POSTGRADUATE INSTITUTE OF MEDICINE

UNIVERSITY OF COLOMBO, SRI LANKA

PROSPECTUS

MD AND BOARD CERTIFICATION IN MEDICAL ADMINISTRATION

(To be effective from the year 2019)

BOARD OF STUDY IN MEDICAL ADMINISTRATION

CONTENTS

This prospectus is made under the provisions of the Universities Act, the Postgraduate Institute of Medicine Ordinance, and the General By-Laws: No. 1 of 2016 and By-Laws No. 2 of 2016 for Degree of Doctor of Medicine (MD) and Board Certification as a Specialist.

1. BACKGROUND AND JUSTIFICATION

The Board of Study in Medical Administration (hereinafter referred to as the Board) will conduct a training programme in Medical Administration leading to the degree MD (Medical Administration).

Administration and Management of healthcare institutions, divisions and directorates have been carried out by Medical Officers (MO), since the inception of the healthcare delivery system in Sri Lanka. The need for specially trained MOs in administration and management was identified and the College of Medical Administrators was established in 1992 with one of its main objectives to "Promote postgraduate studies in the field of Medical Administration and Health System Management". This was in order to have specialist medical administrators with the necessary knowledge, attitudes & skills in administration to take up the posts in medical administration in the health sector organization, especially the Ministry of Health and to make the health system in Sri Lanka efficient and effective.

Medical Administrators have the responsibility to improve the healthcare provision in a sustainable manner in the general and health-specific administration of Ministry of Health, Provincial & Regional directorates and tertiary and secondary hospitals. Scope of Medical Administration includes health planning and implementation, human resource management, health economics, etc in addition to general administrative functions.

The cadre for Medical Administrators has been identified by Medical Services Minutes of 2014, and includes Deputy Director General grades, Senior Administrative Grade and Deputy administrative grade posts. Total number of posts in the ministry of health has been identified as 301 as at 2014.

MSc Medical Administration is a one year and three months training programme covering the basics of medical administration and health system management. Those who intend to follow the MD in Medical Administration programme must obtain this MSc as a pre-requisite.

The postgraduate training programme in Medical Administration leads to the MD degree in Medical Administration which is at SLQF level 12.

2. ELIGIBILITY FOR SELECTION TO THE TRAINING PROGRAMME

The candidate should have:

The MSc Degree in Medical Administration conducted by the Postgraduate Institute of Medicine (University of Colombo) not more than 10 years prior to application to register for the MD Medical Administration Part I training programme.

3. LEARNING OUTCOMES

At the end of the training programme the trainee should be capable of:

1. Leading a multi-disciplinary team of health care providers to achieve organizational objectives in the relevant healthcare institution;
2. Developing short, medium and long-term plans for the health sector;
3. Optimally managing the available resources and mobilizing additional resources for provision of cost effective health care;
4. Enhancing human resource management and development
5. Implementing, monitoring and evaluating the work of the health sector;
6. Engaging in or initiating health systems research for improvement of the health care and introducing and sustaining innovative approaches;
7. Ensuring the safety and quality of the healthcare services;
8. Maintaining ethical standards in the health sector;
9. Ensuring community mobilization and inter-sectoral collaboration through effective coordination
10. Ensuring responsiveness in health care services;

4. STRUCTURE OF THE PRE MD TRAINING PROGRAMME

The duration of the programme of study is two years. The programme is in two components: Part I and Part II. Part I consists of 8 modules which will be conducted over approximately 300 hours in three months. Learning will be assessed by written & oral examinations. Candidates must successfully complete Part I examination in order to proceed to Part II.

Part II of the programme, conducted over a period of one year and nine months, will have components of training and research. For training, attachments to health administrative units as Registrars will be made by the Board of Study.

4.1. MD (Medical Administration) Part I Training Programme

The Part I training programme consists of eight modules conducted over 3 months, with approximately 300 h of face to face sessions. The trainees are expected to attend all the sessions

and meet their study requirements in order to get the best benefit. To be eligible to sit for the MD Part I examination, the minimum attendance requirement is 80%. Each module has specific number of lecture hours allocated to it. Table 1 shows the modules and learning hours. Details of the curriculum are given in **Annexure 1**

Table 1: List of Modules in MD Part I Training Programme

Module	Module Topic	Lecture hours	Self Learning
1	Advanced Epidemiology (30 hrs)	30	70
2	Health Systems Research (60 hrs)	60	140
3	IT and Statistics in Health Care (45 hrs)	45	105
4	Health Policy Planning & Development (30 hrs)	30	70
5	Health Economics (30hrs)	30	70
6	Health Systems Strategic Management (60 hrs)	60	140
7	Human Resource Management (30 hrs)	30	70
8	Legal and Ethical Issues in Health Care (15 hrs)	15	35
	Total	300	700

4.2. MD (Medical Administration) Part I Examination

Only trainees who pass this examination will be permitted to follow the Part II training programme. The examination consists of written & oral components.

Written papers

There will be three papers of three hours each. Papers 1 and 2 will consist of five essay questions each. All questions should be answered.

Paper 1   300 marks

Advanced Epidemiology Health Systems Research, IT and Statistics in Health Care, Health Policy Planning & Development (Modules 1-4)

Paper 2   300 marks

Health Economics, Health Systems & Strategic Management, Human Resource Management, Legal and Ethical Issues in Health Care (Modules 5-8)

Paper 3   200 marks

This will be of 3 hours duration and will consists of 20 Short Answer Questions including 10 Situational Judgement Tests (SJTs) covering all 8 modules

Oral examination   200 marks

There will be two viva boards with two examiners each. Each viva board will conduct the viva using structured questions on health management, research methodology and allied subjects covering all eight modules for 15 minutes by each board. The summary of assessments is given in Table 2.

Table 2: Summary of assessments of MD Part I Examination

Assessment component	Content	Final allocation of Marks
Paper 1	5 essay questions on Advanced Epidemiology Health Systems Research, IT and Statistics in Health Care, Health Policy Planning & Development (Modules 1-4), to be answered in 3 hours	300
Paper 2	5 essay questions on Health Economics, Health Systems & Strategic Management, Human Resource Management, Legal and Ethical Issues in Health Care (Modules 5-8), to be answered in 3 hours	300
Paper 3	20 Short Answer Questions, including 10 Situational Judgement Tests (SJTs) covering all 8 modules, to be answered in 3 hours	200
Oral exam	Structured viva composed of two boards of two examiners; 15 minutes with each board; each board will mark the candidate out of 100 marks	200
		1000

Marking

Each question in papers I and II will be marked out of 100, by two independent examiners and the final mark for each question will be the average of the marks given by the two examiners. In the event of a discrepancy of 15% or above in given marks, the answer will be reviewed by the chief examiner for a final decision.

The total mark out of 500 for each of Papers I and II will be converted to a mark out of 300, for the final computation of marks.

4.3.   Requirements to Pass MD (Medical Administration) Part I Examination

In order to pass the MD (Medical Administration) Part I examination, a candidate must obtain

     i.   an overall total mark of 50% or more AND
    ii.   40% or more for each of Paper 1, Paper 2 and Paper 3
   iii.   40% or more for the oral examination

A maximum of six attempts will be permitted.

5. TRAINERS AND TRAINING UNITS

Training centers for the attachments of Part II will be selected as required by the training programme. PGIM accredited training units include directorates of the line & provincial Ministries of Health, healthcare institutions (public and private), international and national. Trainer would be a person with MD qualification in the relevant field of study approved by the BoS in Medical Administration.

6. MONITORING PROGRESS DURING PRE MD TRAINING

Monitoring progress during pre MD training will be by periodic review of the portfolio and submission of periodic progress reports of the research project by the supervisor.

6.1. MD (Medical Administration) Part II Training Programme

The curriculum of Part II of the training programme consists of (a) a program of training as a Registrar and (b) a research project. Both these components shall be completed by a candidate while being a Registrar in Medical Administration over a period of one (1) year and nine (9) months. Each one of these components is described below.

Allocation of training placements for MD Part II will be according to the merit order of the results of the Part I examination.

