



SUBJECT BENCHMARK STATEMENT IN MEDICINE

Committee of Vice-Chancellors & Directors and
University Grants Commission
Sri Lanka

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FOREWORD

The work in connection with the development of Subject Benchmark Statements was begun in August 2003 as a part of the overall quality assurance framework that supports academic standards and the furtherance and dissemination of good practice in Universities in Sri Lanka.

Subject Benchmark Statements will support and promote quality and standards by:

- Providing universities with a common and explicit reference point for internal and external programme approval and review;
- Guiding and promoting curriculum development, especially in new departments and new universities, and in other institutions of higher education;
- Evolving over time to take account of changes and innovations that reflect subject development and new expectations;
- Providing an authoritative and widely recognized statement of expectations of what
 is expected of a graduate in a specific (or designated) subject area in a form readily
 accessible to students, employers and others with a stake in higher education
 qualifications;
- Providing a clear and transparent reference point for external examiners;
- Assisting international comparison and competitiveness of higher education awards and student achievement.

SUBJECT BENCHMARK STATEMENT MEDICINE

1. INTRODUCTION

Scope of SBS

1. Subject benchmarking is an essential component of quality assurance in the university system. This Subject Benchmark Statement (SBS) in Medicine provides guidelines and an academic reference point for courses leading to the award of medical degrees in Sri Lanka. It describes the essential characteristics which will enable a graduate in medicine to function effectively, initially as an intern house officer, and on satisfactory completion of internship, as a basic doctor providing independent primary care, or as a medical officer in state or private sector institutions (i.e. general professional practice), or as a trainee in a postgraduate programme leading to further specialisation. The SBS is meant to be used as a guideline and is not meant to be prescriptive.

Authors

2. This SBS has been prepared on the authority of the University Grants Commission by a group of senior medical teachers representing all the Faculties of Medicine in Sri Lanka, in consultation with representatives From the Sri Lanka Medical Council (SLMC). Similar benchmark statements are being prepared in respect of other subjects (courses) leading to the award of a degree within the Sri Lankan university system.

Degrees covered by SBS

3. This statement is concerned with professional degree courses leading to award of the M.B.B.S. (Bachelor of Medicine & Bachelor of Surgery) degree. This is the undergraduate degree in Medicine awarded by all the Faculties of Medicine in Sri Lanka. Faculties of Medicine are encouraged to develop their own innovative approaches in designing and delivering their courses within the broad framework described here.

Role of SLMC 4. The Medical Ordinance (Chapter 105) of 1988 empowers the SLMC to formulate regulations for the maintenance of minimum standards of medical education including standards relating to courses of study, examinations, staff, equipment, accommodation, training and other facilities at the universities and other institutions which grant or confer any qualification which entitles a person to obtain registration under the Ordinance. The Council has appointed an Education Committee, which advises the Council on such matters and visits the medical faculties of the universities to assess their standards. In the year 2000, on the advice of its Education Committee in consultation with the Sri Lankan medical faculties, and advice from the World Health Organization, the Council specified standards for medical schools seeking its accreditation. This SBS will complement the SLMC

reference point for courses leading to the MBBS degree. The SLMC recognizes courses of study leading to a medical degree with a minimum duration of four years and nine months, following which graduates are provisionally registered to undertake a period of internship of twelve months, in specified specialties in medicine, in recognized hospitals. On successful completion of internship, they are qualified to obtain full registration to practise.

Internship

5. At present the MBBS degree is awarded on passing the Final MBBS examination. However, in the future, with the concurrence of the SLMC, all medical faculties, and the Ministry of Health, it may be awarded only after satisfactory completion of internship.

Intercalated degrees

6. The medical faculties do not provide an opportunity for an intercalated degree by coursework or research, at present. Some faculties may decide to introduce this option in the future. However, this should not in any way compromise the duration or quality of the training leading to the MBBS degree. At least one year of additional study or research would be required for award of an intercalated degree.

Fall-back qualifications

7. Options available at present to undergraduates, who are unable or unwilling to complete the MBBS course, are very few. The University of Jaffa offers a Bachelor of Medical Sciences degree to those who have completed the 3rd MBBS examination. The University of Kelaniya offers a Diploma in Health Sciences to those who have satisfactorily completed certain specified courses but are unable to pass the Final MBBS examination within ten years. The University of Sri Javewardenepura provides the opportunity for students who have completed the pre-clinical stage of the course, the option of changing to a B.Sc. course in Human Biology,' provided that they have fulfilled certain minimum academic criteria. It is desirable for all Faculties of Medicine to develop such 'fall back' options for students who are unable or unwilling to complete the MBBS course. However, such qualifications are not equivalent to the professional degree of MBBS and will not entitle them to register with the SLMC as a medical practitioner.

