learn of the complex interplay of pathogenic processes, and of social, psychological and physical factors. Students need to witness the roles of family and community supports, and the influence of the physical and social environment in determining the expression and course of disease in different individuals. It is essential that students are taught in an environment where patients as a whole are considered rather than individual organ systems or diseases. Although the diagnosis and management of the person in health and diseases is a central function of the TM profession, students must also acquire appropriate knowledge, skills and attitudes relating to disease prevention, health promotion and public health medicine. Students must also be made aware of other health practices used by the community including their cultural significance and their benefits and dangers.

## **Design and implementation of the curriculum**

TM schools should be able to demonstrate that the content and balance of the curriculum and its assessment matches the explicit objectives of the TM school. They should also be able to demonstrate that they can implement the curriculum with the resources available to them. Systems of distribution of funds within the university or TM school should promote the cooperation of individual departments or disciplines and be responsive to recommendations of curriculum committees.

TM schools should have in place an identified group of individuals with

expertise and interest in TM education who are responsible for the overall curriculum, implementation and student assessment. Membership of this curriculum committee should include representatives of all the relevant disciplines, but the responsibilities of individuals should transcend specific discipline interests. TM schools should also have mechanisms to evaluate, review and change the curriculum.

## **Organization of topics and integration of the curriculum**

All topics should be relevant to the overall objectives of the TM programme and their relevance should be clear to the students. Practitioners should participate in the teaching of the theoretical components using combined teaching sessions based on clinical problems. This not only helps to enforce basic concepts, but also highlights the relevance of the basic principles to later clinical practice.

The level of knowledge and understanding, skills and attitudes expected of the students at each stage of the course should be defined. For example, if particular clinical skills are learnt in more than one year of the programme, the TM school should inform both the students and the staff of the standards required each year.

## **Special health topics requiring emphasis**

A number of special topics that are of considerable contemporary importance might require emphasis from time to time, for example, the specific health needs of indigenous people, minority ethnic groups and socially challenged groups; and environmental issues might need to be incorporated into the curriculum. The curriculum committee should develop a mechanism to identify local, national and regional needs, such as a consultative committee with broad community representation.

## **Elective periods**

Elective periods provide students with the opportunity to study certain areas in-depth or to experience the practice of medicine in other environments, including other countries and other settings, both urban and rural. These periods add greatly to the diversity of the students' experience and are to be encouraged, provided they are appraised and do not become predominant over training in core disciplines in local settings.

## **Teaching and learning methods**

Teaching and learning methods should be enjoyable and consistent with the school's educational objectives and should utilize sound educational principles including active student participation, problem solving and the development of communication skills. A school should incorporate educational strategies that promote student-centred learning, stimulate analytical and problem-solving skills, promote organization of knowledge, and foster lifelong learning.

Effective learning outcomes can be achieved using variety of teaching and learning methods including small group learning, peer learning, problem- and project-based learning. The use of a computer is becoming an integral part of professional practice. Computer-assisted learning should supplement other educational methods, and TM schools should ensure that students acquire an understanding and skills in the use of information and communication technology. The growing use of information and communication technology in teaching and learning can enhance the quality of learning by providing exciting and challenging learning environments and the opportunity for increased interaction and collaboration among learners.

## **Clinical teaching settings**

Students need to be exposed to a range of settings in which health care and health promotion are delivered. Where possible, TM students should obtain experience in working in a variety of Western medicine practice settings in order to develop an understanding of the range and scope of the diagnostic and therapeutic procedure as well as the practice guidelines, policies and regulations guiding the practice of Western medicine.

Over the course of their studies, students need broad and sustained exposure to a range of common health problems and should have the opportunity to work in a variety of settings that may include rural and suburban practices as well as community health centres, nursing homes and hospices. Ideally, students should also have exposure to hospital patients, including the complex and severe cases found in the tertiary teaching hospitals. Where clinical training opportunities are provided in other countries, language and cultural differences may need additional teaching and learning support.

As well as the common and transitory health problems encountered in community practice that are not seen in the hospital setting, students should also experience the effect of the family and the community environment on symptom expression and therapeutic responses.

The objectives and the assessment of all placements, in hospitals and in the community, should be clearly defined and known to both the students and the supervisors. The TM school needs to have mechanisms to ensure that all placements enable students to undertake a thorough study of a series of patients under the supervision of suitably qualified clinicians who understand the learning objectives and assessment criteria for the clinical placement.

Every effort must be made to provide appropriate support services, such as library services and accommodation in all clinical settings. The school should make a special effort to monitor the educational experiences in more remote clinical attachments.

### **III. ASSESSMENT OF EDUCATIONAL OUTCOMES**

Student learning is driven by assessment. It is therefore essential that methods of student assessment match and reinforce the goals and objectives of the TM programme. Assessment methods should be explicit and made known to students at the outset of the programme or the programme component. When a TM school changes the objectives of its TM programme, the assessment process should reflect these changes. Conventional assessment tools are unlikely to be helpful in measuring abilities such as independent learning, communication with patients, working as part of a health team and problem-solving skills. TM schools should therefore seek to develop valid and reliable instruments to assess all their specific educational objectives.

Assessment comprises summative assessment, which serves to determine student progression, and formative assessment, where assessment is for student guidance only. Methods of formative and summative assessment may include written assessments, oral assessments, projects, documentation of the performance of practical procedures (such as log books) and clinical case examinations.

Although the reproducibility (reliability) of clinical examinations is usually less than that of written examinations, clinical examinations, whether on real or simulated patients, should form a significant component of the overall process of assessment of the clinical disciplines. This is partly because of the incentive it provides to students to practice their clinical and other health practice skills in a variety of settings and partly because no other method has been shown to provide a more valid basis for the assessment of competencies. Greater reproducibility can be achieved by using simulated and standardized situations

and by testing specific skills in a structured, multiple-station assessment process, sometimes known as the “objective structured clinical examination”. Even when these forms of assessment are used, there may still be a need for an in-depth examination of a patient. This allows the TM school to assess the student’s ability to take a complete history, conduct a full clinical examination, interpret the findings and develop a management plan. Thus, assessment should include observation of the student performing a complete clinical and health skills evaluation.

## **IV. STUDENT SELECTION AND SUPPORT**

### **Methods of student selection**

There are many approaches to selecting students. The aim of selection is to identify those students most likely to complete the course successfully and become successful graduates. Whatever selection process is chosen, it must be clearly defined, consistent, defensible and, except where explicit affirmative action in favour of nominated disadvantaged groups is used, free of discrimination or bias. A description of the selection process should be published and available to potential students. Where a school uses student interview, it should ensure that it is structured to be as objective and fair as is possible. TM schools should monitor their selection process to ensure consistency with their stated objectives. Each TM school should have in place an appeal mechanism.

Although students need certain standards of literacy, numeracy, aptitude and scientific knowledge to complete a TM programme, the school should not demand an extensive and prescriptive list of prerequisite subjects for entry.