6.2. Programme of Training

Those who successfully completed MD Part 1 and were selected according to the merit order shall be registered for MD Part II training programme. The duration of the Part II training program shall be 1 year and 9 months. During this period, candidates will be provided with **Training Attachments** as **Registrars** in accredited administrative units of the line ministry/ in the provincial health ministries (see Table 3 below) or any other unit approved by the Board of Study. During the period of training, Registrars will maintain a comprehensive account of learning activities in the form of a Portfolio. The required number of the case studies and reflective writing reports should be submitted separately as required in accordance with the Portfolio.

Table 3: Duration of Each Appointment/Training Unit

Appointments / Training Units	Duration
Hospitals	6 Months (4 months in a TH, 1 month in DGH, 1 month in a specialised hospital)
Ministry of Health	4 Months under a DDG (2 months in two Directorates)
Provincial Health System	6 Months (2 months in a PDHS and 4 months RDHS each)
Preventive Health Sector	3 Months (FHB, Epidemiology Unit, Health Promotion Bureau, Specialised Campaigns –one month each in selected three institutions)
INGO/NGO	1 Month
Private Hospital	1 Month
Total	**21 months**

6.3.   Mode of training

Training will be by way of working as Registrars and undertaking individual assignments under the guidance and supervision of trainer approved by the PGIM. During these attachments trainees will be expected to apply the theoretical knowledge gained to understand, analyze, review and critique the organization, management and functioning of the health system in Sri Lanka.

A registrar shall present at least two case studies and two reflective writings at monthly tutorials organized by the BoS during the training period and shall maintain 80% attendance for tutorials.

During these attachments, the trainee will learn and gain experience under the direct guidance and supervision of trainers approved by the Board of Study.

Syllabus of Part II is Annexed ([Annexure II](#))

Trainers will be those who have at least three years' experience following MD and Board Certification and holding administrative grade posts.

Online and manual Multi-Source Feedback (MSF) submission system will be applied during first year of training to support trainees who are in need.

6.4.   Research Project

The trainees are expected to design and conduct one interventional research project, which should be written up in the form of a dissertation consisting of 20,000 words (±10% compulsory margin) during the period of attachment as Registrar. This research project shall consist of research and an intervention component. Intervention component shall be written in project management format specified in annexure 3.

The subject areas for the research project should be selected from the followings:
1. Management of Hospitals
2. Management of Health System
3. Management of Programmes/Projects
4. Management of Support Services

The approval for the research project has to be obtained from the board of study in the sequenced of pre-proposal followed by the detailed proposal through the proposed supervisor/s. The board of study has the authority to appoint suitable supervisors for the projects.

6.5.   Portfolio

Trainees are expected to maintain a Portfolio that documents important management problems / issues identified by the trainee. Formats for case studies and reflective writings shall be provided to the trainees by the Board of Study. The trainee has to submit 12 case studies and 12 reflective writings at the end of the period of training. The number of case studies and reflective writings for each appointment is mentioned in the table 03. These case studies and reflective writings should be selected with the agreement of the supervisor of the particular training unit.

Number of case studies and reflective writings are mentioned in the table 4 below.

Table 4: Number of Case Studies and Reflective Writings for Each Training Unit / Attachment

Appointments/ Training Units	No. of Case Studies	No. of Reflective Writings
Hospitals	3	4
Ministry of Health	3	3
Provincial Health System	3	2
Preventive Health Sector	2	2
INGO/NGO	1	1
Private Hospital		
Total	**12**	**12**

7. MD EXAMINATION

7.1.   Eligibility to appear for the Examination

Trainees who have fulfilled the following requirements will be eligible to appear for the final examination.

1. Minimum of 80 % attendance overall, in the Part II training programme.
2. Satisfactory completion of all attachments as certified by the trainers
3. Submission of Portfolio which includes 12 case study reports and 12 reflective writings
4. Submission of the research project report

Above requirements shall be fulfilled and documentation submitted to the PGIM by the closing date of application for the MD examination.

7.2.   Final Assessment of MD part II training programme

The final assessment of the candidate's performance will be at the end of the training programme. This will consist of four parts. The total mark for all four parts shall be 1000 marks.

Part A: Written Examination - 500 marks

Written examination will consist of 2 papers which are three (3) hours each.

Paper 1: Five essay type questions   250 marks
Paper 2: Twenty Short Answered Questions (SAQ) and 10 Situational Judgment Tests (SJT); (SAQ)s will have a total mark of 150 and SJTs will have a total marks of 100)   250 marks

Both Paper 1 and Paper 2 would have questions covering the full spectrum of MD training course. Each question in both papers will be marked by two examiners independently and average marks will be taken as the final mark for each question.

Part B: Oral Examination - 100 marks

Oral examination will be of half an hour duration focus on a given management problem/s and will be on lines similar to structured discussion of problems in clinical sciences by a panel with two examiners.

Part C: One Research Project - 200 marks

Candidate has to submit the Research Project in printed format as stipulated by the guidelines. He or she will be assessed on these printed versions and viva.

The research project will be evaluated by two examiners. The average marks will be taken as the final mark for the research project.

The research project will be assessed on the following criteria:

Planning   50 marks
(Title, justification & objectives with purpose of project,
Literature review, references, plan of implementation)

Execution   50 marks
(Process of execution, analysis & results)

Evaluation   50 marks
(Findings & discussion, conclusion and recommendations)

Research Project viva   50 marks
Half hour duration by a panel with two examiners

Part D: Portfolio - 200 marks

The Portfolio will be evaluated by two examiners. Each examiner independently marks out of 200 and the final mark will be the average of two. The sections listed in table 03 of section 5.3 will be evaluated.

Requirements to Pass MD (Medical Administration) Part II Examination

An overall average score of 50% or more (500 marks from 1000 marks)
    AND
45% or more in each of Part A & Part B
    AND
50% in each Part C and Part D
If the candidate has obtained less than 50% for a research project, following will apply;

I.   If the candidate gets overall 50% at the exam and marks for the research project is between 45 and 49, trainee need to re-submit same research project and sit for a separate oral examination for research project in 3 months. If the trainee obtains more than 50% at the repeat examination, he / she is considered as passing the examination.

II.   If the candidate gets overall 50% and marks for the research project is between 40% and 44%, trainee needs to re-submit same research project and sits for a separate oral examination for research project in 6 months. If the trainee obtains more than 50% at the repeat examination, he / she is considered as passing the examination.

III.   If the candidate gets overall 50% and marks for the research project is between 30% and 39%, trainee need to re-submit same research project and sit for the oral examination for research project in 12 months. If the trainee obtains more than 50% at the repeat examination, he / she is considered as passing the examination.

IV.   If the candidate gets overall 50% and marks for the research project is less than 30% the trainee will be required to submit a fresh research project. If the trainee obtains more than 50% at the subsequent examination, he / she is considered as passing the examination.

V.   If the candidate gets more than 50% in the research project and fails component A and B, then the candidate is allowed for one more sitting in the next exam using same research project. If this candidate fails in the repeat examination, then the candidate has to repeat the entire examination and the maximum number of repeat attempts will be four.

VI.   If the candidate gets more than 50% of the overall exam and gets less than 50% in the portfolio, then the candidate will be considered as failed the exam. The candidate has to resubmit the portfolio in the subsequent year. If the trainee obtains more than 50% at the subsequent examination, he / she is considered as passing the examination. If that candidate fails in the repeat examination, then the candidate has to repeat the entire examination and the maximum number of repeat attempts will be four.

7.3.   Award of the Degree in MD (Medical Administration)

Candidates who are successful at the final examination will be recommended for the award of the MD Degree in Medical Administration.

8. POST MD TRAINING

On successful completion of the final evaluation and the award of the MD Degree, the candidate shall undergo Post MD training prescribed as follows;

Local Training
Work under a trainer on full time basis for a period of six months each at two National Level units approved by the Board of Study as Senior Registrars. The senior registrars have to formulate the objectives of the training with the assistance of the supervisor and get the approval from the board of study. They have to submit monthly progress reports to the board of study with regard to fulfillment of the approved objectives.

Overseas Training
One-year training overseas in an accepted training centre approved by the Board of Study.