Electives

8. The medical course leads to a professional degree where the core curriculum is compulsory. However, opportunities for student choice should be encouraged through periods of elective study.

Medical faculty admissions

9. The undergraduate medical course should consist of at least five academic years. Entry qualifications should match the high academic standards, which are maintained throughout the medical degree courses. At present the entry criteria are determined by The University Grants Commission. However, these criteria should be reviewed periodically in consultation with the medical faculties.

Professional development

10. A graduate is entitled to independent practice after successful completion of one year's internship and full registration with the SLMC. Continuing professional Professional development is essential for all graduates regardless of specialisation. If they wish to development specialise, graduates will have to undertake further study in order to achieve the final professional status in their chosen field.

Extended faculty

11. The subject of Medicine is characterized by the need for students to acquire not only knowledge and understanding but also clinical skills and appropriate attitudes. Professional standards are of great importance as is the ability to work together with other healthcare professionals. The acquisition of clinical skills involves access to patients under the supervision of clinical teachers, usually medical practitioners, in state hospitals and in the community. While universities are responsible for the core organization and assessment of training programmes in medical education, the clinical training is arranged and provided with the active participation, guidance and cooperation of those specialist clinicians that constitute the extended faculty.

Curriculum structure

12. Undergraduate medical training provides an academic education in the basic and clinical sciences, behavioural sciences, community health and medical jurisprudence., The training also prepares undergraduates for professional practice as doctors. The course provides the undergraduate with intellectual skills such as analysis and reflection, problem solving and clinical reasoning, and has vocational, ethical and legal components; Medical schools in Sri Lanka have pre-clinical, para-clinical and clinical components in their MBBS courses. All faculties have a separate unit dealing in medical education. In keeping with global and regional trends, elements of vertical and horizontal integration amongst subjects have been introduced to varying degrees by all faculties. This has generated teaching in modules and emphasis is now on problem-oriented learning. Aspects of behavioural sciences, ethics, community care and research are also given increasing importance.

Curriculum content

13. The medical course consists of a core curriculum and which provides the essential knowledge, understanding, clinical skills and professional attitudes which are required content by any medical graduate in order that he may practise as a basic doctor, In addition, the curriculum should be designed in such a way that undergraduates can develop competencies in English and Information Technology so that they are able to develop professionally.

Evaluation of students

14. Assessment strategies and methods should ensure that the knowledge, understanding, skills and attitudes set out in the curriculum are sufficiently covered. Clinical competencies should be rigorously assessed in order to identify those who are fit for practice.

15. Graduates should be prepared to approach medical practice:

Professional skills

- With the appropriate intellectual skills enquiry, clinical reasoning, critical thinking and decision making;
- Possessing sufficient knowledge of the basic and clinical sciences, and an understanding of the underlying principles of scientific method;
- With developed clinical, interpersonal and practical skills;
- Understanding and accepting their professional, ethical and legal responsibilities, and their limitations.

2. PROFESSIONAL VALUES, ATTITUDES, BEHAVIOUR AND ETHICS

- 1. A medical degree is a professional qualification as well as an academic award. As such, it must prepare graduates for professional activities across widely differing fields. In particular, graduates must possess all the professional skills and attributes necessary to function as an intern house officer.
- 2. Graduates must adhere to the professional standards defined by the SLMC.

3. Graduates must:

- a. be aware of the importance of the doctor patient relationship' in all aspects of patient care;
- adopt an empathic and holistic approach to patients and the problems they present with;
- c. respect patient autonomy and involve patients, or where appropriate, relatives or careers as partners in therapeutic and management decisions;
- d. be aware of and respect different cultures, values, views and beliefs;
- e. be aware of the use of alternative medical practices, and be sympathetic and understanding if patients choose to use these practices;
- f. remain non-judgmental in all aspects of their work and avoid stigmatizing any category of patient;
- g. understand and engage in reflective practice, audit and appraisal of their own work, as well as that of others.
- 4. Graduates should demonstrate their ability to work effectively within a team by:
 - a. practising in a manner that promotes effective inter-professional activity, including shared learning;
 - b. working within the limits of their responsibility and capability;
 - c. making decisions in partnership with colleagues and patients;
 - d. giving leadership.