### **Student support and facilities**

The TM school should provide adequate student support services and physical facilities for student study and recreation. Student support services should include access to counselling services with trained staff, a student health service, student academic advisers, and more informal and readily accessible advice from individual academic staff. These services should provide support to maintain the physical and emotional well-being of students. Assistance with such matters as vocational counselling, the development of learning skills, and financial advice and support should also be available. If non-academic concerns become apparent,

there should be a formal mechanism that allows the school to notify the regulatory authority where such an authority exists, of such concerns about the ability of the student to meet the requirements of registration.

### **Mechanisms for exit to alternative courses**

TM schools should explore options for students who decide in the middle or later stages of the course that they do not wish to complete the TM programme. Students may wish to transfer to an alternative course, or complete a limited and prescribed amount of additional study to acquire an alternative degree.

### **Personal development of students**

The curriculum should encourage personal development of breadth and perspective in the student, rather than being focused too narrowly on vocational training. Elective periods, self-directed learning, advanced study units in optional areas and intercalated years of research or work experience locally or abroad can all help to develop this breadth.

## **V. ACADEMIC STAFF/FACULTY**

The quality of teaching staff is a vital ingredient of effective TM education. The faculty should consist of an appropriate blend of academic staff with expertise in TM clinical practice and medical sciences and, where possible, be actively involved in research and development of the TM field. Schools should develop transparent processes for recruiting and maintaining the best staff. This can be achieved by providing the best working conditions it can afford and by cooperative arrangements with appropriate health care services.

TM schools should have policies on staff development and review. Staff development should be formative, and provide opportunities for the mentoring of newer staff by more experienced staff.

In order to undertake and sustain curriculum evaluation and reform, TM schools need staff with educational expertise that can be directed not only to curriculum design but also to teaching and learning methods, staff development, student assessment and course evaluation. There are advantages in creating an education centre or unit within the school that can facilitate and support school-

wide developments. There are advantages in exploring the shared use of educational expertise and resources of other TM schools both nationally and internationally.

## **VI. EDUCATIONAL RESOURCES**

### **Teaching facilities**

TM schools should have access to well-equipped facilities to allow the achievement of educational objectives. This may include auditoriums, tutorial rooms, computers and audiovisual equipment, libraries, herbal specimens, TM laboratories and laboratory equipment, and clinical teaching facilities.

Libraries should maintain a collection of reference materials adequate to meet the curriculum and research needs of the students and the faculty staff. Supportive staff should be available to help the students. Access to computer-based reference systems should also be provided.

### **Facilities in other teaching centres including hospitals**

Institutions involved in teaching should provide suitable facilities for students. Hospital accommodation to allow students to stay overnight and witness acute presentation of disease and emergency management is desirable. There should be facilities for quiet study and for relaxation. Other teaching centres, such as community centres, also need appropriate resources.

### **Research**

TM education is greatly enhanced by an environment in which research is actively pursued. A research ethos attracts high calibre staff who can engender a milieu of critical appraisal and evaluation of existing knowledge, and who can contribute to the advancement of knowledge. Active researchers are also in the best position to interpret and apply advances in traditional medicine occurring elsewhere for the benefit of the local community. The resources they attract through research grants add to the number of available teachers and boost the morale of the teaching staff. Moreover, while teaching, service, and research commitments can be construed as competitive for the time of busy professionals, often the contact engendered by interdisciplinary teaching has beneficial effects for research collaboration and delivery of clinical services. Research in TM

may include educational studies and studies specific to sustainability of TM practice.

An active research environment provides students with opportunities to observe and participate in ongoing programmes either as mandatory or elective components of their curriculum. All students can benefit from direct contact with active researchers. Exposure to an atmosphere of curiosity and enquiry promotes the enduring ability to solve problems, analyse data and update knowledge. Students should have the opportunity for in-depth research experience to encourage an interest in research in their future careers. Alongside teaching, research and clinical practice should be mutually reinforcing; it does not follow that all academic staff can be equally active in all three domains.

## **VII. MONITORING, EVALUATING AND CHANGING THE CURRICULUM**

Each TM school should develop multiple sources and mechanisms for ongoing monitoring and evaluation of its curriculum, and teaching and learning. The focus of the evaluation should be on identifying strengths and opportunities for improvement. There should be mechanisms for feeding the information back to those responsible for designing and teaching individual courses or course components. Students should be kept informed of changes introduced as a result of evaluation.

The best method of evaluating the appropriateness and effectiveness of the TM programme is to examine the quality of the graduates. TM schools should have follow-up mechanisms for obtaining feedback about their graduates from a number of sources and act on it as appropriate.

## **VIII. GOVERNANCE AND ADMINISTRATION**

### **Administration and structure within the university**

There are many ways of administering a TM school. While the specific structure is the responsibility of the parent university, the TM school should be able to demonstrate sufficient control over its curriculum to allow its objectives to be achieved. Methods of management also differ between universities. A TM school should have sufficient autonomy to be able to direct resources in an



appropriate manner to achieve the overall objectives of the school. There should be a clear and direct line of responsibility for the curriculum and its resourcing. The head of academic unit, as the chief academic manager of the TM school, should be appropriately qualified by education and experience and have the managerial authority to provide leadership for the TM school.

The TM school must be able to demonstrate that its resources are sufficient to allow the school's objectives to be achieved and to maintain high standards of TM education for the proposed period of accreditation.

Grouping TM schools with schools of other health care professions (such as schools of nursing, physiotherapy, dentistry and pharmacy) in larger units of health sciences can result in economies of scale and interdisciplinary cooperation. Nevertheless, the specific needs of TM education differ in some ways from those of other health sciences. Although elements of basic TM education may appropriately be undertaken together with other branches of health care, the differing depth of knowledge required in many areas will usually necessitate specific courses designed for the TM curriculum.

Where medical science departments (such as biochemistry, physiology, anatomy, microbiology, pharmacology and behavioural science) are administered through other faculties, the TM school should be able to demonstrate that it exercises sufficient curriculum control to achieve the specific educational goals of TM education.

## **Relationship of the TM schools with government health departments**

TM education may depend on government support. It is essential that the TM school has a constructive relationship with the government health department. Health care institutions benefit from being centres for TM education and students benefit from access to patients and teachers within institutions administered through the government. TM schools need a supportive health authority and appropriate channels of communication to allow problems to be addressed and new initiatives to be developed.

## **Relationship with affiliated institutions and the community**

Ideally, there should be effective communication and liaison between the university, the TM school and the health care and research institutions, including those affiliated with the university. Ideally, TM schools should develop effective

communication and liaison with other higher education departments and schools, which may include traditional medicine, Western medicine, external health care, and cross-disciplinary education and research. Academic staff of TM schools working within health care institutions must be integrated into the service and administrative activities of the institution so that they have appropriate access to patients for teaching and health research and are able to maintain their clinical and health skills. Staff employed by the affiliated institutions must fulfil their teaching obligations. While formalized arrangements can protect these relationships, they are best developed by an ethos of reciprocity.

As it is important that institutions associated or affiliated with TM schools share the educational and research objectives of the TM school, the university should be represented on the relevant staff appointment committees, and preferably the board of management of its affiliated institutions. In turn, the institutions should be represented on the committees of the TM school, especially those appointing academic staff who will have clinical responsibilities.