11. ELIGIBILITY FOR PRE BOARD CERTIFICATION ASSESSMENT
12. ELIGIBILITY TO APPEAR FOR THE PRE BOARD CERTIFICATION ASSESSMENT
12.1.
Trainees who have fulfilled the following requirements will be eligible to appear for the pre board certification assessment.
1. Minimum of 80 % attendance overall, in the post MD training programme.
2. Submission of Portfolio

13. FORMAT OF PRE BOARD CERTIFICATION ASSESSMENT (PBCA)

On successful completion of the training to the satisfaction of the Board of Study, the candidate will have to do a 30-minute presentation on his or her local and overseas training to the BoS. BoS shall look into the details of completion of learning objectives and outcome of Senior Registrars training as per the maintained portfolio. Following this the candidate will be recommended for Board Certification as a Specialist in Medical Administration by the Postgraduate Institute of Medicine, University of Colombo.

14. RECOMMENDED READING

Recommended reading is given under each module in the curriculum.

ANNEXURE I – MD Medical Administration Part I Curriculum

1. Introduction

The curriculum of Part I of the Degree consists of 8 training modules which will be conducted over approximately 300 hours in three (3) months.

Knowledge in terms of factual information, descriptions, theories, principles, concepts and models were learnt during this training programme. The trainees are expected to acquire the relevant knowledge.

2. Programme of Training

The candidate should have the MSc Degree in Medical Administration conducted by the Postgraduate Institute of Medicine (University of Colombo) to register for the MD Medical Administration training programme. The duration of the Part I program is 300 hours in 3 months. During this period, trainees will be undergoing training on 08 modules listed in table 2.1. During the period of training, the trainees are expected to attend all the sessions and meet their study requirements in order to get the best benefit. To be eligible to sit for the MD Part 1 examination minimum attendance requirement is 80%.

Table 1: List of Modules

Module	Module Topic	Hours
1	Advanced Epidemiology	30
2	Health Systems Research	60
3	IT and Statistics in Health Care	45
4	Health Policy Planning & Development	30
5	Health Economics	30
6	Health Systems Strategic Management	60
7	Human Resource Management	30
8	Legal and Ethical Issues in Health Care	15
	Total Hours	300

3. Mode of Training

Training will be by way classroom sessions conducted and supervised by qualified Senior Medical Administrators. During these sessions trainees will be expected to take the opportunity to acquire the theoretical knowledge to understand, analyze, review and critique the organization, management and functioning of the health care system in Sri Lanka.
Regular and structured tutorials at classroom will also provide the trainees additional opportunity to improve their knowledge.

4. Programme Outcomes:

Each training module has a credit weight depending on the total number of session hours allocated to it. Fifteen hours of student teacher contact amounts to one credit.
The table 4.1 shows the list of modules and credits allocated

5. Module Description

Module 01: Advanced Epidemiology

This module is designed to provide an understanding of knowledge and skills of applications of epidemiology in Health Administration. It will help students to understand in particular:
Basic concepts in applied epidemiology and their applications to health administration;
The role of health administrator at different levels of administration on;

  ➢ Disease surveillance in Sri Lanka,
  ➢ Prevention and control of communicable diseases, and
  ➢ Delivery of immunization services

The role of health administrators' preparedness and response to outbreaks of communicable diseases; and
The use of epidemiological information for development of health policies

The following topics will be covered:
Scope and uses of epidemiology in health administration; Principles of surveillance and functions of health administrator in disease surveillance system in Sri Lanka;
Principles of surveillance and functions of health administrator in disease surveillance system in Sri Lanka;
Concepts, rationale, structure, current problems and role of health administrators in ILI surveillance;
The role of health administrator in epidemic preparedness and response;
The role of health administrator in outbreak investigation;
Implementation, Monitoring and Evaluation of National Expanded Programme on Immunization and the role of health administrators at institutional, district and provincial level;
Role of health administrators in response to emerging and re-emerging diseases in Sri Lanka;
Role of health administrators in AFP, Rubella and Measles control in Sri Lanka;
Role of health administrators in Leptospirosis, Diarrhoea and ARI control in Sri Lanka; and
The role of health administrator in dengue control and prevention
Any other topic approved by the Board of Study.

Session hours: 30; *Delivery methods*: Lectures and case studies; Assignments:
Module assessment: Continuous assessment and Attendance 80%

Readings:
Gordis, L., 2004. *Epidemiology, 3rd ed*. Philadelphia, PA: W.B. Saunders.
Haynes, R.B., 2006. *Clinical Epidemiology: How to Do Clinical Practice Research, 3rd ed.* Philadelphia, PA: Lippincott Williams & Wilkins.

Piantadosi, S., 2005. *Clinical Trials: a Methodological Perspective, 2nd ed.* New York, NY: John Wiley and Sons, Inc.

Rothman J.K., Greenland, S., 1998. *Modern Epidemiology, 2nd ed.* Philadelphia, PA: Lippincott Williams & Wilkins.

Young T.K. 2005. *Population Health: Concepts and Methods, Second ed.* New York: Oxford University Press.

Module 02: Health Systems Research

Contribution to knowledge is an important final aim of the MD program and hence research methodology comprises a corner stone of the MD curriculum. Refreshing on the previous knowledge the trainees possess, this module lays the foundations required for successful undertaking of the thesis work in Part II of the program. While introducing quantitative, qualitative and mixed-methods of approaches to advanced study and research, the module will sharpen the learners' skills in conceptualization, proposal development, and choice of techniques for data collection and analysis.

Topics covered include:

Introduction to Health Systems Research; Introduction to Health Program Evaluation; Concepts, Hypotheses and Theoretical Frameworks; Research Design & Quantitative & Qualitative Methods; Literature Review & Meta-analysis; Measurement and Validity Tests; Survey Application and Survey Design, & Proposal Writing; Application of Information Systems, Secondary Data, and Quality of Care and its Measurement. Any other topic approved by the Board of Study.

Session hours: 60; *Delivery methods*: Lectures, exercises, group work, and case studies; Assignments: Research design and proposal

Module assessment: Continuous assessment based on assignments, and attendance 80%

Readings:

Aday, L.A., Begley, C.E., Lairson, D.R., Balkrishnan, R. 2004. *Evaluating the Healthcare System: Effectiveness, Efficiency, and Equity, 3rd ed*. Chicago, IL, Washington, DC: Health Administration Press, Academy Health.

Bowling, A., Ebrahim, S. 2005. *Handbook of Health Research Methods, Investigation Measurement and Analysis.* Washington, DC: National Academies Press.

Campbell, D.T., Stanley, J.C. 1969. *Experimental and Quasi-experimental Designs for Research.* Chicago, IL: Rand McNally.

Choi, T., Greenberg, J.N., eds. 1983. *Social Science Approaches to Health Services Research.* Ann Arbor, MI: Health Administration Press.

Harkness, J.A., van de Vijver, F.J.R., Mohler, P.P., eds. 2003. *Cross-cultural Survey Methods.* Hoboken, NJ: John Wiley and Sons,   Inc.

Israel, B.A., Eng, E., Schulz, A.J., Parker, E.A., eds. 2005. *Methods in Community-based Participatory Research for Health.* San Francisco, CA: Jossey-Bass Publishers.

Nanayakkara, G. 2008. *Handbook on Academic and Professional Writing in Management*. Colombo: Academy of Management Sciences

Module 03: Information Technology & Statistics in Healthcare

This module is organized to provide a sound knowledge of techniques for information technology management, collection of data, and statistical applications for medical administrators. Using medical and non-medical information in the administration of healthcare institutions and programs is a key competency of medical administrators. Acquiring skills of IT use, data gathering for research and study and using information with technical analysis are emphasized in this module.

The topics covered include:
IT systems and MIS, Aligning IT systems and Data systems with healthcare systems of the organization; database management; Introduction to ERP Systems; Statistical sampling; Experimental designs; Testing for independence and homogeneity; Non-parametric statistics; Regression analysis; Time series analysis; Survival data analysis; Further regression models; Factor analysis; The process of data collection and tabulation; Questionnaire format designing; Practical exercise on questionnaire designing; Introduction to SPSS; SPSS applications; Practical assignment; and Group presentations. Any other topic approved by the Board of Study.

