"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"

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

PROSPECTUS

DOCTOR OF MEDICINE (MD) BY THESIS
AND
BOARD CERTIFICATION
IN
FAMILY MEDICINE

2013

BOARD OF STUDY IN FAMILY MEDICINE AND GENERAL PRACTICE

CONTENTS

MD BY THESIS AND BOARD CERTIFICATION IN FAMILY MEDICINE

1. INTRODUCTION AND JUSTIFICATION

Family medicine is a relatively new area of specialization which evolved as a felt need in personal health care. Humanistic approaches to health of the whole family, broad-based care of the person rather than focusing on the disease, and improvement of quality of life are some pertinent concerns of the discipline. The family physician now functions as the core of the health care system in many countries. It is not a mandatory requirement that family practitioners in Sri Lanka have specialist qualifications, but working towards this goal would help to improve the quality of care. However, most family physicians in private practice cannot afford to enter a full-time training programme which leads to securing Board Certification as a specialist in Family Medicine. The MD family medicine by thesis programme is structured in such a way that would allow family physicians to enter into a study course which would not adversely impact on their practice. The MD by thesis programme in Family Medicine leading to Board Certification aims to equip health professionals with expertise in knowledge, skills and attitudes required of a specialist in family medicine. The course has been designed in a structured stepwise manner to develop participant's competencies at several levels. The programme will also enable participants to design, deliver and conduct research. A clinical training component has been incorporated into the post MD course to enable the general practitioner to update his/ her knowledge on current clinical practice management and skills.

This five year course (three years for MD by thesis and a further two years for Board Certification) is designed for family physicians who are in full time general practice, holding the Diploma in Family Medicine, and who wish to pursue Family Medicine as a career.

2. TRAINING OUTCOMES

A Board Certified Specialist in Family Medicine shall demonstrate a range of learning outcomes:

- **Scholarship in health professions' education**: In addition to the comprehensive and up-to-date knowledge acquired in Family Medicine, the trainee will have a detailed knowledge and understanding of one or more specific areas in Family Medicine.
- **Methodological approaches**: The graduate will be competent in research methodologies appropriate to Family Medicine.
- **Application of knowledge and understanding**: Through the MD thesis, the trainee will demonstrate competence in specialized, advanced and evolving practice, including research in an area of Family Medicine. The graduate will create new knowledge and understanding and make an original contribution to the development of family practice. He/She will demonstrate an understanding of how the learning outcomes of the Family Medicine programme may be applied to inform judgments and to develop and advance ideas and/or practice.
- **Generic skills**: The trainee will be able to approach intellectual enquiry autonomously to analyze, synthesize, diagnose, design, plan, execute and evaluate at an advanced level. They will be able to do this to the extent necessary to critically review, consolidate and extend knowledge, skills, practices, and thinking.
- **Communication, research and IT**: trainee will show an ability to practice a wide range of advanced and specialized skills both generally and in Family Medicine. They

will be able to communicate effectively with peers and senior colleagues, including specialists in Family Medicine.

- **Practice skills**: The trainee will be competent to deal with any problem encountered in a family /GP practice

3. TRAINING CONTENT

The MD by thesis in family medicine is a research degree with specified course work which is meant to enable trainees to complete a research degree of a high standard. A clinical training component is incorporated to update the clinical knowledge and skills of the trainee to be eligible for Board certification.

The course work shall consist of face-to-face sessions and workshops conducted at the PGIM. These sessions shall be on topics designated by the Board of Study (BoS) in Family Medicine, including the following:

- Advanced research methods and statistics
- Scientific writing and writing of a thesis
- Critical evaluation of publications in Family Medicine
- Writing of a review on a research paper
- Critical evaluation and writing of a report on the Diploma Family Medicine course
- Exercises to develop skills and techniques in communication

Further details of these are given in (**Annex 1.** Details of supplementary modules)
Some of these sessions may be conducted along with other MD training programmes.

The project proposal and the thesis shall show evidence of scholarship in one particular area of Family Medicine. It shall be assessed on the individual's ability (where appropriate) to:

- Apply family medicine principles to individual practice
- Write clearly and succinctly
- Critique the relevant published literature
- Show ability to analyze primary and/or secondary material
- Argue and discuss clearly and coherently
- Clearly define the topic under study
- Clearly define the questions to be asked and investigated
- Show evidence of critical thinking about the problem, assumptions, opinions and values encountered
- Put the study into context
- Show an understanding of appropriate research methods
- Apply appropriate methodological approaches with rigour
- Present the work undertaken including where appropriate the findings/data in an orderly and coherent manner
- Discuss the significance of the results/outcome as applied to the individual's situation
- Justify the conclusions in terms of the findings
- Provide a complete and orderly bibliography/reference list properly cited

4. SELECTION OF TRAINEES / ELIGIBILITY CRITERIA

The minimum requirements for admission to the programme leading to the MD Family Medicine shall be as follows:

a. An M.B.B.S. degree (or equivalent basic medical degree), registered with the Sri Lanka Medical Council
   And
b. Have passed the Diploma in Family Medicine examination of the PGIM
   And
c. Be a full time general practitioner and have five years of active professional experience in General/ Family practice acceptable to the PGIM during the 10 years preceding the date of application

The maximum number of trainees admitted to the training programme during a given year will depend on the availability of supervisors and the decision of the BoS in Family Medicine. A supervisor may be assigned to more than one trainee if the need arises.

5. STRUCTURE, COMPOSITION, AND DURATION OF THE TRAINING PROGRAMME

5.1. Once a candidate is admitted to the MD in Family Medicine training programme and the candidate has registered with the PGIM; the trainee shall take part in several face-to-face teaching-learning sessions and workshops on advanced research and statistical methods and IT techniques in Family Medicine. These sessions will be conducted over a period of six months (**Annex 1** Details of supplementary modules).

5.2. The trainee will submit to the BoS in Family Medicine , a preliminary project proposal (**Annex 2** Format of Preliminary Project Proposal) followed by a detailed project proposal, prepared under the guidance of two or more supervisor(s) approved by the BoS, according to the format and guidelines of the BoS. This preliminary proposal should be submitted within three months of registration. The detailed project proposal should be submitted within four months of receiving approval of the preliminary proposal from the BoS. (**Annex 3** Format of Detailed Project Proposal). On approval of the detailed project proposal by the BoS, the trainee shall implement the project under the guidance of the Supervisor(s), in compliance with the PGIM's Guidelines for Supervisors of Dissertations / Theses. The trainee shall be required to submit progress reports at regular intervals (once in six months) through the supervisor(s). (**Annex 4** PGIM guidelines for supervisors of dissertations / theses). On completion of data collection and analysis, the trainee shall prepare a thesis according to the format prescribed by the BoS, and submit the completed thesis to the PGIM with the recommendation of the supervisor(s). The thesis should be submitted Two and a half years after registration for the MD but not later than 6 years after registration. (**Annex 5** Guidelines for Preparation of Thesis). The thesis shall be examined by the Examiners nominated by the BoS and approved by the BoM and senate. It has to be defended by the trainee at a viva voce examination. The trainee shall be awarded the MD Family Medicine on successful defense of the thesis.

5.3. Post MD Clinical training leading to Board Certification

To obtain Board Certification after passing the MD Family Medicine by thesis the trainee shall under the supervision of designated trainers undertake at least two years

of work in further clinical training in Family Medicine : one year at a local centre and another year at an overseas centre or make use of the flexible post MD training option. The supervisors, the centre and the nature of work to be undertaken by the trainee shall be approved by the BoS. During the clinical attachments in a University Family Medicine Department and in General Practice Clinics, the supervisors shall be required to submit progress reports once in six months to the PGIM.(**Annex 11 and 12** format for Progress Reports).

6. APPOINTMENT OF SUPERVISORS (TRAINERS) AND THEIR RESPONSIBILITIES

Each trainee must have at least one supervisor (trainer) with relevant qualifications approved by the Board of Study.

A trainee may have an overseas supervisor. In this event, the trainee must also have a local co-supervisor.