A formal mechanism for high-level consultation between the TM school and affiliated institutions should ensure appropriate communication and liaison on matters of mutual interest, particularly those relating to teaching, research, clinical and health service. Consultation should include regular communication with the health department and formal agreements that meet the interests of both parties.

So that it can respond appropriately to the health care needs of the community, the TM school should have effective methods for communicating with and receiving the opinions of TM practitioners, health workers and recipients of health care in the community.

## **IX. CONTINUOUS RENEWAL OF TM SCHOOLS**

Communities increasingly demand more accountability from their public institutions, including TM schools. Communities need accessible TM practitioners who are competent to treat common conditions and to serve the needs of social groups such as the elderly, and the socially and geographically disadvantaged. TM school needs to focus more of their education, research and service on the requirements of health care delivery in their countries.

In addition to being responsive to these social needs, TM schools need to adapt continuously to changes in scientific, educational and health practices

worldwide. To meet these challenges TM schools need robust and dynamic procedures for reviewing, modifying and renewing their fundamental structures and activities.

## PART B

# FRAMEWORK FOR ESTABLISHING A QUALITY ASSURANCE SYSTEM

### Definition of quality assurance

An acceptable definition is obtained from the Quality Assurance Agency for Higher Education in the United Kingdom, which defines quality assurance as:

“...the totality of systems, resources and information devoted to maintaining and improving the quality and standards of teaching, scholarship and research, and of students’ learning experience.”

Institutions have to maintain and demonstrate quality because they are subject to increasingly fierce competition for students and resources. The markets in which they compete are themselves becoming increasingly competitive and well informed.

### Quality assurance system

There are two parts to a quality assurance system, an internal and an external quality assurance process. The most important part of the system is the TM school’s internal quality assurance process. The internal quality process is important because ultimately the quality of TM education depends on the interaction between the teacher and the student, and on the collective integrity and professionalism of the academic community.

A TM school develops its own goals and objectives, which are relevant to local and national health care needs, as well as the methods to achieve the goals. It then conducts periodic reviews to assess the extent to which goals are met within the framework of the guidelines, and whether the methods of teaching and learning, the facilities, and the financial and human resources for delivery of the curriculum support the goals. A TM school may invite external reviewers to assist in the review.

The other part of a quality assurance system is external quality assurance, which is practised in most countries through mechanisms such as accreditation, validation and audit. External scrutiny is needed to confirm that a TM school's responsibilities are being properly discharged.

In many countries, public money is allocated to TM education. Therefore, there must be reasonable evidence that competent and safe graduates are being produced to meet the needs of the nation. Also, because the number of students and TM schools are rapidly expanding, methodological approaches have to be adopted to provide guarantees of quality.

For the purpose of external quality assurance, most countries establish an independent agency that carries out its functions in a continuous, transparent and open way. The external agency is usually called the accrediting authority or quality assurance agency. The external agency usually includes in its quality process representatives of universities with TM schools, health professionals, health care authorities, registration authorities and members of the community. In most countries, the processes of the external agency incorporate the TM school's own internal quality assurance processes.

## **Benefits of quality assurance by accreditation**

Benefits flow from the feedback provided by external reviewers and report. Feedback includes the opinions of experts in particular fields of TM education, the shared experiences of colleagues who have faced similar challenges, the cross fertilization of ideas from institutions that have adopted different methods, and the local and national leverage that authoritative reports can provide in rectifying deficiencies.

A voluntary system of quality assurance of TM schools, among interested countries and institutions, based on the quality guidelines for TM education, can provide many benefits. Apart from the above benefits to the institution, a quality assurance mechanism also serves many useful purposes for its stakeholders,

which include prospective students, employers of the graduates of TM schools and, ultimately, the community that relies on the TM school to produce safe, effective and caring professional TM practitioners.

## **Best practice in quality assurance systems**

While universities have a long tradition of academic autonomy, which has ensured that fundamental educational principles are not compromised by other interest groups, in professional programmes such as TM, the community, the profession and government all have legitimate interests in the quality and orientation of the graduates of the programme.

A credible quality assurance process should therefore have the following attributes:

- It should include all major stakeholders.
- It should be open to external public scrutiny.
- It should be conducted in a consultative and consensus-building fashion.
- It should be collegial but not collusive.
- It should balance academic priorities with those of regulating authorities.
- It should identify both strengths and weaknesses.
- It should encourage innovation and re-orientation toward changing health needs.
- It should have the means and authority to implement its conclusions.
- It should monitor progress on an ongoing cycle of review.
- It should focus on the achievement of self-specified objectives.
- It should encourage a variety of methods of teaching and learning.
- It should ensure the choice of credible student assessment methods appropriate for the teaching and learning methods chosen.

- It should ensure there are adequate resources to deliver the curriculum.
- It should be concerned with good outcomes and not detailed specifications of curriculum contents.

## **Procedures in quality assurance of TM education**

The following processes are recommended for an effective quality assurance system.

### **1. Self-review by the TM school**

This process enables the TM school to reflect on and identify its strengths and weaknesses, and to decide on areas for change. In self-review, the TM school brings together representatives of the administration, the academic faculty, students, those associated with its teaching facilities and other constituents to collect and review data about the TM school and the educational programme, identify the strengths and problem areas and devise strategies to ensure that the strengths are maintained and problems are addressed. The educational guidelines are used to evaluate the TM school's sufficiency and organization of the resources as well as the performance and effectiveness of the programme. The TM school usually sets up an internal task force chaired by the responsible officer. Chairpersons are appointed for each section of the guidelines and a person who is familiar with the TM education process is appointed as coordinator of the self-study process. TM schools should comply with quality assurance processes within the institutions.

### **2. External quality assurance process**

In an external quality assurance process, the TM school submits its self-review report and database of information about the school and its programme to an external agency. The external agency constitutes a panel of four or five reviewers with a balance of expertise in the various disciplines, health services and community interests. A chairperson and secretary of the panel are usually appointed. Each member is responsible for reviewing specific sections of the TM school report and to identify issues they would like to be clarified.

A reviewer's visit is usually arranged by the TM school. The visit should be long enough to enable the reviewer to understand the educational programme, to visit the physical facilities and to interact with students, faculty, clinical staff

and administrators. The panel assesses whether the TM school is operating within the educational guidelines and is meeting its own objectives. Apart from observing firsthand the activities and facilities in the TM school, the other purpose of the visit is to clarify issues identified from the self-review report and database as well as to validate some of the information. The visit is a peer-review process and the review panel is professional, collegial and positive, not punitive. The aim is to be helpful to the TM school. The reviewers prepare an interim report that is given to the TM school for correction of errors of fact. A final report is then prepared.

### **3. Accreditation**

In countries that have an accreditation process, the report is submitted to the accrediting authority. The accrediting authority may make a final decision on accreditation based on the report. The period of accreditation, if granted, may vary from three to five years, or longer, depending on the duration of the programme.

Sometimes a TM school is given accreditation subject to certain conditions being addressed within specified periods. The accrediting authority may revisit a TM school in this category during the period of accreditation, depending on the periodic reports. If the TM school does not achieve the required progress, the accrediting authority may revoke or reduce the accreditation to a shorter period of time. It may also impose additional conditions.