Session hours: 4*5*; *Delivery methods*: Lectures, exercises, group work and presentation; Assignments: SPSS Application
Module assessment: Continuous assessment based on assignments and attendance 80%.

Readings:
International Journal of Technology Assessment in Health Care
Brailer, D., & Thompson, T. (2004). *Health IT strategic framework*. Washington, DC: Department of Health and Human Services.
Chaudhry, B. Wang, J., & Wu, S. et al., (2006). *Systematic review: Impact of health information technology on quality, efficiency, and costs of medical care,* Annals of Internal Medicine, 144(10), 742–752.
Daniel, W.W*; Bio-statistics: a foundation for analysis in the Health Sciences,* Third edition, John Wiley & Sons, New York.
Mendenhall, William; *Statistics for Psychology*; Duxbury Press, Massachusetts.
Mills, Richard. L; *Statistics for Applied Economics and Business*, McGraw Hill Book Company, New York.
Spiegel, Murray. R and Stephens, Larry. J; Schaum's *Outline of Theory and Problems of Statistics*, Third Edition, Tata McGraw Hill New Delhi.
Walpole, R.E*; Introduction to Statistics*; Second edition, Macmillan Publishing Co. Inc. New York.

Module 04: Health Policy Planning & Development

The objective of the module is to assist students to understand policy formulation, planning and plan implementation processes and the organization of managerial inputs in the planning process. The module will be delivered through the following main topics utilizing 30 teaching hours.

The topics are:
The policy making process – an overview; Health policy planning and development; Advocacy in policy development and implementation; Comparative healthcare policies; Linking health policy planning to national development; Stakeholder mapping; Case studies in health policy analysis and development; Tools for health policy implementation; Issues in policy execution; and, Assessing policy impact and policy evaluation.

Any other topic approved by the Board of Study.

Session hours: 30; *Delivery methods*: Lectures and case studies; Assignments: Preparation of an action plan for selected area of policy   development and its presentation in class
Module assessment: Continuous assessment based on assignments and attendance 80%

<u>*Readings:*</u>
Beracochea, Elvira, e.t.al. Editors. 2010. *Rights-based Approaches to Public Health,* N.Y.: Sprincer Publishing

Keane, Christopher, 2013. *Modeling Behaviour in Complex Health Systems.* Boston: Elsevier
Almgren, G, and Taryn Lindhorst. 2011. *The Safety-net Health Care System*. N.Y.: Sprincer Publishing
Johnson, James A., Carleen Stockoof. 2010. *Comparative Health Systems: Global Perspectives*.

Module 05: Health Economics

After this module is completed, students will be able to apply theories, concepts and techniques of economics to the institutions, actors and activities that affect health. Healthcare budget constitutes a significant component of the national budget and economical use of resources is a primary objective of health administration. While public-private competition has become an important factor in the health sector, introduction of new technology and delivery of healthcare in the most efficient and effective manner to the periphery of the society are major challenges facing economic analysis of healthcare.

Topics covered include*:*
Recapturing basic principles of Health Economics; health care markets and the role of competition; market failure; state intervention and regulation; demand for health care services; supply of health care services, Advanced methods of costing health care services: Activity-based costing; using cost information in decision making with empirical evidence; Methods of economic evaluation including benefit-cost analysis: using economic evaluations in decision making with empirical evidence; Health policy issues from economics point of view; different forms of reforms and their viability in the Sri Lankan context: decentralization; user fees; out sourcing; social insurance; purchaser provider splits and provider payment mechanisms; community financing; Macro-economic concepts and issues:

National income and income distribution; balance of payments; labour force and unemployment; and economic growth vs. Development.

Any other topic approved by the Board of Study.

Session hours: 30; *Delivery methods*: Lectures and case studies; Presentation skills; Assignments:
Module assessment: Continuous assessment based on assignments, and attendance 80%

<u>*Readings:*</u>
Witter S., Ensor T., Jowett M. and Thompson R. (2000). *Health economics for developing countries: A practical guide*, London: Macmillan.
Drummond M.F., O'Brien B., Stoddart G.L. and Torrance G.W. (2005) *Methods of the economic evaluation of health care programmes* (3rd edition), Oxford Medical Publications, Oxford University Press: Oxford.
Fox-Rushby Julia and Cairns John, (ed.) (2006) *Economic Evaluation*, London: Open University Press.
Johnson-Lans S., 2006. *Health Economics Primer.* Boston, MA: Person/Addison Wesley.
Phelps, C.E., 2002. *Health Economics, 3rd ed.* Boston, MA: Addison Wesley.
Rice, T., 2002. *The Economics of Health Reconsidered, Second Edition.* Chicago: Health Administration Press.
*Supplementary readings are given in the detailed syllabus.

Module 06: Health Systems Strategic Management

This course aims at developing knowledge and skills in strategic analysis of internal and external environments for the purpose of formulating policy and strategy for healthcare development and administration of institutions.

The main topics covered are
Introduction to health systems; Health system goals and directions of development in advanced systems; Process of the strategy making; Operational and strategic planning; Developing strategic direction, formulation of vision, mission, objectives, and values; Environmental assessment: Organizational capability analysis, Completive analysis, SWOT analysis, TOWS matrix;
Developing Strategies: Different types of strategies, Generic and specific strategies; Healthcare time tested Strategic models; Monitoring and evaluation of organizational performance; Results-based monitoring and evaluation; Quality, patient safety and clinical governance; Developing strategic plans for healthcare including healthcare organizations;
Plan implementation and problems of implementation and control; Organizational culture and issues of execution.

Any other topic approved by the Board of Study.

Session hours: 60; *Delivery methods*: Lectures and case studies; Assignments: (a) Vision, mission and value statements (b) formulating a strategic plan for a hospital or a selected health organization
Module assessment: Continuous assessment based on assignments and attendance 80%

Readings:
Micheal Porter *Redefining Healthcare: creating value-based competition on results, Elisabeth Olmsted Tiesber*
Martin V & Henderson E, 2001. *Mapping Service environment: Managing in Health & social care environment.*
Swayne, Linda E., et.al.2009. *Strategic Management of Health Care Organizations*.

Module 7: Human Resource Management

This HRM module is designed to provide participants with an understanding of the concepts and practices in modern strategic HRM which can be seen as set of decisions and actions that result in formulation and implementation of HR policies and strategies to achieve organizational goals and objectives. It will provide learning opportunities for participants to:

- Improve their understanding and awareness of strategic HRM concepts and conceptual frameworks in use;
- Developing human relations skills, teamwork, and management of employee relations
- Providing leadership to healthcare organizations
- Be competent in analyzing case situations related to HR policies and strategy issues; and
- Acquire skills in developing policies, programs and schemes for attracting, remunerating, motivating and developing talent to perform in healthcare institutions for higher productivity.

The key topics covered are:
Introduction to HR strategy and policy; HR strategy and developing people talents for healthcare strategy; Formulating HR strategies; HR strategies to build employee commitment and motivation for productivity; Organization of the HRM function; Recognizing impact of people management on organizational performance/productivity; Leadership and entrepreneurship; Introduction to modern concepts of leadership; Case study of successful leaders; Best practices in leadership; Interpersonal relations and teamwork; managing employee relations and resolving conflict; Managing employee performance; The concept of competency; Type of competencies; Competency analysis; The application of the concept of competency; Manual HR information and records system; Benefits of a computerized human resource information system; Application of ICT strategies for HR information and record system; The functions of a computerized HR information system; Developing a computerized HR information systems; and Developing HR policy manuals. Any other topic approved by the Board of Study.

Session hours: 30; *Delivery methods*: Lectures and case studies; Assignment: Developing an HR Policy Manual.
Module assessment: Continuous assessment, and attendance 80%.

Readings:
Michael Armstrong, *Human Resource Management Practice*, 10th Edition, 2006.
Stephen T. Robbins and Timothy A. Gudge, *Organizational Behaviour*, 13th Edition, 2008.
Fred R. David, *Strategic Management Concepts and Cases*, 11th Edition, 2009.