All supervisors (local and overseas) must be appointed by the BoM on the recommendation of the BoS in Family Medicine.

All supervisors of theses are expected to abide by the PGIM's Guidelines for Supervisors of Dissertations / Theses.

7. TRAINING SETTING/UNITS AND EDUCATIONAL RESOURCES (LOCAL/FOREIGN)

7.1 Local and overseas training will be in units / hospitals/ specialty clinics / Universities / GP practices which are approved by the BoS.

7.2 RESPONSIBILITIES OF TRAINEES

Students are expected to acquaint themselves with PGIM Rules and Regulations and meet all requirements stipulated therein, that are relevant to the MD Family Medicine by thesis programme.

8. RESEARCH PROJECT LEADING TO THESIS

8.1 Preliminary project proposal

The preliminary project proposal must be submitted to the BoS in Family Medicine within three months of the trainee's registration in the PGIM for the MD in Family Medicine. It should be completed using the format prescribed for this purpose by the BoS (**Annex 2**), and recommended by the supervisor(s).

A trainee must have a supervisor for the research project. The appointment of the supervisor must be approved by the BoS in Family Medicine. In the event that the proposed supervisor is based overseas, the trainee must be co-supervised by a local supervisor.

In the event that the preliminary project proposal does not meet with the approval of the BoS, the trainee is required to submit an amended proposal.

8.2 Detailed project proposal

Within four months of approval of the preliminary project proposal, the trainee is expected to prepare and submit a detailed project proposal to the BoS for its approval.

The detailed project proposal must be completed using the format prescribed for this purpose by the BoS, and recommended by the approved supervisor(s).

In the event that the detailed project proposal does not meet with the approval of the BoS, the trainee is required to submit an amended proposal.

8.3 Submission of thesis

Upon completion of the thesis, the trainee is expected to submit three copies with a soft copy to the PGIM. The MD thesis must be at least 40,000 words in length, and conform to the format prescribed by the BoS for this purpose.
The MD thesis must be certified by the supervisor(s) as being the candidates' original work. The candidate must include a declaration in the thesis that the work has not been submitted for any other research degree.

The MD thesis must be submitted within a period of not less than two and half years, and not more than six years after the candidate's registration in the PGIM for the MD in Family Medicine.

9. PERIODIC APPRAISALS

Upon receiving the BoS approval of the detailed project proposal, the trainee is expected to implement the project under the guidance of the approved supervisor(s). During the period of data collection, analysis and thesis writing, the trainee must submit progress reports at regular six monthly intervals as prescribed by the BoS. The progress reports should be completed using the format prescribed by the BoS (**Annex 6)**, and recommended by the supervisor(s).

In the event that the BoS is not satisfied with the progress of the trainee, the BoS will inform the supervisor of this. The supervisor will be expected to counsel the trainee, and discuss possible remedial measures to be implemented during the next six months.

10. ELIGIBILITY TO REGISTER FOR MD FAMILY MEDICINE EXAMINATION BY THESIS

The trainee should fulfill the following criteria in order to be eligible for the MD by thesis examination:

(a) Completed at least two and half years from the date of first registration in the MD training programme
(b) Obtained approval for the detailed project proposal by the BoS
(c) Submitted satisfactory progress reports BoS for the period of training
(d) Submitted a thesis which is recommended by the supervisors appointed by the BoS.

11. EXAMINATION OF MD FAMILY MEDICINE BY THESIS

11.1 Appointment of examiners

The MD thesis shall be evaluated by two independent examiners who are experts in Family Medicine, at least one of whom shall be from overseas. The Examiners must be approved by the BoS in Family Medicine, the Board of Management and the Senate of the University.

11.2 Evaluation of the thesis

The MD thesis shall be assessed independently by each examiner using a pre-determined format. (Annex 7. Format for assessment of MD thesis)

11.3 Defense of the thesis

The candidate shall defend the thesis at an examination conducted not less than three months after, and not more than six months from the date of submission of the thesis.
The Viva voce shall be conducted by the two examiners appointed to evaluate the MD thesis.(See 11.1 above)

11.4 Acceptance of thesis

After the candidate has defended the thesis, the examiners shall reach a consensus regarding the examination outcome, which shall be one of the following:

- accept with no revisions;
- accept with minor revisions;
- Re-submit after major revisions.

11.5 Pass / fail criteria

In the event that the examiners recommend that the thesis be **accepted with no revisions**, the candidate will be deemed to have **passed** the MD in Family Medicine, subject to confirmation by the Senate.

In the event that the examiners recommend that the thesis may be **accepted with minor revisions**, the candidate will be informed of the revisions recommended by the examiners, and granted a period of not more than 1 month to carry out such revisions. The corrected thesis must be submitted to the PGIM along with an

endorsement by the Supervisor(s) that the required corrections have been carried out satisfactorily. Such a candidate will be deemed to have **passed** the MD in Family Medicine, subject to confirmation by the Senate.

In the event that the examiners recommend that the thesis should be **re-submitted after major revisions**, the candidate will be informed of the revisions recommended by the examiners, and granted a period of not more than 6 months to carry out such revisions. The revised thesis must be re-submitted to the PGIM along with a recommendation by the supervisor(s) that the required corrections have been carried out satisfactorily, and re-examined by the Board of Examiners (first re-submission). Upon their recommendation that the thesis has been revised to their satisfaction, the candidate will be deemed to have **passed** the MD in Family Medicine, subject to confirmation by the Senate.

In the event that the Board of Examiners deem that the thesis has not be revised to their satisfaction, the candidate will be permitted to re-submit the thesis again, and granted a period of not more than 6 months to carry out the required revisions. The revised thesis must be re-submitted to the PGIM and re-examined once more by the Board of Examiners (second re-submission). Upon their recommendation that the thesis has been revised to their satisfaction, the candidate will be deemed to have **passed** the MD in Family Medicine, subject to confirmation by the Senate.

A candidate shall be permitted to re-submit the MD thesis on not more than two occasions. In the event that the candidate fails to satisfy the Board of Examiners after the second re-submission, such a candidate shall be deemed to have **failed** the MD in Family Medicine and shall be required to leave the training programme.

12. REQUIREMENTS FOR AWARD OF MD FAMILY MEDICINE

A candidate shall be deemed to have fulfilled the requirements for award of the MD in Family Medicine in the following circumstances.

(a) The examiners have accepted the thesis

(b) The examiners have accepted the thesis subject to minor corrections and such corrections have been carried out

(c) The examiners have recommended that the thesis be re-submitted after major revisions and such revisions have been carried out as stipulated in section 11.5 above

13. POST MD TRAINING LEADING TO BOARD CERTIFICATION

Clinical training component: The trainee will have to undergo two years of clinical training in hospitals / specialty clinics. This training shall be one year locally and another year in an overseas centre. In the event the trainee is unable to secure an overseas placement he shall embark on a flexible training option, instead of the overseas training component.

13.1 Clinical Training

The trainee will have to complete one year of supervised training in local units and another year in an overseas centre approved by the BoS of study in Family

Medicine. If the trainee decides to continue the 2nd year of training locally the trainee should do six months in a university family medicine department and six months in a general practice clinic approved by the BoS. During this two year period of training, the trainee will have to maintain the training portfolio.

13.2 Objectives

The objectives and curriculum for training are set out in **Annex 8.**

13.3 Guidelines for maintenance of Training Portfolio

During the 24 month period of post MD training, the trainee has to document the progress and maintain a comprehensive record in the form of a Training Portfolio **(Annex 9).** This will enable the trainee to reflect on his/her training experience and identify and correct any weaknesses in the competencies expected from him/her, and also recognize and analyze any significant clinical events experienced, so that appropriate changes in management could be adopted in order to reduce the risks arising from such situations in the future. The trainer needs to conduct regular assessments and certify that the trainee has satisfactorily acquired the required competencies. This Training Portfolio will be used at the Pre Board Certification Assessment, to evaluate the trainee's competence to practice independently as a Specialist in Family Medicine.