### **4. Quality assurance in approving new TM programmes**

The development of a new TM programme is a complex undertaking. Before a new programme is set up, decisions need to be made about the workforce implications of the new programme, how it will be resourced, and the educational needs it will serve. It also needs to be decided whether the proposed programme is likely to meet the standards in the educational guidelines, whether it has demonstrated the commitment and capacity to manage the change process and how the new TM programme will have an impact on the educational and clinical resources available to existing TM schools. A panel of reviewers is usually constituted to study the broad outline of the new programme, which is submitted by the TM school well before the new programme is to be introduced. A site visit may be arranged prior to commencement of the programme.





# ANNEX 1

## THE WFME INTERNATIONAL STANDARDS – AMENDED FOR TRADITIONAL MEDICINE

### DEFINITIONS

The World Federation of Medical Education (WFME) recommended a comprehensive set of international standards in basic medical education. These are provided here with the only major change being the inclusion of item 2.3 on traditional medicine (TM) theory. The standards are structured according to nine **areas** with a total of 37 **sub-areas**.<sup>1</sup>

**AREAS** are defined as broad components in the structure and process of TM education and cover:

- (1) Mission and objectives
- (2) Educational programme
- (3) Assessment of students
- (4) Students
- (5) Academic staff/faculty

- (6) Educational resources
- (7) Programme evaluation
- (8) Governance and administration
- (9) Continuous renewal

**SUB-AREAS** are defined as specific aspects of an area, corresponding to performance indicators.

**STANDARDS** are specified for each sub-area using two levels of attainment:

- **Basic standard.** This means that the standard must be met by every TM school and fulfilment demonstrated during evaluation of the school.

Basic standards are expressed by a “**must**”.

- **Standards for quality development.** This means that the standard is in accordance with international consensus about best practice for TM schools and basic TM education. TM schools should be able to demonstrate fulfilment of some or all of these or that initiatives to do so have or will be taken. Fulfilment of these standards will vary with the stage of development of the TM schools, their resources and educational policy. Even the most advanced schools might not comply with all standards.

Standards for quality development are expressed by a “**should**”.

**ANNOTATIONS** are used to clarify, amplify or exemplify expressions in the standards.

## 1. MISSION AND OBJECTIVES

### 1.1 Statements of mission and objectives

#### **Basic standard:**

The TM school **must** define its mission and objectives and make them known to its constituency. The mission statements and objectives **must** describe the educational process resulting in a TM doctor competent at a basic level, with an appropriate foundation for further training in any branch of TM and in keeping with the roles of doctors in the health care system.

#### **Quality development:**

The mission and objectives **should** encompass social responsibility, research attainment, community involvement, and address readiness for postgraduate TM training.

#### **Annotations:**

- *Statements of mission and objectives* would include general and specific issues relevant to institutional, national and regional policy.
- *Any branch of TM* refers to all types of TM practice and TM research.
- *Postgraduate TM training* would include pre-registration training, vocational training, specialist training and continuing TM education/professional development.

### 1.2 Participation in formulation of Mission and Objectives

#### **Basic standard:**

The mission statement and objectives of a TM school **must** be defined by its principal stakeholders.

### **Quality development:**

Formulation of mission statements and objectives **should** be based on input from a wider range of stakeholders.

### **Annotations:**

- *Principal stakeholders* would include the dean, members of the faculty board/council, the university, governmental authorities and the profession.
- *A wider range of stakeholders* would include representatives of academic staff, students, the community, education and health care authorities, professional organizations and postgraduate educators.

## **1.3 Academic autonomy**

### **Basic standard:**

There **must** be a policy for which the administration and faculty/academic staff of the TM school are responsible, within which they have freedom to design the curriculum and allocate the resources necessary for its implementation.

### **Quality development:**

The contributions of all academic staff **should** address the actual curriculum and the educational resources **should** be distributed in relation to the educational needs.

## **1.4 Educational outcome**

### **Basic standard:**

The medical school **must** define the competencies that students should exhibit on graduation in relation to their subsequent training and future roles in the health system.

### **Quality development:**

The linkage of competencies to be acquired by graduation with that to be acquired in postgraduate training **should** be specified. Measures of, and information about, competencies of the graduates **should** be used as feedback to programme development.

### **Annotations:**

- *Educational outcome* would be defined in terms of the competencies the students must acquire before graduation.
- *Competencies* within TM and TM practice would include knowledge and understanding of the basic, clinical, behavioural and social sciences, including public health and population medicine, and medical ethics relevant to the practice of TM; attitudes and clinical skills (with respect to establishment of diagnoses, practical procedures, communication skills, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning and problem solving); and the ability to undertake lifelong learning and professional development.

## **2. EDUCATIONAL PROGRAMME**

### **2.1 Curriculum models and instructional methods**

#### **Basic standard:**

The TM school **must** define the curriculum models and instructional methods employed.

#### **Quality development:**

The curriculum and instructional methods **should** ensure the students have responsibility for their learning process and should prepare them for lifelong, self-directed learning.

**Annotations:**

- *Curriculum models* would include discipline, system, problem- and community-based models, etc.
- *Instructional methods* encompass teaching and learning methods
- *Curriculum and instructional methods* should be based on sound learning principles and should foster the ability to participate in the scientific development of TM as professionals and future colleagues.

## **2.2 Scientific method**

**Basic standard:**

The TM school **must** teach the principles of scientific method and evidence-based medicine, including analytical and critical thinking, throughout the curriculum.

**Quality development:**

The curriculum **should** include elements for training students in scientific thinking and research methods.

**Annotation:**

- *Training in scientific thinking and research methods* may include the use of elective research projects to be conducted by TM students.

## **2.3 Traditional medicine theory**

**Basic standard:**

The TM school **must** identify and incorporate in the curriculum the contributions of traditional medicine theories fundamental to acquiring and applying clinical practice in TM.

### Quality development:

The contributions in the curriculum of the traditional medicine theories **should** be adapted to the scientific, technological and clinical developments as well as to the health needs of society.

### Annotation:

- *Traditional medicine theories* would, depending on local needs, interests and traditions, typically include reference to all prominent TM theories used in the TM practice.

## 2.4 Basic biomedical sciences

### Basic standard:

The TM school **must** identify and incorporate in the curriculum the contributions of the basic biomedical sciences to create understanding of the scientific knowledge, concepts and methods fundamental to acquiring and applying clinical science.

### Quality development:

The contributions in the curriculum of the biomedical sciences **should** be adapted to the scientific, technological and clinical developments as well as to the health needs of society.

### Annotation:

- *Basic biomedical sciences* would, depending on local needs, interests and traditions, typically include anatomy, biochemistry, physiology, biophysics, molecular biology, cell biology, genetics, microbiology, immunology, pharmacology, pathology, etc.



## **2.5 Behavioural and social sciences and medical ethics**

### **Basic standard:**

The TM school **must** identify and incorporate in the curriculum the contributions of the behavioural sciences, social sciences, medical ethics and medical jurisprudence that enable effective communication, clinical decision-making and ethical practices.

### **Quality development:**

The contributions of the behavioural and social sciences and medical ethics **should** be adapted to scientific developments in health care, to changing demographic and cultural contexts and to health needs of society.