Module 08: Legal and Ethical Issues in Health Care

This module has two parts: Legal issues and Ethical Issues. Both law and ethics are about conduct of affairs and they cover two different aspects of the conduct in situations of healthcare delivery. In the absence of laws applicable to a situation, ethical conduct and codes of behaviour play the role of guide. The objective of this course is to increase the awareness of students of the legal framework and specific laws applicable to important situations in healthcare administration in institutions while calling their attention to the application of codes of conduct and ethical behaviours in the healthcare system.

The component dealing with legal aspects will cover:
Structure of the medico-legal system in Sri Lanka; Role as principle service provider in the Healthcare system; Responsibility of an efficient and effective medico-legal service for criminal investigation and administration of justice; Role of Medical Administrators in regard to inquest, crime scene, exhumation, post-mortem examination and provision of facilities for effective and efficient medico-legal service

The second component of the module that addresses issues of ethics will provide participants a substantial knowledge of the ethical concepts, issues and their complex expressions in relation to medical and health care services with particular emphasis on medical administration. It will provide learning opportunities for participants to be:

- familiar with ethical, social and cultural dimensions of the provision of health care services
- equipped with the basic concepts, issues and theories of ethics in relation to the provision of health care services
- able to identify ethical dilemmas and problems arising during the provision of health care services
- competent to handle moral and ethical issues in practical contexts particularly in relation to medical administration

The topics covered here will include:
Brief history of medical ethics from ancient to modern times, including codes of Ethics
  ➢ Professional ethics
  ➢ Clinical Ethics and Clinical Governance
  ➢ Ethics of modern medicine and new technologies in health care (bioethics)
  ➢ The ethics of health care systems and public health
  ➢ Administrative ethics and health care, public service.
  ➢ Role and composition of different types of Ethics Committees
  ➢ Research ethics and Ethical Review Committees
  ➢ Seminar preceded by reading, reference work
Any other topic approved by the Board of Study.

*Session hours:*15; *Delivery methods*: Lectures and case studies; Assignments:
Module assessment: Examination 60%; Assignments 40%

Readings:

Medical Ethics by C M Francis, 2nd Edition 2004, Jaypee Brothers Medical Publishers, New Delhi

The Virtues in Medical Practice, by Pellegrino, E.D. and Thomasma. D.C.1993. New York: OUP

Guidelines of the: - Sri Lanka Medical Council; General Medical Council; (UK). The GMC documents can be accessed at www.gmc-uk.org/guidance

Doctors in Society: Medical Professionalism in a Changing World, Royal College of Physicians 2005.

Clinical Ethics- A Practical Approach to Ethical Decisions in Clinical Medicine, Jonsen, Siegler and Winslade, 2006.

Further readings are listed in the detailed syllabus.

ANNEXURE II – MD Medical Administration Part II Curriculum

1. Introduction

The curriculum of Part II of the Degree consists of;
   a.   A programme of training as a Registrar
   b.   One research project

Both these components shall be completed by a candidate while doing attachments as a Registrar over a period of one (1) year and nine (9) months.

Knowledge in terms of factual information, descriptions, theories, principles, concepts and models were learnt during the Part 1 training programme, the trainees are now expected to acquire application skills in Part II. The skills and attitudes associated with the part 11 training programmes are the *competencies that* are necessary to achieve performance standards in key result areas.

2. Programme of Training

Those who successfully complete MD Part 1, shall be registered for MD Part II. The duration of the Part II program will be 1 year and 9 months. During this period, trainees will be provided with **Training Attachments** as **Registrars** in approved administrative units of the line ministry and in the provincial health ministries (see Table 1 below) or any other unit approved by the Board of Study. The training units may be changed by the Board due to requirements of training or availability. During the period of training, Registrars will maintain a comprehensive account of learning and activities in the form of Portfolio.

3. Mode of Training

Training will be by way of working as Registrars in Medical Administration and undertaking individual assignments under the guidance and supervision of qualified Senior Medical Administrators. During these attachments trainees will be expected to take the opportunity to use the theoretical knowledge gained to understand, analyze, review and critique the organization, management and functioning of the health care system in Sri Lanka. Further, they may come up with solutions/improvements to encountered situations and see the possibility of implementing them with the cooperation of the health policy makers and administrators.

Regular and structured tutorials and case presentations at medical administrators' forums will also provide the trainees additional opportunity to strengthen their management skills.

4. Programme Outcomes

Programme out comes to be achieved are:

1. Leading a multi-disciplinary team of health care providers to achieve organizational objectives in the relevant healthcare institution;
2. Developing short, medium and long-term plans for the health sector;
3. Optimally managing the available resources and mobilizing additional resources for provision of cost effective health care;
4. Enhancing human resource management and development
5. Implementing, monitoring and evaluating the work of the health sector;
6. Engaging in or initiating health systems research for improvement of the health care and introducing innovative approaches;
7. Ensuring the safety and quality of the healthcare services;
8. Maintaining ethical standards in the health sector;
9. Ensuring community mobilization and inter-sectoral collaboration through effective coordination
10. Ensuring responsiveness in health services;

5. Competencies

The skills and the attitudes associated with the part 11 training programme are the *competencies*

that are necessary to achieve performance standards in key result areas.

Thus, competencies are the standards in skills and related aspects of performance to be achieved in terms of standards. These standards are both expressed and implied in the modules of education and training provided and their schemes of assessment. The trainees are expected to acquire competency in specific skills and techniques in the following four areas in particular;

I. PLANNING HEALTH SYSTEMS -

RELATED PROGRAMME OUTCOMES ARE 02,05, & 06

    a. Planning and Resource Allocation
    b. Developing Policy and Public Health Perspectives in Health Care
    c. Project Planning, Management and Evaluation

II. MANAGING INSTITUTIONS –

RELATED PROGRAMME OUTCOMES ARE 01,03, 04, 06, 07 9, & 10

    a. Administering health organizations/hospitals
    b. Managing & coordinating health operations and care delivery
    c. Managing & supervising medical and non-medical staff
    d. Performance appraisal and management
    e. Communicating and managing information systems
    f. Total Quality Management in Health Care

22

g. Managing budget and costs, and applying standards of economy

h. Public relations, conflict resolution and client satisfaction

i. Governance in health organizations/hospitals

III. MANAGING PROGRAMMES –

RELATED PROGRAMME OUTCOMES ARE 02,05,06 & 08

a. Formulation of Health System Research Projects

b. Implementation of Projects

c. Developing health care data systems

d. Measuring project performance/outputs, monitoring progress and evaluation of results

IV. PROVIDING LEADERSHIP –

RELATED PROGRAMME OUTCOMES ARE 01, 03, 06,07, 08, 09, & 10

a. Leadership and team management

b. Organization design and change

c. Health systems development

d. Interpersonal and motivation skills

e. Managing people and human resource development

f. Mobilizing inter-sectoral support for Health Sector development

g. Improving professional standards and ethical conduct.

6. Training Units

Table 1: Duration of Each Appointment/Training Unit

Appointments / Training Units	Duration
Hospital	6 Months
MoH	5 Months (2 months in two Directorates and 1 month in a project)
Provincial	5 Months (2 months in a PDHS and RDHS each and 1 in a Provincial Project)
Public Health	3 Months
INGO/NGO	1 Month
Private Hospital	1 Month
Total	21 months

Table 2: Training Units and Expected Outcomes

Training Units	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6	Outcome 7	Outcome 8	Outcome 9	Outcome10
Office of PDHS	√	√	√	√	√			√	√	√
Office of RDHS		√	√	√	√	√	√	√	√	√
Teaching Hospital	√	√	√		√	√	√	√	√	√
District General Hospital		√	√	√	√	√			√	
Ministry of Health - MDPU	√	√			√		√		√	√
Ministry of Health -ET&R	√		√	√	√	√		√	√	
Ministry of Health - Medical Service		√	√	√	√		√			
Ministry of Health - Laboratory Service	√	√	√		√	√	√	√		
Ministry of Health - Public Health Service	√		√		√	√	√		√	
Specialized Disease Control Programme	√	√	√	√	√		√		√	
Health Education Bureau	√						√	√	√	√
Family Health Bureau	√	√	√	√	√		√			
Epidemiological Unit	√	√		√	√		√			
Private Hospital		√	√	√		√		√		
INGO/CBO/NGO			√		√	√			√	√

7. The Portfolio

7.1 Portfolio

Maintain a Portfolio where important management problems / issues are identified by the trainee. Formats for case studies and reflective writings have to be provided to the trainees by the Board of Study. The trainee has to submit 12 case studies and 12 reflective writings at the end of the training. The number of case studies and reflective writings for each appointment is mentioned in the table. These case studies and reflective writings should be selected with the agreement of the supervisor of the particular training unit (appointment). During this attachment, the trainee has to perform situation analysis of each unit and selection of case studies should be based on the situation analysis report submitted to the supervisor.