5 Graduates should be able to:

- a. prioritise the care of ill patients;
- b. prioritise their time with regard to duties and responsibilities;
- c. maintain complete and effective medical records;

- d. keep up to date with current medical practice.
- 6. Graduates need to apply ethical and legal knowledge to their practice, particularly in:
 - a. applying the principles of confidentiality, consent, honesty and integrity;
 - b. dealing effectively with complaints about their own practice or behaviour or that of colleagues;
 - c. being aware of and complying with legal and professional responsibilities, with respect to the issue of medical certificates, notification of infectious diseases, death and dying, drug prescribing, mental health, physical and sexual abuse of children and adults and abortion;
 - d. considering the rights of patients.
- 7. Outcomes for graduates' personal development include:
 - a. self-awareness and reflection in evaluating their performance and personal capability and recognizing the limits of their competence;
 - b. the ability to manage their learning with respect to continuing professional development;
 - c. recognizing the pressures on themselves and colleagues created by a busy professional career, and being aware of important issues in self-care, eg: stress reduction, avoidance of unhealthy practices such as alcohol misuse, substance abuse and self-medication.

3. SCIENTIFIC FOUNDATION OF MEDICINE

- 1. The primary concern of medicine is to promote good health. In order to achieve this it is important to have a knowledge of the aetiology, diagnosis, management (treatment, rehabilitation, supportive and palliative care), prognosis, prevention of diseases and injury and promotion of health. The impact of such conditions on patients, their families, and on the community should be understood.
- 2. Graduates should demonstrate knowledge and understanding of:
 - a. the normal structure and function of the human body, the different. organ systems and their inter-relationships;
 - b. changes occurring during the life cycle:
 - c. regulation of body functions, homeostasis and biochemical aspects;
 - d. the pathogenesis and pathology, risk factors, and natural history of diseases;
 - e. signs and symptoms of diseases, investigation and diagnosis, differential diagnosis, non-pharmacological and pharmacological management of diseases:
 - f. management of emergencies;
 - g. therapeutics, adverse reactions of therapy, curative and palliative therapy;
 - h. disability, rehabilitation and handicap;
 - i. the importance of record keeping;
 - j. other systems of medicine and their limitations.
 - k. behavioural sciences and relationships to medical anthropology, sociology, basic psychology;
 - 1. the educational principles underlying learning and continuing education~
 - m. ethics and legal aspects in relation to practice of medicine in Sri Lanka;

- n. the role of the family and extended family, inter-relationships and interactions with the society;
- o. cultural and ethnic differences about perception and response to illnesses;
- p. principles of communication.

4. COMMUNICATION SKILLS

- 1. In relation to interpersonal skills, the graduate should be competent in the following areas of communication:
 - a. listening to patients, relatives, careers and other healthcare professionals;
 - b. explaining and providing adequate information to patients and careers;
 - c. mediating and negotiating with patients, careers and colleagues;
 - d. handling complaints appropriately;
 - e. liaising with other members of the health care team;
 - f. dealing with bereavement and grief.
- 2. It is desirable that graduates are able to communicate in the languages commonly used in Sri Lanka: both national languages and English.

5. CLINICAL SKILLS

All medical graduates should be competent in core clinical, interpersonal, practical and technical skills relevant to general professional practice in Sri Lanka. In relation to all aspects of clinical practice, graduates should demonstrate appropriate professional behaviours, safeguarding confidentiality, understanding the need for informed consent, recognising their own limitations. They should be prepared to seek help from more experienced health care professionals when necessary.

- 1. In relation to clinical skills, the graduate should be able to:
 - a. take a history which is patient-centred, sensitive, structured and relevant;
 - b. undertake a relevant and systematic physical and mental state examination in a sensitive manner, appropriate for age, gender, culture and clinical condition;
 - c. define problems and formulate a diagnosis or differential diagnosis based on history and examination;
 - d. select appropriate investigations and interpret their results;
 - e. make clinical decisions based upon evidence and findings;
 - f. plan patient management, recognising the:
 - importance of discussing the management plan with the patient, or if appropriate, a relative or carer;
 - effect on the patient;
 - relevance of age and social circumstances;
 - requirements for informed consent;
 - need for team work;
 - need for appropriate referrals;
 - economic constraints with regard to individuals as well as in the health care system in a developing country.
 - g. carry out those practical and technical procedures, including investigative and

therapeutic measures, which are relevant to general professional practice in Sri Lanka, taking into account costs, risks and hazards.