The components of the Training Portfolio are:

1. Log of Procedures and clinical activities carried out
2. Reflective Practice (on significant clinical events experienced by the trainee)
3. Teaching
4. Research and Audit
5. Information Technology
6. Ethics and Medico-legal Issues
7. Professional Development

13.4 Submission of the Portfolio and Portfolio viva

The portfolio must be submitted to the PGIM within a month of completing the Post MD clinical training. The portfolio will be assessed at the Portfolio Viva (Annex 10 portfolio evaluation form). The portfolio viva (one hour duration) will be conducted by two examiners within three months of the submission of the portfolio on a date stipulated by the BoS in family medicine. The marking scheme given in table I will be used

Table I. Marking scheme for the portfolio viva

Grade	Marks %
A	80-100
B	60-79
C	50-59
D	40-49
E	0 – 39

Candidate should obtain a Grade C or above to pass the portfolio viva and be eligible to proceed to Board certification. Candidates who fail to obtain a Grade C should resubmit the portfolio with corrections/amendments one month before Board certification and will be on the date stipulated by the BoS in family medicine.

Those who fail to obtain a pass grade after the second attempt will have to re-sit this component as and when it is next conducted. There will be no limitation in the number of attempts.

13.5 Progress Reports

The trainers should evaluate the progress of each trainee at six monthly intervals as recommended by the BoS and complete the relevant sections of the portfolio. During the post MD training period, progress reports will have to be submitted once in six months using the form shown in **Annex 11 and 12**.

The PTR forms (**Annex 13)** to be submitted every six months during the Post MD training period. The trainer should supervise this activity and ensure that the forms are sent to the BoS for necessary follow action.

In the event of reports with adverse comments the BoS should take prompt action according to the PGIM General Rules and Regulations and initiate a preliminary investigation if necessary.

13.6 Objective Structured Clinical Examination (OSCE)

10 stations/**100 minutes/1000 marks**

The trainee will have to obtain a pass mark at the Objective Structured Clinical Examination conducted at the end of the clinical training component**.**

There shall be 10 stations and each station will consist of two examiners. The duration at each station will be 10 minutes. Each station will be independently marked out of 100 by the two examiners. The mark for each station will be the average of the two marks given by the two examiners based on a predetermined marking scheme for the expected answers, provided the two marks are within 15% of each other. If the two marks are more than 15% apart for any station, the two examiners will discuss and arrive at an agreed mark. The candidate will have to secure a pass mark of 60% or more (Total mark of 600 or more out of 1000) to be eligible to proceed to Board certification.
Those who fail this component will have to re-sit this component when it is next conducted. There will be no limitation in the number of attempts.

14. PRE BOARD CERTIFICATION ASSESSMENT

In order to be eligible for board certification the trainees must fulfill the following criteria:

i. Satisfactory completion of 24 months of post MD clinical training
ii. satisfactory progress reports from local / overseas supervisors
iii. Pass the Objective Structured Clinical Examination (OSCE)

iv. Submission of the completed Portfolio and obtain a pass grade (Grade C or above) at the portfolio viva

v. Attendance of 80% or more in each of the clinical training components

vi. Submit a Certificate of competence in cardiopulmonary resuscitation issued by an institute approved by the BoS.

vii. Make an Oral presentation to the Board of Study - Approximately 30 minutes duration regarding his / her post-MD training and future vision regarding improvement of quality of patient care/family medicine/ diagnostic services in Sri Lanka.

15. DATE OF BOARD CERTIFICATION FOR TRAINEES WHO HAVE FULFILLED CRITERIA TO BE ELIGIBLE FOR BOARD CERTIFICATION

15.1. The date of Board certification will be decided by the Board of Study in Family Medicine and recommended for approval by the Board of Management, the Senate and the Council of the University of Colombo.

16. TRAINERS

The practitioners with at least three years experience after Board Certification in the field of Family Medicine will be recommended as trainers by the BoS and approved by the Board of Management.

The roles and responsibilities of a trainer are identified in **(Annex 14)**

The current list of trainers will be notified at the commencement of the course

17. RECOMMENDED BOOKS/JOURNALS FOR READING – (Annex 15)

ANNEXES

ANNEX 1. Details of Supplementary Modules

1. Advanced research methods, statistics and psychometrics

Course outcomes

At the end of the course the trainee should be able to:

1. Evaluate critically the different research methods paying special attention to methodological rigor and research ethics.
2. Select an appropriate research/psychometric method to address a research question.
3. Device a detailed research protocol based on the selected research method.
4. Discuss the data analysis techniques as applicable to Family Medicine research.
5. Select appropriate data analysis/psychometric techniques to analyze a set of data.
6. Use suitable software packages to analyze a set of data.
7. Present the analyzed data appropriately.

Content

1. Scientific method
2. Quantitative research methods (including data collection and data analysis methods)
3. Qualitative research methods (including data collection and data analysis methods)
4. Advanced psychometric methods (including data analysis)
5. Research ethics

Teaching and learning methods

- Lecture discussions (12 hours)
- Face-to-face, supervised, hands on small group/individual sessions (10 hours)

Assessment: A supervised assignment (25 hours)

The assignment topic will be announced by the course organizer during the course. The trainee is prepared to write an assignment and submit to the PGIM. The course tutors will grade the assignment using the following scale.

Grade A – Has critically applied the material learnt in the course to a practical situation. Can justify such application with extensive and appropriate evidence.

Grade B – Has applied the material learnt in the course to a practical situation. Can justify such application with appropriate evidence.

Grade C – Cannot appropriately apply the material learnt in the course to a practical situation.

The trainee should receive a B grade to pass the unit. If a trainee receives a C grade he/she needs to re-submit the assignment. A maximum of three re-submits are allowed.

2. Critical evaluation of Family Medicine literature and writing a review

Course outcomes

At the end of the course the trainee should be able to:

1. Recognize the role of a review in the advancement of knowledge.
2. Use appropriate sources to collect literature evidence on Family Medicine.
3. Categorize the literature evidence based on appropriate parameters such as relevance, scientific rigor, impact, etc.
4. Identify an appropriate format for a review.
5. Write a review related to Family Medicine.
6. Review a review critically.

Content

1. Literature search methods
2. Criteria/features of a good review
3. Literature review methods (qualitative and quantitative)
4. Referencing systems.

Teaching and learning methods

- Lecture discussions (12 hours)
- Face-to-face, supervised, hands on small group/individual sessions (10 hours)

Assessment: A supervised assignment (25 hours)

The assignment topic will be announced by the course co-ordinator during the course. The trainee is prepared to write an assignment and submit to the PGIM. The course tutors will grade the assignment using the following scale.

Grade A – Has critically applied the material learnt in the course to a practical situation. Can justify such application with extensive and appropriate evidence.

Grade B – Has applied the material learnt in the course to a practical situation. Can justify such application with appropriate evidence.

Grade C – Cannot appropriately apply the material learnt in the course to a practical situation.

The trainee should receive a B grade to pass the unit. If a trainee receives a C grade he/she needs to re-submit the assignment. A maximum of three re-submits are allowed.

3. Scientific writing and writing a thesis

Course outcomes

At the end of the course the trainee should be able to:

1. Collect background data necessary for a scientific write up.
2. Design the structure of a scientific communication, based on the house style of the publisher or the institute to which the communication is submitted.
3. Critique the common techniques used to measure impact of a scientific publication.
4. Appraise critically a scientific communication paying special attention to issues such as scientific validity and plagiarism.
5. Write a scientific communication.

Content

1. How is scientific writing different to non-scientific writing?

2. Types of scientific publications; e.g. conference communications, journal articles, theses and dissertations, scientific reports and letters, grant proposals, ethics applications.
3. Features of a good scientific communication.
4. Writing style.
5. Creativity versus plagiarism.

Teaching and learning methods

- Lecture discussions (12 hours)
- Face-to-face, supervised, hands on small group/individual sessions (10 hours)

Assessment: A supervised assignment (25 hours)

The assignment topic will be announced by the course co-ordinator during the course. The trainee is prepared to write an assignment and submit to the PGIM. The course tutors will grade the assignment using the following scale.

Grade A – Has critically applied the material learnt in the course to a practical situation. Can justify such application with extensive and appropriate evidence.