The procedure for supervision is outlined in Annex IV of the Prospectus.

Number of case studies and reflective writings are mentioned in the table below.

Table 3: Number of Case Studies and Reflective Writings for Each Training Unit or Attachment

Appointments/ Training Units	No of Case Studies	No of Reflective Writings
Hospital	3	4
MOH	3	3
Provincial	3	2
Public Health	2	2
INGO/NGO	1	1
Private Hospital		
Total	12	12

7.2 The completion of Portfolio requirements, as prescribed below shall be fulfilled according to a time table stipulated by the Board of Study (BOS):

- ➢ 12 case records;
- ➢ 12 reflective writings;
- ➢ At least one presentation following participation at foreign and/or special local training programmes
- ➢ At least 5 educational lectures attended in the field of management.
- ➢ At least 10 special activities conducted (e.g. 5S implementation, quality assurance, shramadana (etc.)
- ➢ Participation at the tutorials conducted by the College of Medical Administrators of Sri Lanka every month

8. Research Project

The Trainee is expected to design and conduct **one** research project during the period of attachment as a Registrar in Medical Administration. The subject areas for the research projects should cover one area selected from the following:
1. Management of Hospitals
2. Management of Decentralized Health System
3. Management of Programmes/Projects
4. Management of Support Services

The topics of research should be of the applied type and be relevant to Sri Lanka. Pre proposals containing the title of the project along with a statement of objectives and the usefulness and relevance to Sri Lanka should be submitted to the Board of Study for approval within three months from the date of commencement on Part II training Programme. The Board having approved the pre-proposal will appoint one or more supervisors. Thereafter, the trainee in consultation with the supervisor(s) shall draw up a detailed protocol for submission to the Board of Study for approval.

The detailed protocol shall include the following:

1. Title of the project
2. Justification

3. Objectives and purpose of the Research Project
4. Literature review
5. Plan of implementation
6. Plan of Execution
7. Plan of Evaluation
8. Budget with justification
9. Source of funds (if any)

It is the responsibility of the trainee to consult and obtain guidance from the supervisor(s) at all stages of the research projects and in the preparation of the project reports. The trainees shall submit quarterly reports to the Director, PGIM on the progress of the research through the supervisor, on the prescribed form (See guidelines provided in Annex III of the Prospectus).

The copies of the completed Project Reports should be submitted loose bound in the first instance, to enable corrections, if any, to be made. If a Report is accepted, it should be bound in hard cover with the author's name, degree qualification of the trainee and year printed in gold on the spine (bottom upwards). The cover should be in black. The front cover should carry the title on top, the author's name in the center and the year at the bottom (also printed in gold), prior to convocation.

Three copies of the project reports should be submitted to the Director, PGIM. Two copies shall be the property of the PGIM while the third copy will be returned to the trainee. Trainee shall defend the project reports at an oral examination conducted by two examiners. Supervisor(s) may be present as observer(s).

9. Detailed Curriculum– MD Degree Part II: Training

TRAINING MODULES – GUIDELINES

Exit learning outcome	Teaching learning content	Training unit	Teaching and learning method	Assessment method
1. Leading a multi-disciplinary team of health care providers to achieve organizational objectives in the relevant healthcare institution;	a. Providing leadership to healthcare organizations b. Leadership and people skill development c. Organization design and change d. Health systems development	Provincial Health Hospital DDG(MOH) Public Health	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders Field visits Review meetings	Case study and reflective report s Supervisor report Monthly tutorial Written and oral examination

	e. Developing human relations skills, teamwork, and management of employee relations f. Improving professional standards and ethical conduct. g. Office management practices			
2. Developing short, medium and long term plans for the health sector;	a. Developing Policy and Public Health Perspectives in Health Care b. Planning and Resource Allocation c. Project Planning, Management and Evaluation d. Developing healthcare data systems e. Measuring project performance /out puts, monitoring progress and evaluation of results for planning purposes	Provincial Hospital DDG (MOH) Private Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders	Case study and reflective report s Supervisor report Monthly tutorial Written and oral examination
3. Optimally managing the available resources and mobilizing additional	a. Managing budget and costs, and applying standards of economy b. Communicating and	Provincial Hospital DDG	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and	Case study and reflective report s Supervisor report

resources for provision of cost effective health care;	Managing information systems c. Managing & coordinating health operations and care delivery d. Applying principles of quality in resource management e. Management of Drug supply f. Supplies Chain Management g. Cost Benefit Analysis	(MOH) Public Health Private Hospital INGO/NGO	administrative leaders Field visits Review meetings	Monthly tutorial Written and oral examination
4. Enhancing human resource management and development;	a. Human resource development and training. b. Team building, motivation, and change management. c. Managing & supervising medical and non-medical staff d. Performance appraisal and management e. Conflict resolution f. Assess the Needs assessment for in-service training and for continuous	Provincial Hospital DDG (MOH) Public Health Private Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders Field visits Review meetings	Case study and reflective report s Supervisor report Monthly tutorial Written and oral examination

	Professional education			
5. Implementing, monitoring and evaluating the work of the health sector;	a. Project Planning, Management and Evaluation	Provincial Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders Field visits Review meetings	Case study and reflective report s Supervisor report Monthly tutorial Written and oral examination
	b. Implementation of projects	DDG (MOH)		
	c. Developing healthcare data systems	Public Health		
	d. Measuring project performance /out puts, monitoring progress and evaluation of results	Private Hospital		
	e. Communicating and Managing information systems in evaluation	INGO/NGO		
6. Engaging in or initiating health systems research for improvement of the health care and introducing innovative approaches;	a. Formulation of health system research projects	Provincial Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders Field visits Review meetings	Case study and reflective report s Supervisor report Monthly tutorial Written and oral examination
	b. Evaluation of health systems for improvement	DDG (MOH)		
	c. Innovative research on health improvement	Public Health		
		Private Hospital		
		INGO/NGO		
7. Ensuring the safety and quality of the healthcare services;	a. Total Quality Management in Health Care	Provincial Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant	Case study and reflective report s Supervisor
	b. Safe hospital	DDG		

	development and safety culture within hospitals	(MOH)	political and administrative leaders Field visits Review meetings	report Monthly tutorial Written and oral examination
	c. Managing & coordinating health operations and care delivery for quality and safety	Public Health		
	d. Quality assurance programmes of health services	Private Hospital		
8. Maintaining ethical standards in the health sector;	a. Principles of ethics in medical care	Provincial Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders Field visits Review meetings	Case study and reflective report s Supervisor report Monthly tutorial Written and oral examination
	b. Formation of ethical committees	DDG (MOH)		
	c. Ethical issues in practical contexts particularly in relation to medical administration	Public Health		
	d. Ethical, social and cultural dimensions of the provision of health care services	Private Hospital		
	e. Ethical conduct in research			
9. Ensuring community mobilization and inter-sectoral collaboration through effective coordination.	a. Mobilizing inter-sectoral support for Health Sector development	Provincial Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders Field visits	Case studies and reflective report s Supervisor report Monthly tutorial Written and
	b. Managing & coordinating health operations and care delivery in multi-	DDG (MOH)		

			Review meetings	oral examination
	c. Sharing and Managing information systems in multi-sectoral platforms	Public Health		
		Private Hospital		
	d. Public Private Partnership	INGO/NGO		
10. Ensuring responsiveness in health services;	a. Public relations and customer care	Provincial Hospital	Case studies Reflective writing Document reviews FGDs/Key II with relevant political and administrative leaders	Case study and reflective report s Supervisor report Monthly tutorial
	b. Healthcare quality and safety and responsiveness in customer care	DDG (MOH)		
	c. Customer feedback assessment, surveys and research for healthcare improvement	Public Health	Field visits Review meetings	Written and oral examination
	d. Physical and human resource development for responsiveness	INGO/NGO		
	e. Organization and implementation welfare activities			

ANNEXURE III - Guidelines for the Research Project

1. The topics of research should be of the applied type and be relevant to Sri Lanka. Pre proposals containing the title of the project along with a statement of objectives and the usefulness and relevance to Sri Lanka should be submitted to the Board for approval within three months after the completion of the course on research methodology.