### **Annotations:**

- *Behavioural and social sciences* would, depending on local needs, interests and traditions, typically include medical psychology, medical sociology, biostatistics, epidemiology, hygiene and public health, community medicine, etc.
- *Behavioural and social sciences and medical ethics* should provide the knowledge, concepts, methods, skills and attitudes necessary for understanding socio-economic, demographic and cultural determinants of causes, distribution and consequences of health problems.

## **2.6 Clinical sciences and skills**

### **Basic standard:**

The TM school **must** ensure that students have patient contact and acquire sufficient clinical knowledge and skills to assume appropriate clinical responsibility upon graduation.

### **Quality development:**

Every student **should** have early patient contact leading to participation in patient care. The different components of clinical skills training **should** be structured according to the stage of the study programme.

### **Annotations:**

- *Clinical sciences* would, depending on local needs, interests and traditions, typically include internal medicine (with subspecialties), dermatology and venereology, general practice/family medicine, geriatrics, gynaecology & obstetrics, laboratory medicine, neurology, oncology, ophthalmology, otorhinolaryngology, paediatrics, pathological anatomy, physiotherapy and rehabilitation medicine, psychiatry, etc.
- *Clinical skills* include history taking, physical examination, procedures and investigations, emergency practices and communication skills.
- *Appropriate clinical responsibility* would include health promotion, disease prevention and patient care.
- *Participation in patient care* would include relevant community experience and teamwork with other health professions.

## **2.7 Curriculum structure, composition and duration**

### **Basic standard:**

The TM school **must** describe the content, extent and sequencing of courses and other curriculum elements, including the balance between the core and optional content, and the role of health promotion, preventive medicine and rehabilitation in the curriculum, as well as the interface with modern medical practices.

### **Quality development:**

Basic sciences and clinical sciences **should** be integrated in the curriculum.

### **Annotations:**

- *Core and optional content* refers to a curriculum model with a combination of compulsory elements and electives or special options. The ratio between the two components can vary.
- *Integration of disciplines* would include both horizontal (concurrent) and vertical (sequential) integration of curricular components.

## 2.8 Programme management

### Basic standard:

A curriculum committee **must** be given the responsibility and authority for planning and implementing the curriculum to secure the objectives of the TM school.

### Quality development:

The curriculum committee **should** be provided with resources for planning and implementing methods of teaching and learning, student assessment, course evaluation, and for innovations in the curriculum. There **should** be representation on the curriculum committee of staff, students and other stakeholders.

### Annotations:

- *The authority* of the curriculum committee would include supremacy over specific departmental and subject interests, and the control of the curriculum within existing rules and regulations as defined by the governance structure of the institution and governmental authorities.
- *Other stakeholders* would include other participants in the educational process, representatives of other health professions or other faculties in the university.

## 2.9 Linkage with TM practice and the health care system

### Basic standard:

Operational linkage **must** be assured between the educational programme and the subsequent stage of training or practice that the student will enter after graduation.

### Quality development:

The curriculum committee **should** seek input from the environment in which graduates will be expected to work and **should** undertake programme modification in response to feedback from the community and society.

**Annotations:**

- *Subsequent stages of training* would include pre-registration training and specialist training.
- *Operational linkage* would imply clear definition and description of the elements and their interrelations in the various stages of training and practice, and should pay attention to the local, national, regional and global context.

### **3. ASSESSMENT OF STUDENTS**

#### **3.1 Assessment methods**

**Basic standard:**

The TM school **must** define and state the methods used for assessment of its students, including the criteria for passing examinations.

**Quality development:**

The reliability and validity of assessment methods **should** be documented and evaluated and new assessment methods developed.

**Annotations:**

- The *definition of methods used for assessment* may include consideration of the balance between formative and summative assessment, the number of examinations and other tests, the balance between written and oral examinations, the use of normative and criterion-referenced judgements, and the use of special types of examinations, e.g. objective structured clinical examinations (OSCE).
- *Evaluation of assessment methods* may include an evaluation of how they promote learning.
- *New assessment methods* may include the use of external examiners.

## **3.2 Relation between assessment and learning**

### **Basic standard:**

Assessment principles, methods and practices **must** be clearly compatible with educational objectives and **must** promote learning.

### **Quality development:**

The number and nature of examinations **should** be adjusted by integrating assessments of various curricular elements to encourage integrated learning. The need to learn excessive amounts of information **should** be reduced and curriculum overload prevented.

### **Annotation:**

- *Adjustment of number and nature of examinations* would include consideration of avoiding negative effects on learning.

## **4. STUDENTS**

### **4.1 Admission policy and selection**

#### **Basic standard:**

The TM school **must** have an admission policy that includes a clear statement on the process of selection of students.

#### **Quality development:**

The admission policy **should** be reviewed periodically, based on relevant societal and professional data, to comply with the social responsibilities of the institution and the health needs of community and society. The relationship between selection, the educational programme and desired qualities of graduates **should** be stated.

**Annotations:**

- *The statement on process of selection of students* would include both rationale and methods of selection and may include description of a mechanism for appeal.
- *The review of admission policies* and the recruitment of students would include improvement of selection criteria, to reflect the capability of students to become doctors and to cover the variations in required competencies related to diversity of medicine.

## 4.2 Student intake

**Basic standard:**

The size of student intake **must** be defined and related to the capacity of the TM school at all stages of education and training.

**Quality development:**

The size and nature of student intake **should** be reviewed in consultation with relevant stakeholders and regulated periodically to meet the needs of community and society.

**Annotations:**

- *The needs of community and society* may include consideration of balanced intake according to gender, ethnicity and other social requirements, including the potential need of a special admission policy for underprivileged students.
- *Stakeholders* would include those responsible for human resources in the national health sector.

## 4.3 Student support and counselling

**Basic standard:**

A programme of student support, including counselling, **must** be offered by the TM school.

### **Quality development:**

Counselling **should** be provided based on monitoring of student progress and should address social and personal needs of students.

### **Annotation:**

- *Social and personal needs* would include academic support, career guidance, health problems and financial matters.

## **4.4 Student representation**

### **Basic standard:**

The TM school **must** have a policy on student representation and appropriate participation in the design, management and evaluation of the curriculum, and in other matters relevant to students.

### **Quality development:**

Student activities and student organizations **should** be encouraged and facilitated.

### **Annotation:**

- *Student activities and organizations* would include student self-government, student representation on educational committees and other relevant bodies, as well as social activities.

## **5. ACADEMIC STAFF/FACULTY**

### **5.1 Recruitment policy**

### **Basic standard:**

The TM school **must** have a staff recruitment policy which outlines the type, responsibilities and balance of academic staff required to deliver the curriculum adequately, including the balance between TM and non-TM academic

staff, and between full-time and part-time staff, the responsibilities of which **must** be explicitly specified and monitored.

### **Quality development:**

A policy **should** be developed for staff selection criteria, including scientific, educational and clinical merit, relationship to the mission of the institution, economic considerations and issues of local significance.