Grade B – Has applied the material learnt in the course to a practical situation. Can justify such application with appropriate evidence.

Grade C – Cannot appropriately apply the material learnt in the course to a practical situation.

The trainee should receive a B grade to pass the unit. If a trainee receives a C grade he/she needs to re-submit the assignment. A maximum of three re-submits are allowed.

4. Communication skills

Course outcomes

At the end of the course the trainee should be able to:

1. Recognize the importance of communication in delivering scientific information.
2. Network widely to promote research ideas and to engage in cross-border and multi-disciplinary research.
3. Distinguish and adopt appropriate styles of communication when communicating scientific information with different audiences; e.g. general public, scientific community of the same specialty, scientific community of different specialties, professionals with non-scientific backgrounds.
4. Select an appropriate method to deliver information; e.g. press releases, interviews, reports, web blogs, etc.
5. Make written and oral presentations to disseminate scientific information.
6. Evaluate a scientific communication.

Content

1. Basic principles of communication
2. Uses and benefits of appropriate communication
3. Methods of communication and their appropriate use
4. Types of communication; e.g. oral versus written communication, verbal versus non-verbal communication

5. Resources for communication and their appropriate use
6. Ground rules of a good scientific communication

Teaching and learning methods

- Lecture discussions (12 hours)
- Face-to-face, supervised, hands on small group/individual sessions (10 hours)
- Oral presentation of information (1 hour)

Assessment: A supervised assignment (25 hours)

The assignment topic will be announced by the course co-ordinator during the course. The trainee is prepared to write an assignment and submit to the PGIM. The course tutors will grade the assignment using the following scale.

Grade A – Has critically applied the material learnt in the course to a practical situation. Can justify such application with extensive and appropriate evidence.

Grade B – Has applied the material learnt in the course to a practical situation. Can justify such application with appropriate evidence.

Grade C – Cannot appropriately apply the material learnt in the course to a practical situation.

The trainee should receive a B grade to pass the unit. If a trainee receives a C grade he/she needs to re-submit the assignment. A maximum of three re-submits are allowed.

5. Family Medicine, Information and Communication Technologies (ICT) and Blended Learning

Course outcomes

At the end of the course the trainee should be able to:

1. appreciate the changes occurring in Family Medicine with the infusion of innovative technologies
2. discuss how blended nature of Family Medicine has enhanced with the introduction of ICT/innovative technologies by critically evaluating aspects such as validity, reliability, practicality, ethical and legal aspects.
3. specify appropriate ICT/innovative technologies which would enhance their academic (learning/teaching, assessment)/administrative/research activities.
4. design a small scale project in a chosen area to demonstrate the ability to use ICT/innovative technologies

Content

1. Introduction to ICT and Blended learning in Family Medicine
2. ICT/innovative technologies in today's Family Medicine: global perspective
3. Blended learning in Family Medicine: evaluating evidences critically
4. Free and open source tools to enhance Family Medicine
5. Potential ICT/ innovative tools for Sri Lankan Family Medicine
6. Future technologies and Family Medicine

Teaching and learning methods

- Lecture discussions (12 hours)
- Face-to-face, supervised, hands on small group/individual sessions (10 hours)

Assessment: A supervised assignment (25 hours)

The assignment topic will be announced by the course co-ordinator during the course. The trainee is prepared to write an assignment and submit to the PGIM. The course tutors will grade the assignment using the following scale.

Grade A – Has critically applied the material learnt in the course to a practical situation. Can justify such application with extensive and appropriate evidence.

Grade B – Has applied the material learnt in the course to a practical situation. Can justify such application with appropriate evidence.

Grade C – Cannot appropriately apply the material learnt in the course to a practical situation.

The trainee should receive a B grade to pass the unit. If a trainee receives a C grade he/she needs to re-submit the assignment. A maximum of three re-submits are allowed.

ANNEX 2. Format of Preliminary Project Proposal

PGIM BOS IN FAMILY MEDICINE
MD IN FAMILY MEDICINE
Preliminary Project Proposal

Section 1

1. Name of trainee
2. Date of registering for MD Fm/Med
3. Proposed project title
4. Brief outline of proposed project (about 250 words)
5. Signature of trainee and date

Section 2

1. Supervisor 1
   a. Name
   b. Designation
   c. Institution
   d. Postal address, Telephone number and Email address
2. Supervisor 2
   a. Name
   b. Designation
   c. Institution
   d. Postal address, Telephone number and Email address

Section 3

I hereby certify that I will supervise the above-named PGIM trainee in carrying out the research project outlined above. I have read, and am willing to follow the PGIM's *Guidelines for Supervisors of Research Projects / Dissertations.*

Signature of Supervisor 1 Signature of Supervisor 2
Date Date

Section 4

Date of submission to PGIM:

Date of approval by Family medicine BoS:

ANNEX 3. Format of Detailed Project Proposal

PGIM BOS IN FAMILY MEDICINE
MD IN FAMILY MEDICINE
Detailed Project Proposal

Section 1

1. Name of trainee
2. Name(s) of supervisor(s)
3. Training centre

Section 2

1. Project title
2. Background and justification
3. Objectives of study
4. Research plan
    a. Study setting
    b. Methodology
    c. Sample size and sampling techniques
    d. Outcome measures
    e. Ethical considerations
    f. Work plan and time lines
5. References
6. Time frame
7. Proposed Budget
8. Signature of trainee

Section 3

Recommendation of supervisor(s)

Signature of Supervisor 1 Signature of Supervisor 2

Date Date

Section 4

Date of submission to PGIM

Date of approval by BoS Signature of Secretary BoS of study in Family Medicine

ANNEX 4. PGIM Guidelines for Supervisors of Dissertations / Theses

Introduction

A supervisor plays a key role in the student's professional development, inculcating the scientific approach, and ethics of research. Practically, a supervisor is responsible for providing help, support and mentoring of a postgraduate student in order to enable the student to complete the research and produce a thesis to the best of the student's ability. Supervisor behavior needs to reflect varying levels of direction and facilitation. The supervisor should possess recognized subject expertise, skills and experience to monitor, support and direct student research and the final preparation of the dissertation / thesis.

Roles and responsibilities

1. Ensure development of good rapport with the student and a conducive environment.
2. Be familiar with the guidelines on the format of the dissertation / thesis and PGIM rules / regulations.
3. Ensure that the administrative requirements are met with.
4. Ensure that the student is aware of and complies with PGIM, University and Institutional and other internationally accepted policies and regulations regarding relevant safety procedures and ethics.
5. The supervisor should have good knowledge of the student's subject area.
6. If a students work goes outside the supervisor's field, the student should be put in touch with another specialist who could help.
7. Ensure that the student chooses an appropriate topic, draws up the research proposal and completes necessary procedures for registration and ethical approval.
8. Guide the student to carry out the research project ensuring that appropriate instruments are available and appropriate quality assurance methods are used for data collection.
9. The nature of the supervision can be face-to-face meetings, or contact via email / fax / telephone and reading of submitted material.
10. There should be regular face-to-face supervisory sessions between the student and supervisor.
11. Provide sufficient time in order to enable the student to complete the task.
12. There will probably be a need for more intensive supervision in the initial planning stage and at the writing-up stage. However, the supervisor should meet the student at least once a month, or more frequently when required.
13. The recommended minimum total time allocation for supervision of a full-time research student is at least 60 hours per year.
14. The supervisor should read and critically comment on written work as it is produced.
15. Assist the student to plan their time, draw up a programme of work and monitor the progress.
16. Inform the BoS and make appropriate arrangements if the supervisor plans to take more than 2 months of leave, or intimate that supervision can be continued although on leave.
17. Inform the BoS promptly (with a copy to the Director /PGIM) of issues that may arise related to the student or research.
18. Submit a progress report every 6 months to the PGIM
19. Ensure that the student is made aware, if either progress of the standard of work is unsatisfactory, and arrange corrective action.
20. It is the responsibility of the supervisor to ensure that the student himself has obtained all data, and carried out the investigations / procedures and performed relevant statistical analyses.