2. The Board having approved the preproposal will appoint one or more supervisors. Thereafter the candidate in consultation with the supervisor(s), shall draw up a detailed protocol of the research project for submission to the Board for approval. The detailed protocol shall include the following;

   I. Title of the project
   II. Justification
   III. Objectives and purpose of the Research Project
   IV. Literature review
   V. Plan of implementation
   VI. Plan of Execution
   VII. Plan of Evaluation
   VIII. Budget with justification
   IX. Source of funds (if any)

3. It is the responsibility of the candidate to consult and obtain guidance from the supervisor(s) at all stages of the research project and in the preparation of the project reports.

4. The candidates shall submit quarterly reports to the Director, PGIM on the progress of the research through the supervisor, on the prescribed form.

5. Candidate shall submit the research project report to the Director, PGIM within a period of one year, six months from the date of successful completion of the course on research methodology.

6. It is recommended that the project reports should contain 20,000 words, it should be type-written using double-spacing on good quality A4 size paper on one side only. A margin of not less than 40 mm should be allowed on the left hand side to facilitate binding, and margins of 20 mm should be left on the top right had side and the bottom. Chapter headings should be capitalized and centered, whilst subdivision headings should be typed from the left hand margin in lower-case type and underlined. Tables and figures should be placed as near as possible to the part of the text to which they refer. The contents of the project report should be given under the following headings.

   i. Title author's name and degrees
   ii. A declaration that the work presented in the project report is the candidate's own and that no part of the project report has been submitted earlier or concurrently for any other degree.
   iii. Summary or synopsis

    iv.   Table of contents

    v.   List of tables

    vi.   List of figures

    vii.   Planning

        a)   Introduction

        b)   Justification

        c)   Objectives and purpose of the Research Project

        d)   Literature review

        e)   Plan of implement

        f)   Budget with justification and source of funds (if any)

    viii.   Execution

        a)   Process of execution

        b)   Analysis

        c)   Results

    ix.   Evaluation

        a)   Findings

        b)   Discussion

        c)   Conclusion

        d)   Recommendations

    x.   References

    xi.   Acknowledgements

7. The copies of the research project report should be submitted loose bound in the first instance, to enable corrections, it any, to be made. If this is accepted, it should be bound in hard cover with the author's name, degree and year printed in gold on the spine (bottom upwards). The cover should be in black. The front cover should carry the title on top, the author's name in the center and the year at the bottom (also printed in gold).

    Three copies of the research project report should be submitted to the Director, PGIM. Two copies shall be the property of the PGIM while the third copy will be returned to the candidate.

8. The candidate shall defend the research project report at an oral examination conducted by two examiners; the supervisor(s) may be present as observer(s).

ANNEXURE IV - The procedure for Supervision – Trainees (Registrars)

Report on Monthly Basis to be evaluated face to face by the supervisors.

1. Satisfactory attendance at work
2. Contributions at the meetings related to policy formulation.
3. Contributions at the meetings with regard to monitoring work plans coming under the officer's direct administrative purview.
4. Contributions at Advisory Committee/Committees.
5. Contributions at meetings conducted to implement the programmes with donor agencies (WHO/UNICEF/World Bank)
6. Special activities conducted during the month. (e.g.5S implementation, quality assurance, shramadana etc.)
7. Reports on supervisions of units and institutions, within the administrative purview.
8. Educational lectures attended in the field of management.
9. Lectures given to staff or trainers during the month.
10. Innovative ideas implemented if any.
11. Presentations following participation at foreign and special local training programmes
12. Participation at the sessions of the Medical Administrators Forum of the Board of Study (at least 50% per year).

This forum will be created by the Board of Study in Medical Administration and will be comprised of all the trainees of MSc and MD (Medical Administration), which will have at least quarterly sessions and will be opened to any Medical Professional.

13. At least one (15 minutes) presentation at the Medical Administration Forum of the Board of Study.
14. Co-ordinate at least one session of the Medical Administration Forum of the Board of Study per year.
15. Portfolio assessment at the end of the training.

ANNEXURE V - Formats for Reflective Writings and Case Studies

WHAT IS REFLECTIVE WRITING? (Adapted from How to Succeed in Medical School, Evans and Brown, BMJ 2009)

Reflection is the **looking in**, a deep thinking technique that allows us to plan for or analyze events that have already happened and to extract maximum learning from them – a sort of 're-evaluation of experience'.

Reflection helps to develop an extra level of consciousness or a 'third eye', which allows us to become more aware of our own part or the 'self' in any given situation. Reflective skills are an important part of personal and professional development for all healthcare professionals and some authors argue that it is the main way we effectively learn from experience as adults. Reflecting honestly upon how you learn something or how a particular event has gone is a way of deconstructing experiences and learning from them – a way of learning for real understanding.

Some people are natural reflectors, they think about events that have happened, both good and bad and try to work out what went well, what didn't and what their own part in each may have been. For a lot of us however these skills do not come naturally, and we have to work at them and actively implement them into our everyday life. Like all new learning skills, it takes a few weeks or months to become comfortable with them, but eventually they become part of what we are and second nature.

The reflective cycle

To get started or consolidate your reflective skills it may be helpful to have a practical model as shown in the following figure:
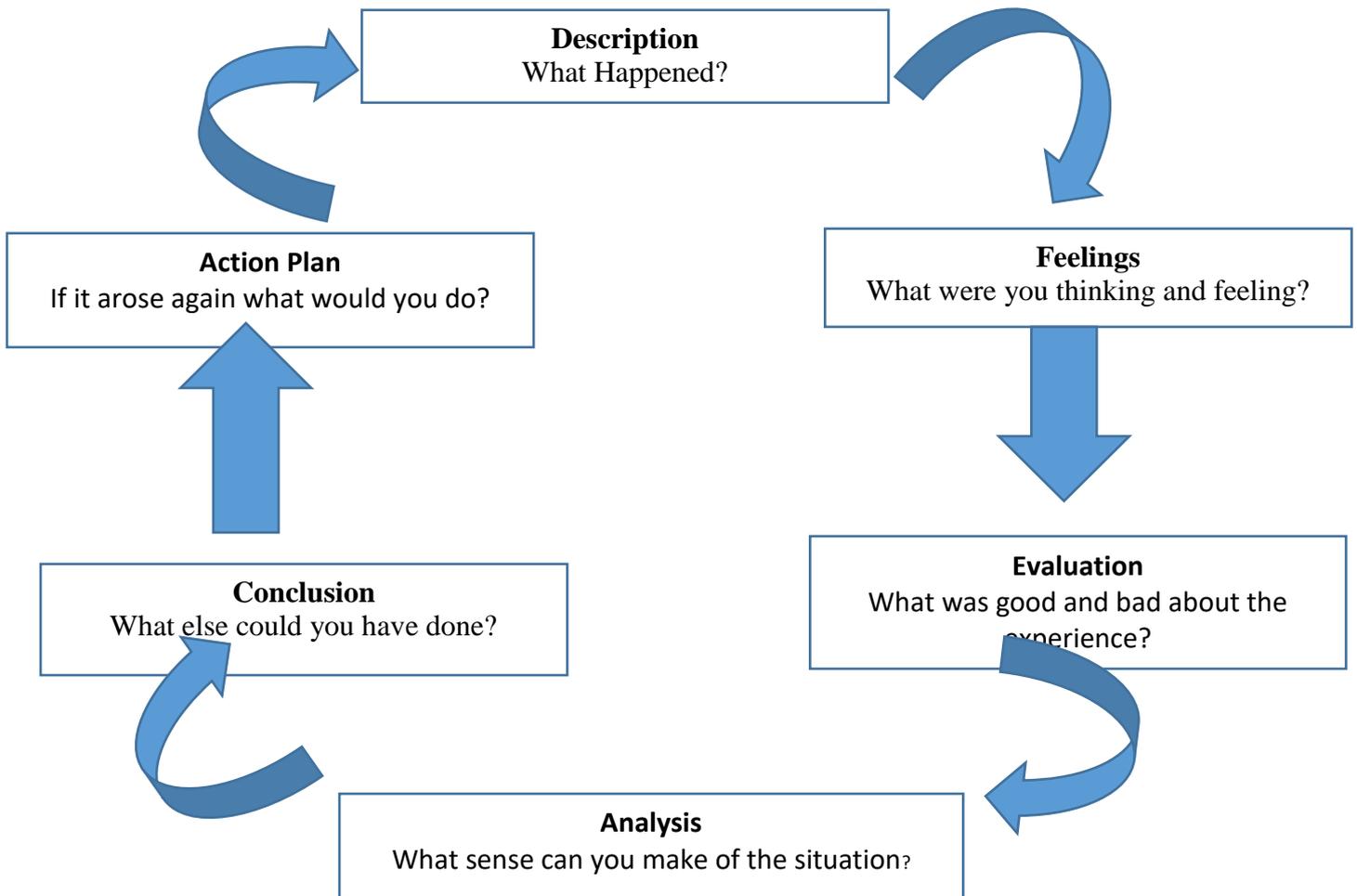
Adapted from The Reflective Cycle (Gibbs, 1988)