### **Annotations:**

- *Balance of academic staff/faculty* would include staff with joint responsibilities in the basic and clinical sciences, in the university and health care facilities, and teachers with dual appointments.
- *Issues of local significance* may include gender, ethnicity, religion, language and other issues of relevance to the school.
- *Merit* can be measured by formal qualifications, professional experience, research output, teaching, peer recognition, etc.

## **5.2 Staff policy and development**

### **Basic standard:**

The TM school **must** have a staff policy that addresses a balance of capacity for teaching, research and service functions, and ensures recognition of meritorious academic activities, with appropriate emphasis on both research attainment and teaching qualifications.

### **Quality development:**

The staff policy **should** include teacher training and development and teacher appraisal.

Teacher-student ratios relevant to the various curricular components and teacher representation on relevant bodies **should** be taken into account.



**Annotations:**

- *Service functions* would include clinical duties in the health care system, administrative and leadership functions, etc.
- *Recognition of meritorious academic activities* would be by rewards, promotion and/or remuneration.

## **6. EDUCATIONAL RESOURCES**

### **6.1 Physical facilities**

**Basic standard:**

The TM school **must** have sufficient physical facilities for the staff and the student population to ensure that the curriculum can be delivered adequately.

**Quality development:**

The learning environment for the students **should** be improved by regular updating and extension of the facilities to match developments in educational practices.

**Annotation:**

- *Physical facilities* would include lecture halls, tutorial rooms, laboratories, libraries, information technology facilities, recreational facilities, etc.

### **6.2 Clinical training resources**

**Basic standard:**

The TM school **must** ensure adequate clinical experience and the necessary resources, including sufficient patients and clinical training facilities.

## Quality development

The facilities for clinical training **should** be developed to ensure clinical training that is adequate to the needs of the population in the geographically relevant area.

### Annotations:

- *Clinical training facilities* would include hospitals (adequate mix of primary, secondary and tertiary), ambulatory services, clinics, primary health care settings, health care centres and other community health care settings as well as skills laboratories.
- *Facilities for clinical training* should be evaluated regularly for their appropriateness and quality regarding TM training programmes.

## 6.3 Information technology

### Basic standard:

The TM school **must** have a policy that addresses the evaluation and effective use of information and communication technology in the educational programme.

### Quality development:

Teachers and students **should** be enabled to use information and communication technology for self-learning, accessing information, managing patients and working in health care systems.

### Annotations:

- A policy regarding the use of computers, internal and external networks and other means of *information and communication technology* would include coordination with the library services of the institution.
- The use of *information and communication technology* may be part of education for evidence-based medicine and in preparing the students for continuing medical education and professional development.

## **6.4 Research**

### **Basic standard:**

The TM school **must** have a policy that fosters the relationship between research and education and must describe the research facilities and areas of research priorities at the institution.

### **Quality development:**

The interaction between research and education activities **should** be reflected in the curriculum and influence current teaching and **should** encourage and prepare students to engagement in TM research and development.

## **6.5 Educational expertise**

### **Basic standard:**

The TM school **must** have a policy on the use of educational expertise in planning TM education and in development of teaching methods.

### **Quality development:**

There **should** be access to educational experts and evidence demonstrated of the use of such expertise for staff development and for research in the discipline of TM education.

### **Annotations:**

- *Educational expertise* would deal with problems, processes and practice of TM education and would include TM doctors with research experience in TM education, educational psychologists, sociologists, etc. It can be provided by an education unit at the institution or be acquired from another national or international institution.
- *TM education research* investigates the effectiveness of teaching and learning methods, and the wider institutional context.

## 6.6 Educational exchanges

### Basic standard:

The TM school **must** have a policy for collaboration with other educational institutions and for the transfer of educational credits.

### Quality development:

Regional and international exchange of academic staff and students **should** be facilitated by the provision of appropriate resources.

### Annotations:

- Transfer of *educational credits* can be facilitated through active programme coordination between medical schools.
- *Other educational institutions* would include other TM schools or public health schools, other faculties, and institutions for education of other health and health-related professions.

## 7. PROGRAMME EVALUATION

### 7.1 Mechanisms for programme evaluation

#### Basic standard:

The TM school **must** establish a mechanism for programme evaluation that monitors the curriculum and student progress, and ensures that concerns are identified and addressed.

#### Quality development:

Programme evaluation **should** address the context of the educational process, the specific components of the curriculum and the general outcome.

### **Annotations:**

- *Mechanisms for programme evaluation* would imply the use of valid and reliable methods and requires that basic data about the TM curriculum are available. Involvement of experts in TM education would further broaden the base of evidence for quality of TM education at the institution.
- *Identified concerns* would include problems presented to the curriculum committee.
- *The context of the educational process* would include the organization and resources as well as the learning environment and culture of the TM school.
- *Specific components for programme evaluation* would include course description and student performance.
- *General outcomes* would be measured, e.g. by career choice and postgraduate performance.

## **7.2 Teacher and student feedback**

### **Basic standard:**

Both teacher and student feedback **must** be systematically sought, analysed and responded to.

### **Quality development:**

Teachers and students **should** be actively involved in planning programme evaluation and in using its results for programme development.

## **7.3 Student performance**

### **Basic standard:**

Student performance **must** be analysed in relation to the curriculum and the mission and objectives of the TM school.

### **Quality development:**

Student performance **should** be analysed in relation to student background, conditions and entrance qualifications, and **should** be used to provide feedback to the committees responsible for student selection, curriculum planning and student counselling.

### **Annotation:**

- Measures of *student performance* would include information about average study duration, scores, pass and failure rates at examinations, success and dropout rates, student reports about conditions in their courses, as well as time spent by the students on areas of special interest.

## **7.4 Involvement of stakeholders**

### **Basic standard:**

Programme evaluation **must** involve the governance and administration of the TM school, the academic staff and the students.

### **Quality development:**

A wider range of stakeholders **should** have access to results of course and programme evaluation, and their views on the relevance and development of the curriculum should be considered.

### **Annotation:**

- *A wider range of stakeholders* would include educational and health care authorities, representatives of the community, professional organizations and postgraduate educators.

## **8. GOVERNANCE AND ADMINISTRATION**

### **8.1 Governance**

#### **Basic standard:**

Governance structures and functions of the TM school **must** be defined, including their relationships within the university.

#### **Quality development:**

The governance structures **should** set out the committee structure, and reflect representation from academic staff, students and other stakeholders.

#### **Annotations:**

- *The committee structure* would include a curriculum committee with the authority to design and manage the TM curriculum.
- *Relationships within the university* and its governance structures should be specified, if the TM school is part of or affiliated to a university.
- *Other stakeholders* would include the health care sector and the public.

### **8.2 Academic leadership**

#### **Basic standard:**

The responsibilities of the academic leadership of the TM school for the TM educational programme **must** be clearly stated.

#### **Quality development:**

The academic leadership **should** be evaluated at defined intervals with respect to achievement of the mission and objectives of the school.

### 8.3 Educational budget and resource allocation

#### Basic standard:

The TM school **must** have a clear line of responsibility and authority for the curriculum and its resourcing, including a dedicated educational budget.

#### Quality development:

There **should** be sufficient autonomy to direct resources, including remuneration of teaching staff, in an appropriate manner, in order to achieve the overall objectives of the school.