21. Closely monitor the research work, results obtained, and allocate sufficient time and effort to discussion and interpretation of the students results. Ensure that the data obtained by the student is accurate and reliable, and that it has not been copied from any other source.
22. Ensure that the student has access to current literature, including local research work in the area, and stays abreast of cutting-edge ideas in the relevant field.
23. Encourage the student to participate actively in seminars, colloquia, conferences, and other relevant local meetings and conferences in the local training unit, or at national level, in relevant areas.
24. Help students to develop professional skills in writing reports, papers and grant application proposals.
25. Assist in the development of a student's thesis from early stage of designing, until the dissertation is written and submitted in accordance with the stipulated requirements and regulations.
26. The supervisor should read the final copy of the dissertation fully before submission and certify that it has been written by the student and no-one else, with data collected only by him.

ANNEX 5. Guidelines for Preparation of Thesis for MD in Family Medicine

General instructions

It is essential to start writing the dissertation early and in all cases before the data collection is complete and analyses are finalized. At the same time, you should make arrangements to have your manuscript word-processed. Your supervisor should be consulted before you start to write and thereafter at regular intervals. It is much easier to make corrections if the draft is double-spaced and printed on only one side of the paper.
The past tense should be used as far as possible. To avoid much exceeding the given word limit, it is suggested that an approximate running total is kept. The metric system and the International System (SI) of units should be used whenever possible.

Number of copies

Three copies should be submitted to the Director/ PGIM, spiral-bound in the first instance. One will be retained in the PGIM, one will be sent to the internal examiner and one to the overseas examiner. After acceptance (and necessary corrections), all three copies should be bound in hard covers (black) with the author's name, degree and year printed in gold on the spine. The front cover should carry the title, author's name and year printed in gold. One copy will be returned to the student, one retained by the supervisor, and the third housed in the PGIM Library.

Layout

The dissertation should be word-processed and printed single-side only, on A4-size photocopying paper.
Layout of typescript
There should be 1.5" on left-hand and top margins, and 1.0" on right-hand and bottom margins. It is especially important that the left-hand (binding) margin is of the regulatory size.
Line spacing should not be less than 1.5.
Lettering should be in Times New Roman, font size 12 or Calibri font size 11.
All pages should be numbered consecutively throughout, including appendices. Page numbers should be inserted in the bottom right hand corner.
Tables, diagrams, maps and figures
Wherever possible, these should be placed near the appropriate text. Tables should be numbered in continuous sequence throughout the dissertation. Graphs, photographs, etc., should be referred to as Figures. Each of these should also be numbered in a continuous sequence. Colour should be avoided in graphic illustrations (unless it is essential) because of the difficulty of photographic reproduction; symbols or other alternatives should be used instead.
Notes: Notes, if essential, should be inserted, in reduced font, at the foot of the relevant page. If too voluminous for this to be practicable, they should be placed in an Appendix. Notes may be typed in single spacing.
Abbreviations: Where abbreviations are used, a key should be provided.

Preliminaries

The preliminaries precede the text. They should comprise the following:

1. Title page

<Title of dissertation>
<Author's name>
MD (Family Medicine)
Post Graduate Institute of Medicine
University of Colombo
<Year of submission>

2. Statement of originality: This is a declaration that the work presented in the dissertation is the candidate's own, and that no part of the dissertation has been submitted earlier or concurrently for any other degree. The statement should be signed by the author, and countersigned by the supervisor.
3. Abstract: This should consist of a brief summary of not more than 350 words describing the objectives of the work, the materials and methods used, the results obtained, and the conclusions drawn. This may be in a structured format if helpful.
4. Table of contents: The table of contents immediately follows the abstract and lists in sequence, with page numbers, all relevant divisions of the dissertation, including the preliminary pages.
5. List of tables: This lists the tables in the order in which they occur in the text, with the page numbers.
6. List of figures: This lists all illustrative material (maps, figures, graphs, photographs etc) in the order in which they occur in the text, with the page numbers.
7. Acknowledgments

Text

The dissertation should be divided into clearly defined chapters. Chapters may be subdivided and a decimal number system can be helpful to identify sections and subsections. You should avoid mixing the topics of the chapters, e.g. no results should appear in the Materials and Methods.

Chapter 1 – Introduction: The aim of this section is to state briefly the current position and the reasons for carrying out the present work. Generally, only a few references should be cited here.

Chapter 2 – Literature Review: This section should be reasonably comprehensive, and most of the references to be quoted normally occur here. The relevant references dealing with the general problems should be reviewed first and this is followed by a detailed review of the specific problem. The review is in many cases approached as a historical record of the development of knowledge of the subject. This chapter should conclude with a brief statement of what you propose to find out.

Chapter 3 – Materials and Methods: These should be described so that a reader could repeat all the experiments. Where specific details are available in the literature, reference should be made to the original papers, and comments kept to a minimum. If modifications have been made to the published techniques, these should be described in full.

Chapter 4 – Results: Much of the data should be given in tables and figures and these should be inserted in the text at the appropriate place. The results must be fully described in the text. It is not sufficient to merely present the tables and figures without any comment. The tables and figures should be clear without references to the text, and this requires concise explanations in legends. Where possible, data presented in the text should have already been analyzed and the complete 'raw' figures should not be included in this section but should be contained in tables in the Appendix.

Only data from the present work should be included in this section and in particular no comparison should be made at this stage with results from other workers.

Chapter 5 – Discussion: The discussion is the most difficult part of the dissertation to write because the author has to compare **critically** the present results with those of other workers and to draw valid conclusions from these studies. Descriptions of other workers findings which already appear in the Literature Review should not be repeated in the Discussion. Instead, refer to the Review.

The limitations of the study and recommendations for future research on the subject should also be included in this chapter.

As your project proceeds, keep notes of your thoughts and discussions relevant to this section.

Length of dissertation : the thesis should be approximately 40,000 words in length

References

These are given so that the reader can refer to the original papers for further study. Uniformity is essential, but errors and inconsistencies are very common and authors are advised to check the references most carefully. Examiners will mark students down for inconsistencies in their references, either omissions or failure to follow the recommended format as given in the following section.

References are very important and must be complete and accurate. All literature referred to should be listed in a consistent form and style, and must contain sufficient information to enable the reader to identify and retrieve them.

There are different styles of citing sources, listing references and compiling a bibliography. The Harvard style (author, date) is widely accepted in scholarly and scientific writings, and is recommended for students on the MD (Family Medicine) course.

The Harvard style

The Harvard style is often known as the 'author-date' system. Generally, when using the Harvard system, a citation in your paper requires only the surname of the author (or authors) and the year of publication. If there are only two authors give both names; for more than two authors use *et al*. Citations should, whenever possible, be placed at the end of a sentence (before the concluding punctuation). For example:

There is consistent urban bias in the provision of health services (Sawyer, 1999).

Alternatively, the author's surname may be integrated into the text, followed immediately by the year of publication in parentheses.

Sawyer (1999) observes that.....

If there is more than one reference by the same author(s), the references should be listed chronologically in order of year of publication. If there is more than one reference by an author in the same year, label with lower case letter, 'a' before 'b', 'c', etc.

Other researchers (Tang 1998a; Cleg, 1999) have highlighted this inadequacy, while Tang (1998b) argues that.....

References cited only in tables or in legends to figures should be in accordance with a sequence established by the first identification in the text of the particular table or illustration.

The arrangement of the references at the end of the dissertation should be alphabetical.

The order of the items in each reference should be:

(a) for journal references: name(s) of author(s), year, title of paper, title of journal, volume number, page numbers.

(b) for book references: name(s) of author(s), year, title of book, edition, volume, chapter and/or page number, town of publication, publisher.

Authors' names should be in roman letters, and arranged thus:

Smith, C.O., James, D.E. & Frank, J.D.

Note the use of the ampersand (&) and omission of comma before it. Where an author's name is repeated in the next reference it should also be spelt out in full.

The year of publication should be surrounded by parenthesis like this: (1999)

The title of the paper is then included, without quotation marks: e.g., Child health promotion in developing countries.