This can be used as a way of guiding reflection about any event, but as an example of how reflection can be used to think about how you learn, we have mapped a learning experience on to the cycle.

Description: what happened?

'I went to a 1-hour lecture on the Hospital Architecture along with my whole year. I came away at the end of it having learned almost nothing and with confused and inadequate notes. There were not enough handouts for everyone and so I didn't even have these to fall back on. The whole lecture seemed like a waste of time for me.'

Feelings: what were you thinking and feeling?

'Even before the lecture some of my friends told me that Hospital Architecture is difficult to learn and yet always come up in exams. The lecturer also began the lecture by saying that this was a difficult subject and that people often fail it in exams. I felt from the beginning that my confidence was low. I don't like lectures at the best of times and often find my mind wanders off and that I don't take good notes. I went home at the end feeling fed up and useless.'

Evaluation: what was good and bad about the experience?
'Lots of bad things, like I still don't know about Hospital Architecture and probably would fail any exam about them and that I find lectures so difficult.
The good thing is that most of the others also find Hospital Architecture difficult, so I am not alone.'

Analysis: what sense can you make of the situation?
'I know that Hospital Architecture is important to know about and that I do need to understand them. I need to find a way of learning about them that is right for me. I think that my friends and the lecturer saying that they were difficult had a big influence on my learning and confidence in the lecture. I am more worried about failing exams than learning about Hospital Architecture!'

Conclusion: what else could you have done?
'I could have prepared for the lecture in advance so that the concepts were not new to me and perhaps made a diagram that could have been fleshed out during the lecture as a way of organizing my notes. I think this would have made me more confident. I am going to sit nearer the front next time as it is too easy to let my mind wander when I sit at the back with the other dreamers! I could try recording the lecture to listen to later at home with my notes?'

Action plan: if it arose again what would you do?
'It will arise again as lectures happen frequently. I am determined to be in control in the future and not be influenced by what others say – friends and lecturers have their own motivations and agendas. I also want to discuss lectures in a group to make sure I understand everything and hear what other people have to say. My action plan:

- prepare for lectures to get a head start;
- prepare a rough diagram to shape my notes;
- be aware of my own feelings and how these can impede my learning;
- sit near the front;
- record the lecture;
- consolidate my learning in a group.'

Many people reflect only on the negative or poor experiences, but it is important to reflect on the positive as well. Try applying the reflective cycle to a successful learning experience: establishing what went well and your part in it, will be as valuable as what went wrong.

The reflective cycle can be applied to any situation – professional or private
To help analyze what happened, why and what you felt about it. Try applying it to a situation with friends or family or a patient encounter – it is very adaptable.

(No. of words 1500)

GUIDELINES FOR A CASE STUDY

Objective of a Case Study:
To diagnose what the problems or issues in the case are, and why they have occurred, to consider a variety of solutions; and to justify what you believe to be the best solution

There are two types of case studies and they are:

Type 1: The Analytical Approach
The case study is examined in order to try and understand what has happened and why. It is not necessary to identify problems or suggest solutions.

Type 2: The Problem-Oriented

Method
The case study is analyzed to identify the major problems that exist and to suggest solutions to these problems.

In this course problem – oriented case studies are recommended.

A successful case study has following features:
- Relate the theory to a practical situation
- Identify the problems
- Select the major problems in the case
- Suggest solutions to these major problems
- Recommend the best solution to be implemented
- Detail how this solution should be implemented

The Guidelines for preparing Case Analysis are given below:
- Practicality- make reasonable assumptions and make decisions
- Justification – how you support your decisions
- Realism – no recommendation is beyond an organization's means.
- Specificity-no broad generalization –5W+ (what, why, when, how, where and who)
- Originality- feasible alternatives (not necessary the same as the organization's plan)
- Contribute – Group exercise in class and real life. Be open-minded to other's views. Contribute.

How to Write the Case Study?
There are usually ten sections in a case study. They are:
I. Executive Summary
II. Introduction
III. Problem Analysis
IV. Proposals
V. Recommendations
VI. Implementation

VII.   Conclusion
VIII. References
 IX.   Appendices

I.   Executive Summary should be based on the following criteria (300 words)
   • Outline the purpose of the case study
   • Describe the field of case study – this is usually an overview of the organization
   • Outline the issues and findings of the case study without the specific details
   • Here, the reader should be able to get a clear picture of the essential contents of the study.
   • Mention your recommendations

II.   Introduction should include the following:

   • Overview of the organization and unit
   • Outline the purpose of the case study (Objective of the study)
   • Outline the issues and findings of the case study without the specific details (Problem)
   • Identify the theory that will be used.
   • Here, the reader should be able to get a clear picture of the essential contents of the study

III.   Problem Analysis should address the following:
   • Identify the problems found in the case. Each analysis of a problem should be supported by facts given in the case together with the relevant theory and course concepts. Here, it is important to search for the underlying problems for example: cross-cultural conflict may be only a symptom of the underlying problem of inadequate policies and practices within the hospital.
   • It is recommended to use performance improvement tools such as why – why diagram, Fish – Bone diagram, problem tree, paretto analysis etc
   • This section is often divided into sub-sections, one for each problem.

IV.   Proposals section should consist of following:
   • Summarize the major problem/s
   • Identify alternative solutions to this/these major problem/s (there is likely to be more than one solution per problem)
   • Briefly outline each alternative solution and then evaluate it in terms of its advantages and disadvantages

V.   The recommendation should be based on your case study and consist of the following:
   • Choose which of the alternative solutions should be adopted
   • Briefly justify your choice explaining how it will solve the major problem/s
   • This should be written in a forceful style as this section is intended to be persuasive

- Here integration of theory to your recommendation will be useful.

VI. The implementation section should be based on the following criteria:
- Explain what should be done, by whom and by when
- If appropriate include a rough estimate of costs (both financial and time).

VII. Conclusion
- Sum up the main points from the findings and discussion

VIII. References
- Make sure all references are sited correctly

IX. Appendices (if any)
- Note any original data that relates to the study, but which would have interrupted the flow of the main body.

Number of words 3,500

The Common Errors in Analysing Case Studies are:

- Not understanding and accepting the facts of the case
- Not explaining exactly what the problems are and why they have occurred
- Making unwarranted assumptions to try to simplify the case
- Sticking to generalities, such as "they must try to improve communication"
- Not integrating the various points into a preferred solution
- Not using theories and concepts currently being studied in the course
- Seeking ways out of the situation (such as "fire them all") rather than trying to solve the problems
- Ignoring practicalities

(Do not make these errors in your case studies).