#### Annotation:

- *The educational budget would depend on the budgetary practice in each institution and country.*

### 8.4 Administrative staff and management

#### Basic standard:

The administrative staff of the TM school **must** be appropriate to support the implementation of the school's educational programme and other activities and to ensure good management and deployment of its resources.

#### Quality development:

The management **should** include a programme of quality assurance and the management should submit itself to regular review.

### 8.5 Interaction with health sector

#### Basic standard:

The TM school **must** have a constructive interaction with the health and health-related sectors of society and government.



## **Quality development**

Collaboration with partners of the health sector **should** be formalized.

### **Annotations:**

- *The health sector* would include the health care delivery system, whether public or private, medical research institutions, etc.
- *The health-related sector* would, depending on issues and local organization, include institutions and regulating bodies with implications for health promotion and disease prevention (e.g. with environmental, nutritional and social responsibilities).

## **9. CONTINUOUS RENEWAL**

### **Basic standard:**

The TM school **must** as a dynamic institution initiate procedures for regular reviewing and updating of its structure and functions and **must** rectify documented deficiencies.

### **Quality development:**

The process of renewal **should** be based on prospective studies and analyses and **should** lead to the revisions of the policies and practices of the TM school in accordance with past experience, present activities and future perspectives. In so doing, it **should** address the following issues:

- adaptation of the mission and objectives of the medical school to the scientific, socio-economic and cultural development of the society;
- modification of the required competencies of the graduating students in accordance with documented needs of the environment graduates will enter (The modification shall include the clinical skills and public health training and involvement in patient care appropriate to responsibilities encountered upon graduation.);
- adaptation of the curricular model and instructional methods to ensure that these are appropriate and relevant;

- adjustment of curricular elements and their relationships in keeping with developments in the biomedical sciences, the behavioural sciences, the social sciences, the clinical sciences, and changes in the demographic profile and health/disease pattern of the population, and socio-economic and cultural conditions (The adjustment shall assure that new relevant knowledge, concepts and methods are included and outdated ones discarded.);
- development of assessment principles, and the methods and the number of examinations according to changes in educational objectives and learning goals and methods;
- adaptation of student recruitment policy and selection methods to changing expectations and circumstances, human resource needs, changes in the premedical education system and the requirements of the educational programme;
- adaptation of recruitment and staffing policy regarding the academic staff according to changing needs of the TM school;
- updating of educational resources according to changing needs of the TM school, i.e. the student intake, size and profile of academic staff, the educational programme and contemporary educational principles;
- refinement of programme monitoring and evaluation; and
- development of the organizational structure and management principles in order to cope with changing circumstances and needs of the TM school and, over time, accommodating to the interests of the different groups of stakeholders.



# ANNEX 2

## GUIDELINE FOR COLLECTING DATA

This questionnaire is provided as a guide to assist TM schools to review their TM course.

### AREA 1. MISSION AND OBJECTIVES

#### Criterion A: Statements of mission and objectives

*Basic* Provide a copy of the published general mission and objectives of the TM school. The detailed goals and objectives of the TM course should be described below under criterion D.

*Quality* Provide references to other published mission and objective statements that refer to these areas.

#### Criterion B: Participation in formulation of mission and objectives

*Basic* Who are the school's major stakeholders? How has the school involved its stakeholders in formulating the mission and objective statements?

*Quality* What groups other than the above major stakeholders does the school consult? How does the school consult and involve these groups in ongoing refinement to the mission and objectives statements?

### **Criterion C: Policy on academic independence**

*Basic* Provide copies of institutional and government policies that confer responsibility for the curriculum and allocation of resources.

*Quality* What policies and practices does the TM school have that ensure teaching by individual staff and by departments appropriately addresses the design of the curriculum? How is this evaluated and, if necessary, redressed? What is the TM school's process for reviewing resource allocation as the curriculum evolves?

### **Criterion D: Definition of educational outcomes**

*Basic* What are the broad competencies (knowledge, skills and attitudes) required of students at graduation? How do these relate to the existing and emergent needs of the society in which the students will practise?

*Quality* How does the TM school measure the competencies of its graduates? How does the school feed back this information into course development?

## **AREA 2. EDUCATIONAL PROGRAMME AND PRINCIPLES**

### **Criterion A: Curriculum models and instructional methods**

*Basic* What are the principles guiding the design of the curriculum and the types of teaching and learning methods used to deliver it?

*Quality* How will these methods encourage students to take active responsibility for their learning. What evidence is available to verify that these methods prepare students for lifelong learning?

**Criterion B: Scientific foundation**

*Basic* Which components of the curriculum inculcate the principles of scientific and evidence-based TM and enable analytical and critical thinking?

*Quality* What specific opportunities are there for students to acquire scientific training?

**Criterion C: Role of traditional medicine theory**

*Basic* What traditional medicine theories contribute to the course? How is their contribution integrated with clinical practice at the different stages of the curriculum?

*Quality* What is the process by which the TM school adapts the curricular contributions of the traditional medicine theory to developments in the science, practice and delivery of health care?

**Criterion D: Role of basic sciences**

*Basic* What basic biomedical sciences contribute to the TM course? How is their contribution integrated with clinical sciences at the different stages of the curriculum?

*Quality* What is the process by which the TM school adapts the curricular contributions of the various basic sciences to developments in the science, practice and delivery of health care?

**Criterion E: Role of behavioural and social sciences and medical ethics**

*Basic* How does the curriculum provide for contributions of behavioural sciences, the social sciences and medical ethics?

*Quality* What is the process by which the TM school adapts the curricular contributions of the behavioural sciences, the social sciences and medical ethics to developments in the science, practice and delivery of health care?

**Criterion F: Role of clinical sciences and skills**

*Basic* What are the specific objectives (knowledge, skills and attitudes) specified to ensure clinical competence on graduation? What are the specific clinical disciplines and forms of practice (inpatient/ambulatory health care, hospital/community, rural/urban, specialist/general) in which this experience is to be acquired?

*Quality* What specific opportunities are there for early and ongoing direct participation in patient care and for working with other health professionals?

**Criterion G: Curriculum structure, composition and duration**

*Basic* For the core curriculum, provide a summary in terms of topics/subjects taught, length (hours/weeks), by semester/year. Provide a brief synopsis of individual topics. Indicate where health promotion and preventive medicine. For optional subjects provide a similar summary.

*Quality* What policies guide integration of the curriculum? What mechanisms exist to ensure that it occurs?

**Criterion H: Programme management**

*Basic* What are the terms of reference and composition of the curriculum committee? Specifically, what authority does the committee have to resolve conflicts of educational principle and to determine the contributions of specific disciplines to the TM course? How are its decisions implemented?

*Quality* What is the TM school's mechanism for introducing teaching and learning, evaluation and curriculum innovations? Does the TM school have a TM education unit for these purposes? If so, what is its scope?

**Criterion I: Linkage with TM practice**

*Basic* What links exist between the TM programme and the next stage of training for practice? What specific transition programmes occur in the final year of the course? Are there reciprocal representations between the committees responsible for the basic TM phase and the subsequent phase?