The journal title should be unabbreviated, underlined, and be followed by volume number in bold, the issue (part) number, and the page numbers (first and last page numbers). It should read like this:

Health Policy and Planning **14**:1; 1-10.

Examples:

Ehiri, J.E. & Prowse, J.M. (1999) Child health promotion in developing countries: the case for integration of environmental interventions? Health Policy and Planning **14**:1; 1-10.

Tuku, A.B. James, D.E. & Okada, F.C. (1999) The response of factor B to factor C. Biochemical Journal **151**:2; 1049-1053.

Harris, G.W. (1955) Neural Control of the Pituitary Gland. London: Arnold.

Sloper, J.C. (1966) The experimental and cyto-pathological investigation of neurosecretion in the hypothalamus and pituitary. In The Pituitary Gland, eds. Harris, G.W. & Donovan, B.T. Vol. 3. Ch.7 London: Butterworth.

Websites

Author's name (if available) must be listed first, followed by the full title of the document in italics (underline if handwritten), the date of publication or last revision (if available), the full http address (URL) enclosed within angle brackets, and the date of visit in parentheses

Example:

Schettler, T., Solomon, G., Burns, P. & Valenti, M. *Generations at risk: how environmental toxins may affect reproductive health in Massachusetts.* <http://www.igc.apc.org/psr/genrisk.html > (24/08/99).

ANNEX 6. Format for Pre-MD Progress Reports - MD in Family Medicine by Thesis

(To be forwarded by the Supervisor to the Director PGIM at six monthly intervals)

Section 1 (to be completed by trainee)

1. Name of trainee
2. Name of supervisor
3. Title of project
4. Date of obtaining BoS approval for detailed project proposal:
5. Description of work carried out to date (in approx 250 words)

Section 2 (to be completed by supervisor)

1. Is the work on schedule?
2. Constraints in progress, if any
3. Recommendation of supervisor

Signature of supervisor

Date

Section 3 (to be completed by Family Medicine BoS)

Date of receiving report

Date of tabling at Family Medicine BoS

ANNEX 7. Format for Assessment of MD Thesis

PGIM BOS IN FAMILY MEDICINE
MD IN FAMILY MEDICINE
ASSESSMENT OF MD THESIS

1. Candidate's full name:
2. Title of thesis:
3. Degree sought:
4. a. Do the candidate's findings make a contribution to the advancement of knowledge in the field? (Give reasons)
   b. Does the thesis demonstrate mature scholarship and a capacity for critical examination and sound judgment? (Give reasons)
   c. Is the thesis satisfactory in the point of language and presentation of subject matter?
   d. Is the thesis suitable for publication in its present form with or without amendments? If amendments are required, please specify.
   e. Is the thesis acceptable for the degree sought?
   f. Points to be raised at the oral examination:
5. Comprehensive report giving critical evaluation of the thesis.

ANNEX 8. Training Objectives and Curriculum

Introduction

LOCAL POST MD TRAINING: The trainee should review his portfolio with the trainers and plan out the completion of deficiencies. He/ She should take part in unit administrative work with the consultant, learn to play the lead in the general practice clinics, perform audits, organize risk management, multi disciplinary and other relevant clinical and educational meetings, take a leading role in postgraduate and under graduate teaching, understand the necessities for overseas placement and prepare accordingly , take part in CPD and other activities of the professional associations, maintain and introduce new evidence based practices in the GP/ University clinics, take part in research, make presentations at academic meetings and take part in other academic activities.

OVERSEAS POST MD TRAINING: Trainee shall present the portfolio to the overseas trainers and plan relevant training. He/she should maintain the portfolio with a constant dialogue with the trainers. Trainees are expected to understand that the socio-cultural differences in the overseas centres will need adjustments on their part. Trainees are encouraged to look for training & educational opportunities which are not available in Sri Lanka, participate in audits, research, risk management, drills and other standard practices. They are expected to remember at all times that he/she has a role of an ambassador from Sri Lanka and strive to maintain the dignity and status of our postgraduate programme and the country, try to ascertain assistance to the post graduate programme in Sri Lanka and the country at large.

1. Training objectives during GP and University rotations

WHAT THE TRAINEES SHOULD OBSERVE.

1. Patient activation and engagement
2. Clinical intuition
3. Intuitive thinking and deliberate thinking
4. Physicians cognition and relationship to diagnosis –
5. Cognitive and affective processes influencing decision making of GPs
6. Pattern recognition, anchoring
7. Unmasking the patient's hidden agenda
8. Medical heuristics
9. How does a GP deal with situations requiring informed consent and informed choice?
10. Observe common errors made by GP
    i. Representative errors
    ii. Attribution errors
    iii. Affective errors
    iv. Cognitive errors
11. Remedies that GPs take to overcome cognitive errors
12. Observe as many primary care medical consultations as possible and try and answer the following for each consultation:
    12.1. What is the consultation model which is being followed?
        i. Hypothetico-deductive approach - cues, hypotheses, algorithm for deduction
        ii. Analytical models - using pathophysiological reasoning, using basic sciences

iii. Intuitive-Humanist model - absence of analysis, absence of logic, often used in ambiguous and complex
iv. Situations, usually high speed evident, physician says gut feeling, hunches etc,
v. Ad hoc - methods - individual physicians have adopted their own methods over the years
vi. No methods - there is no apparent method in many consultations carried out by the physician

12.2. In the information processing model with hypothetico-deductive approach look for :

I. Cue generation
II. Cue recognition
III. Cue acquisition
IV. Hypothesis generation
V. Cue interpretation
VI. Hypothesis evaluation
VII. Number hypotheses tested during an average primary care consultation\
VIII. Number of hypotheses available for testing the hypothetico-deductive model
IX. Association between the number of hypotheses and the efficacy of the diagnostician
X. Number of hypotheses and the length of the active practice
XI. Number of hypotheses and the qualification level of the practitioner
XII. Differences between the practicing physicians' use of hypotheses

12.3. In the Intuitive-Humanist model look for :

I. Absence of logic
II. Absence of analysis
III. Presence of speed of decision making -knowledge generated is immediate, fast insight into problems
IV. Physician uttering things like - it's a hunch, we'll try it and see,
V. When pressed for the reasoning physician says - I don't know – it's just a hunch
VI. Does the physician explain the diagnostic decision as a gut feeling, emotion laden terms
VII. Context of use ?complex situations, ambiguous situations, dilemmas
VIII. Is the use of intuition related to expertise or experience?
IX. Pattern recognition as explaining the intuition
X. Representational heuristic as an explanation for intuition - exemplar mode (use of a classification), prototype mode (current situation is assessed for the degree of representation of a prototype)
XI. Availability heuristics - recollection of experiences with patients presenting with same condition
XII. Anchoring heuristics - Relying on initial diagnostic impression
XIII. Adjustment heuristics - use of cognitive reference points - for example; a poorly perfused neonate could be expected to have a bluish complexion, indicative of cyanosis.