2. Graduates should be able to:

- a. recognise emergency situations which require immediate action and be able to carry out the initial treatment of such conditions.
- b. recognise conditions which require early or immediate intervention by the.' healthcare team, and under appropriate supervision, undertake tasks to initiate and be involved in the care of acutely ill patients.
- c. evaluate the health needs of patients with chronic illness and disability, initiate relevant medical investigations and interventions, and plan management including referral.
- d. give appropriate input to the multi-disciplinary and multi-professional teams involved in the management of patients in need of rehabilitation or palliative care, including care of the dying.

6. POPULATION HEALTH AND HEALTH SYSTEMS

It is important to recognize the interactions between the patient, family, society and environment.

- 1. Graduates should demonstrate understanding of:
 - a. demography and vital statistics;
 - b. basic and applied epidemiology;
 - c. basic statistics as applied to Medicine
 - d. epidemiological methods;
 - e. health promotion and prevention;
 - f. needs assessment and health care planning;
 - g. health care management and economics;
 - h. the organisation of curative and preventive health services in the country;
 - i. health care provision in disaster situations;
 - i. international health.
- 2. The graduate should be able to give advice on health promotion and disease prevention, including advice on promoting
 - a. a healthy environment and safe food;
 - b. the quality of life;
 - c. quality of health care provision;
 - d. community care, particularly with regard to mental health, geriatric care, maternal and child health, and care of the disabled.
- 3. The graduate should possess the knowledge, attitudes and skills necessary to deliver primary care.
- 4. The graduate should be able to liaise with different sectors of the health and social care systems and be able to manage those components relevant to the care of the patient.

7. MANAGEMENT OF INFORMATION

Medical graduates should possess a range of generic (transferable) skills in relation to management of information, which are expected of all university graduates. Thus the graduate should be able to:

- a. display proficiency in the English language necessary for their professional activities:
- b. retrieve and manage information of all types, including electronic information;
- c. present information clearly in written, electronic and oral forms, and communicate ideas and arguments effectively;
- d. produce and maintain contemporaneous, legible, accurate and pertinent records for patients under their care.
- e. Ensure that records are signed and dated, as well as filed and stored appropriately

8. CRITICAL THINKING AND RESEARCH

The intellectual attributes possessed by a graduate of medicine in Sri Lanka should include:

- 1. the ability to critically evaluate information and use reasoning and personal judgment in:
 - a. identifying and prioritising clinical problems;
 - b. arriving at a diagnostic hypothesis;
 - c. drawing up a management plan;
 - d. planning preventive and health promotive action.
- 2. understanding and appreciation of the scientific method and its limitations in:
 - a. formulating relevant research questions or hypotheses;
 - b. understanding of basic statistical concepts and their application in clinical practice and research;
 - c. use of appropriate methods in collecting, analysing and interpreting data;
 - d. critical reading of the medical literature and determining its relevance to practice within one's own working environment.
- 3. coping with uncertainty and error in decision making by:
 - a. seeking out information when needed;
 - b. continuous self-audit and reflective practice;
 - c. acceptance of peer review.
- 4. Creativity, resourcefulness and adaptability in:
 - a. Professional development;
 - b. Clinical practice;
 - c. Institutional and infrastructural development;
 - d. research

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APPENDIX 1 - MEMBERSHIP OF THE BENCHMARK GROUP

Professor Narada Warnasuriya (chair) University of Sri Jayewardenepura

Dr Chandra Abeysekera University of Peradeniya
Dr Nanda Amarasekera Sri Lanka Medical Council

Professor PL Ariyananda University of Ruhuna Professor Vasanthy Arasaratnam University of Jaffna

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Professor MTM Jiffiy University of Sri Jayewardenepura

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Professor DB Nugegoda University of Peradeniya Professor-SV Parameswaran University of Jaffna

Dr Ananda Samarasekera Sri Lanka Medical Council

Professor Harsha Seneviratne University of Colombo

Dr K Sivapalan University of Jaffna

Professor Kumudu Wijewardene University of Sri Jayewardenepura

Appendix 2

The following documents were consulted by the group in drawing up this benchmark statement

- 1. Standards for medical schools seeking accreditation from the Sri Lanka Medical Council. Sri Lanka Medical Council, 2001.
- 2. Institutional Objectives of the medical faculties of the Universities of Colombo, Peradeniya, Ruhuna, Jaftha, Kelaniya and Sri Jayawardenepura.
- 3. Subject Benchmark Statement in Medicine. Quality Assurance Agency for Higher Education, UK, 2002.
- 4. Tomorrow's Doctors. General Medical Council, UK, 2002.
- 5. Core Committee, Institute for International Medical Education. Global minimum essential requirements in medical education. *Medical Teacher* 2002; 24: 130 135.