*Quality* How does the curriculum committee obtain the participation of health services in effecting the transition between the TM programme and the next stage of training? How does it evaluate the effectiveness of its programme?

**AREA 3. ASSESSMENT OF EDUCATIONAL OUTCOMES**

**Criterion A: Assessment methodology**

*Basic* What committee is responsible for assessment policy? What are its terms of reference, composition and authority? Provide the general policy on assessment, including the documents provided to students that specify timing, weighting and criteria for progression.

*Quality* How does the TM school monitor the reliability and validity of assessments? How are new assessment methods introduced? How are internal assessments validated against external standards?

**Criterion B: Relation between assessment and learning**

*Basic* How are assessment practices made compatible with educational objectives and learning methods?

*Quality* How does the TM school monitor assessment to reduce curriculum overload and encourage integration?



## **AREA 4. STUDENTS**

### **Criterion A: Recruitment and admission policy**

*Basic* What are the academic criteria for admission to the TM course? Are there additional requirements at institutional or government level?

*Quality* How do the methods used to select students test their suitability and capability to practise in diverse areas of TM? How do they comply with the social responsibilities and health needs?

### **Criterion B: Methods of selection**

*Basic* What body is responsible for selection policy? What methods does it use?

*Quality* How does the selection committee evaluate the outcome of its policies on subsequent educational achievement? What mechanisms exist for appeal?

### **Criterion C: Student intake**

*Basic* What quotas exist and how are they determined?

*Quality* What mechanisms exist for adjusting the quotas?

### **Criterion D: Student support and counselling**

*Basic* What student support programmes are available through the TM school? What other programmes can students access?

*Quality* What mechanisms exist to identify students in need of pastoral and/or academic support?

### **Criterion E: Student representation**

*Basic* What is the TM school's policy on student contribution to curriculum matters? How have students contributed to the development of this policy?

*Quality* What practical measures does the TM school have for encouraging student participation and self-government?

## **AREA 5. ACADEMIC STAFF/FACULTY**

### **Criterion A: Recruitment policy**

*Basic* What policies does the TM school have for ensuring that the staffing profile matches the range and balance of teaching skills required to deliver the curriculum? What are the requirements related to the qualifications for appointment? Are there institutional or government policies or requirements that affect the TM school's staffing decisions? How frequently does the TM school review its priority list for staffing?

*Quality* How does the TM school propose to improve its recruitment of staff to meet its objectives?

### **Criterion B: Staffing policy**

*Basic* What is the TM school policy for ensuring that teaching, research and service contributions are appropriately recognized and rewarded? Are there additional institutional or government policies?

*Quality* What staff development programmes exist or are proposed to enable teachers to upgrade their skills and to obtain appraisals of their teaching performance? How is participation in staff development programmes encouraged?

## **AREA 6. EDUCATIONAL RESOURCES**

### **Criterion A: Physical facilities**

*Basic* Provide a brief description of each of the physical facilities available for the delivery of the non-clinical components of the curriculum. How does the TM school review the adequacy of the educational resources? What mechanisms exist for gathering feedback from students and staff on the facilities? What authority does the TM school have to direct resources to respond to deficiencies?

*Quality* Indicate what plans exist for improving these facilities.

### **Criterion B: Facilities for clinical training**

*Basic* Provide a brief description of the facilities available for clinical training in hospitals, ambulatory services, community clinics and primary health care settings. How does the TM school review the adequacy of the facilities and patients available for clinical teaching? What mechanisms exist to deal with deficiencies?

*Quality* How is the TM school adjusting and expanding its use of clinical training facilities including skills, laboratories and affiliated institutions?

### **Criterion C: Information technology and networking**

*Basic* What policies does the TM school have for the use of information technology in its teaching programme? What committee or body is responsible for formulating the TM school's policies? Are there additional institutional policies? What authority does the TM school have to direct resources to the use of information and communication technology?

*Quality* How is the TM school enhancing delivery of the curriculum by electronic methods?

### **Criterion D: Research attainment**

*Basic* Provide a brief description of the research facilities and major research programmes of the school.

*Quality* How does the school foster interaction between its research and education activities?

### **Criterion E: TM education expertise**

*Basic* What policies does the TM school have to ensure that its education methodologies are appropriate for the delivery of the curriculum?

*Quality* Does the TM school have access to an expert TM education unit and how does it operate?

**Criterion F: Exchange with other educational institutions**

*Basic* What policies does the TM school have for collaborating with other educational institutions? Provide a summary of the existing collaborative links with other institutions and describe the nature of those links, student exchanges, staff exchanges, and research. What is the TM school's policy on the transfer of educational credit?

*Quality* Describe any activities directed towards regional and international so-operation with other TM schools.

**AREA 7. MONITORING AND EVALUATION OF PROGRAMMES AND COURSES**

**Criterion A: Mechanisms for programme evaluation**

*Basic* How does the TM school evaluate its programme? Is there a group that independently monitors performance and outcomes data and ensures that identified concerns are addressed by the appropriate body? What evaluation data are being collected?

*Quality* Describe how evaluation activities are being enhanced to cover all components of the TM education programme.

**Criterion B: Student and teacher opinion**

*Basic* How does the TM school sample the opinions of staff and students about its educational programme?

*Quality* How does the TM school encourage individual staff and students to participate in its evaluation activities?

**Criterion C: Student performance**

*Basic* What statistical data on student performance is collected and analysed?

*Quality* What individual student parameters are monitored in relation to performance during the course and how is this fed back into curriculum planning?

**Criterion D: Feedback of evaluation information**

*Basic* How is information gathered from programme evaluation to modify the curriculum?

*Quality* What steps are being taken to ensure that there is an evidence-based approach to the enhancement of the quality of the TM education programme?

**Criterion E: Involvement of stakeholders**

*Basic* To what extent are the principal stakeholders within the TM school involved in programme evaluation? How does the TM school communicate the outcomes of programme evaluation to stakeholders?

*Quality* To what extent are the principal external stakeholders of the TM school involved in the evaluation of its programme?

**AREA 8. GOVERNANCE AND ADMINISTRATION**

**Criterion A: Organizational structure**  
(refer to Criterion 2G)

**Criterion B: Educational budget and resource allocation**  
(refer to Criterion 2C)

**Criterion C: Academic leadership**

*Basic* Describe the academic management structure of the TM school indicating the line of responsibility for individual areas of the TM programme.

*Quality* How is the performance of the academic leadership of the school appraised?

**Criterion D: Administrative staff and management**

*Basic* What administrative support functions are provided by staff of the school? Describe the administrative staffing structure to support these functions.

*Quality* Does the administrative and management component of the TM school have a quality assurance programme and how is it reviewed?

**Criterion E: Interaction with health sector**

*Basic* Describe the relationships between the TM school and the health services with which it interacts.

*Quality* What formal mechanisms exist to ensure that the TM school interacts constructively with the health sector?

**AREA 9. CONTINUOUS RENEWAL OF THE TM SCHOOL**

*Basic* How frequently does the TM school review its mission, structures and activities? What processes does it use for review?

*Quality* Describe recent and projected activities undertaken to ensure that the TM school remains responsive to its changing environment.