12.4. What factors are associated the use of a given clinical decision making model in practice?

i. Is clinical experience associated with the use of a particular model over the others?
ii. See the workings of a "pattern recognition" in a medical consultation - it is seen in many models of medical consultations.

iii. Tell tale signs are : working through of diseases one by one, "fill in the blanks" phenomenon, looking for confirmatory symptoms,
iv. looking for confirmatory signs, looking for lab signs etc

12.5. Observe as many primary care consultations as possible for the following primary care therapeutic phenomena:

I. Placebo phenomenon
II. Conditioning
III. Referral rates
IV. Practice infrastructure for suggestive features of primary care-ness of a given practice
V. Provision of problem solving services
VI. Provision of cognitive behavioral therapy
VII. Provision of reassurance and explanation
VIII. Provision of exercise therapy
IX. Provision of medical nutrition therapy
X. Probing for therapeutically relevant factors in the medical consultation - beliefs, opinions, intentions, values, attitudes
XI. Evaluation and management of disability and handicap in a given situation
XII. Provision of supportive psychotherapy
XIII. Provision of crisis counseling and its context

2. Curriculum in Family Medicine

2.1 Core curriculum 1. Essentials in family medicine
2.2 Core Curriculum 2. Skills
2.3 Core curriculum 3. Symptom evaluation

2.1 Core curriculum 1. Essentials in family medicine

Introduction

The curriculum /syllabus described in this section is the framework document for systematic training in family medicine for all trainees. The document details the main facets of primary care referred to as **domains.** Under each topic, learning objectives are given and the level of performance / competence to be achieved are described under the categories of :

I. Knowledge
II. Competencies
III. Skills
IV. Attitudes
V. Teaching And Learning Activities

Domains

1) Comprehensive care
2) Continuity of care
3) Coordination of care
4) Primary care

5) Bio psychosocial care
6) Psychosocial awareness
7) Computer literacy
8) Primary care therapeutics

1) Comprehensive care

1.1. Knowledge

1.1.1. Definitions, differences in opinion by various authors and organizations
1.1.2. Application in practice development
1.1.3. Use of the principle in health care provision
1.1.4. Particular relevance for chronic disease management in primary care

1.2. Competencies

1.2.1. Use critical appraisal skills to assess the validity of resources
1.2.2. Formulate clinical questions important to patient management and conduct an appropriate literature search to answer clinical questions
1.2.3. Use evidence-based medicine (EBM) to determine a cost-effective use of diagnostic imaging in the evaluation of core, acute presentations
1.2.4. Find and use high-quality Internet sites as resources for use in caring for patients with core conditions
1.2.5. Assess and remediate one's own learning needs
1.2.6. Describe how to keep current with preventive services recommendations

1.3. Skills

1.3.1. Using information systems to deliver health care
1.3.2. Application of bio psychosocial model in the clinical evaluation of patients
1.3.3. Wellness promotion
1.3.4. Probing for family dynamics in the illness evaluation
1.3.5. Use of clinical guidelines in day to day clinical practice

1.4. Attitudes

1.4.1. Awareness of the potential of the comprehensive care
1.4.2. Willingness to devote time to develop above skills
1.4.3. Positive expectations from the provision of comprehensive care

1.5. Teaching and learning activities

1.5.1. Self study - Survey the morbidity spectrum of the practice and compare it with what is reported in the literature
1.5.2. Self study - Evaluate a practice you visit for the provision of comprehensive care
1.5.3. Experiential learning - Focus on the variety of problems seen by you in a day's practice, what does this mean to you, how will you make sense out of it

2) Continuity of care

2.1. Knowledge

2.1.1. Definitions, differences in opinion by various authors and organizations
2.1.2. Application in practice development
2.1.3. Use of the principle in health care provision
2.1.4. Particular relevance for chronic disease management in primary care
2.1.5. Psychology of relationship development
2.1.6. Emotional intelligence and interpersonal skills and people friendliness
2.1.7. Dimensions of continuity of care

2.2. Competencies

2.2.1. Evaluation of the surrounding health care resources for referral purposes
2.2.2. Use of medical records - electronic, paper based,
2.2.3. Team work for better outcomes in patient care
2.2.4. Development of a lasting relationship with the patient

2.3. Skills

2.3.1. People skills - easily mix with any person
2.3.2. Relationship skills - can create mutually satisfying friendship anytime anywhere
2.3.3. Empathy skills - Understanding others easily
2.3.4. Communication skills - matching, pacing, leading, mismatching,
2.3.5. Use of clinical guidelines in day to day clinical practice for chronic disease management

2.4. Attitudes

2.4.1. Awareness of the importance of medical records
2.4.2. Willingness to use clinical guidelines
2.4.3. Positive expectations from the provision of continuity care
2.4.4. Positive outcomes from team work

2.5. Teaching and learning activities

2.5.1. Self study - Develop a list of all the chronic diseases seen in your practice and compare with one of your colleagues' list
2.5.2. Self study - Evaluate a practice you visit for the provision of care for chronic diseases
2.5.3. Go through the list of all the chronic diseases given in the handbook and identify and note differences

3) Coordination of care

3.1. Knowledge

3.1.1. Definitions, differences in opinion by various authors and organizations
3.1.2. Application in practice development
3.1.3. Use of the principle in health care provision
3.1.4. Particular relevance for chronic disease management in primary care
3.1.5. Particular relevance for patients with red flags
3.1.6. Personal limits in knowledge
3.1.7. Referral patterns, letters, inter-practice variations in primary care
3.1.8. Self care, patient empowerment, delegation of responsibility for health
3.1.9. Basic management of the life-threatening diseases before referral
3.1.10. Knowledge on clinical decision making systems - use, abuse, indications, validity, reliability
3.1.11. Contribution of the self care in the management of chronic diseases

3.2. Competencies

3.2.1. Evaluation of the key health care services in the community for referral purposes
3.2.2. Matching the patient for the specialist
3.2.3. Matching the disease to the specialist
3.2.4. Optimal referral times for diseases which are best treated ta secondary and tertiary care
3.2.5. Use of medical records - paper based or EMR
3.2.6. Development of the self-care skills of the patient
3.2.7. Familiarity with clinical decision supporting systems

3.3. Skills

3.3.1. Hypotensive resuscitation before referral
3.3.2. Anti-platelet therapy for suspected MI before referral
3.3.3. ABC of resuscitation before referral
3.3.4. Evaluation of patient for health literacy
3.3.5. Writing a referral letter
3.3.6. Development of health literacy in the patient
3.3.7. Health education
3.3.8. Use of clinical decision supporting systems in practice

3.4. Attitudes

3.4.1. Awareness of the importance of medical records
3.4.2. Willingness to use clinical guidelines
3.4.3. Positive expectations from the provision of coordinated care
3.4.4. Positive outcomes from team work
3.4.5. Recognition of the value of self care

3.5. Teaching and learning activities

3.5.1. Self study- Evaluate your practice organization to see how much it is suitable for delivery of coordinated care
3.5.2. Self study - Evaluate a practice you visit for the provision of care coordination
3.5.3. Assignment - write an essay on the management of diabetes in your practice using the principles of family medicine

3.5.4. Assignment - Write an essay on the management of asthma in your practice using the principles of family medicine
3.5.5. Assignment - Write an essay on the management of hypertension in your practice using the principles of family medicine

4) Primary care

4.1. Knowledge
4.1.1. Definitions, differences in opinion by various authors and organizations
4.1.2. Application in practice development
4.1.3. Use of the principle in health care provision
4.1.4. Primary care relationship with other types of health care you provide
4.1.5. Primary care and primary health care differences
4.1.6. Primary care and the family medicine - relationship, dependence, care provision
4.1.7. Relevance of primary care in modern health care systems - cost efficacy
4.1.8. Morbidity spectrum of primary care - acute and chronic spectra separately
4.1.9. Primary care, self care, social care, ecology of medical care

4.2. Competencies
4.2.1. Provision of most of the health care needs of an individual
4.2.2. Accountability for health care provided for a person
4.2.3. In comprehensive care, continuity of care, coordinated care
4.2.4. Practice organization for provision of primary care
4.2.5. Practice organization for preventive care services
4.2.6. Wellness prescription writing

4.3. Skills
4.3.1. Defined under comprehensive care
4.3.2. Defined under coordination of care
4.3.2. Defined under continuity of care
4.3.2. In applying preventive care guidelines published in other countries

4.4. Attitudes
4.4.1. Awareness of the importance of primary care for individuals
4.4.2. Awareness of the importance of primary care for the nation

4.5. Teaching and learning activities
4.5.1. Self study- Evaluate your practice organization to see how much of primary care it delivers
4.5.2. Self study - Evaluate a practice you visit for its "degree of primary-care-ness"
4.5.3. Assignment - Compare and contrast primary care and secondary care
4.5.4. Assignment - Compare and contrast primary care and primary health care

5) Bio-psychosocial care

5.1. Knowledge
5.1.1. Bio-psychosocial theory
5.1.2. Critique of bio-psychosocial theory - pros and cons, its real nature
5.1.3. Use of the bio-psychosocial model in medical consultations
5.1.3. Limitations of the model
5.1.4. Patient centeredness and bio-psychosocial model
5.1.5. Holistic care and the biopsychosocial model
5.1.6. Is biopsychosocial model unique to primary care?

5.2. Competencies

5.2.1. Demonstrate active listening skills and empathy for patients.
5.2.2. Demonstrate setting a collaborative agenda with the patient for an office visit.
5.2.3. Demonstrate the ability to elicit and attend to patients' specific concerns in a clinical encounter
5.2.4. Explain history, physical examination, and test results in a manner that the patient can understand
5.2.5. Clarify information obtained by a patient from such sources as popular media, friends and family, or the Internet
5.2.6. Demonstrate validation of the patient's feelings by naming emotions and expressing empathy
5.2.7. Effectively incorporate psychological issues into patient discussions and care planning
5.2.8. Use effective listening skills and empathy to improve patient adherence to medications and lifestyle changes
5.2.9. Describe the treatment plans for prevention and management of acute and chronic conditions to the patient
5.2.10. Reflect on personal frustrations, and transform this response into a deeper understanding of the patient's and one's own situation, when patients do not adhere to offered recommendations or plans

5.3. Skills

5.3.1. Showing empathy
5.3.2. Patient centeredness during the medical consultation
5.3.3. Emotions management
5.3.4. Using transference and counter-transference for diagnostic and therapeutic purposes
5.3.5. Eliciting psychosocial issues in context

5.4. Attitudes

5.4.1. Recognize the importance of biopsychosocial approach
5.4.2. Willingness to be patient-centered
5.4.3. Positive expectations from the provision of patient centered care
5.4.4. Recognize the importance of psychosocial issues in medical consultations
5.4.5. Likes to elicit emotional issues where relevant

5.5. Teaching and learning activities

5.5.1. Experiential learning - Focus on a consultation in which you treated a patient where you felt as if you were treating your own mother - what happened, why it happened, was there any emotional dysfunction
5.5.2. Experiential learning - Focus on critical incident where a patient was angry with you, what was the scenario, analyze the emotions - causes, outcome, prevention
5.5.3. Experiential learning - Focus on a consultation where you felt sad and unhappy that you could not provide proper care for the money's worth
5.5.4. Self-study - Read about the burn-out in doctors

6) Psychosocial awareness

6.1. Knowledge

6.1.1. What is psychosocial?
6.1.2. Etiology of many transient problems in primary care
6.1.3. Interpersonal relationship problems
6.1.3. Domestic violence - intimate partner violence, child abuse, elder abuse
6.1.4. Impairment, disability, handicap
6.1.5. Inter-practice variation as a function of psychosocial morbidity
6.1.6. Disasters, social calamities and their impact on your practice, its morbidity and on you

6.2. Competencies

6.2.1. List and label psychosocial impacts on personal health
6.2.2. Eliciting the etiology of trauma in wound dressing department of your practice
6.2.3. Elicit interpersonal relationship problems in relevant clinical context
6.2.4. Elicit evidence for domestic violence in the relevant clinical context
6.2.5. Evaluate the functional status in any clinical encounter
6.2.6. Evaluate the impact of social pathology as a cause for organic pathology

6.3. Skills

6.3.1. Assess the disability in relation to the impairment
6.3.2. Assess the handicap/social impairment in relation to pathology of impairment
6.3.3. Assess the overall impact of disability and the handicap on the impairment
6.3.4. Use WHO functional scales in clinical practice
6.3.5. Identify the clinical contexts in which the psychosocial factors are relevant
6.3.6. Identify the clinical contexts in which detrimental health behaviors - eg. alcohol - impact on the psychosocial morbidity

6.4. Attitudes

6.4.1. Recognize the psychosocial impact on pathology
6.4.1. Appreciate that total illness experience consists of many other things than pathology
6.4.2. Willingness to devote time to discuss psychosocial issues with patients
6.4.3. Positive expectations from the provision of psychosocial care

6.5. Teaching and learning activities

6.5.1. Self study - List the etiology of all the diseases or clinical problems you encountered in the course of a day in your practice
6.5.2. Self study - Evaluate a clinical method which helps psychosocial evaluation
6.5.3. Experiential learning - have you ever had the experience of a patient breaking down crying in front of you because of the infidelity of the spouse ? What went wrong, If not for the psychosocial storm would you ever have detected the psychosocial nature ? How would you think persons less distressed by the psychosocial problems consult you ?

7) Computer literacy

7.1. Knowledge

7.1.1. What is ICT - information and communication technology - nature, value, relevance, competitive edge
7.1.2. What is software and hardware and other basic tools required for a desktop computer to implement ICT

7.1.3. What accounting and management software available/used for admin purposes of a practice
7.1.4. What software is required for clinical activities in a practice?
7.1.5. Familiarity with electronic medical records, patient health records, clinical decision making systems
7.1.6. Relevance of computers in research and audit
7.1.7. Communications using computers - benefits, dangers and abuse
7.1.8. Familiarity with developing mobile technologies in medicine

7.2. Competencies

7.2.1. List all the computer software which has some practical value in admin work of your practice
7.2.2. Compare and contrast the Microsoft Office and Open office software packages
7.2.3. Explain the value of social networking for a developing practice
7.2.4. Summarize all the software required for social networking
7.2.5. Use of computers for research
7.2.6. Use of computers for audit
7.2.7. Use of computer for pro forma development for surveys, opinion polls, patient satisfaction surveys
7.2.8. Use of email, blogs, forums for electronic communications
7.2.9. Use of computer technology in the CPD

7.3. Skills

7.3.1. Use of Microsoft word for word processing in the practice
7.3.2. Use of Microsoft Excel for accounting, financial and statistical activities in the practice
7.3.3. Use of Google documents for information sharing and academic networking
7.3.4. Use of Microsoft Access for medical record purposes
7.3.5. Use of Microsoft Access or Excel for Pro Forma generation and work
7.3.6. Use of Google Scholar for knowledge navigation
7.3.7. Use of Medline for literature review
7.3.8. Use of Medline for audits
7.3.9. Use of computers for evidence based medicine practice
7.3.10. Use of computers for research
7.3.11. Use of computers for audits

7.4. Attitudes

7.4.1. Recognize the value and necessity of computers in a medical practice
7.4.2. Acceptance of the computers as a necessary object in current social development
7.4.3. Willingness to attempt to use the computers
7.4.4. Recognize that use of computers helps to achieve better patient outcomes

7.5. Teaching and learning activities

7.5.1. Hands-on experience in a computer lab - word processing
7.5.2. Hands-on experience in a computer lab - spreadsheets
7.5.3. Hands-on experience in designing a EMR for personal use - Access
7.5.4. Hands-on experience in using Google scholar
7.5.5. Hands-on experience in using Medline
7.5.6. Hands-on experience in carrying out a research project using a computer
7.5.7. Hands-on experience in carrying out an audit using the computer

8) Primary care therapeutics

8.1. Knowledge

8.1.1. Common symptoms
8.1.2. Common syndromes
8.1.3. Diagnostic importance of red flags in the assessment of common symptoms
8.1.4. Common clinical evaluation method for primary care patients - See the Handbook
8.1.5. Primary care therapeutics
8.1.6. Common chronic diseases with high prevalence in the community
8.1.7. Chronic care model as opposed to acute, time limited transient illnesses
8.1.8. Exercises in primary care
8.1.9. Nutrition principles
8.1.10. Nutrition in relation to obesity and overweight, type 2 DM, hypertension, lipid disorders
8.1.11. Emotional dysfunctions
8.1.12. Behavioral dysfunctions
8.1.13. Identification of emotional and behavioral problems in primary care

8.2. Competencies

8.2.1. List all the common and uncommon presenting symptoms encountered in primary care
8.2.2. List the red flags for all the common symptoms found in primary care
8.2.3. List all the common causes of the common symptoms found in primary care
8.2.4. Demonstrate the ability to differentiate between the common causes for common symptoms
8.2.5. Recognize the life threatening diseases which can present with other common symptoms in primary care
8.2.6. Elicit a focused history and focused clinical exam based on the presenting symptom
8.2.7. Demonstrate the ability to implement a cost-effective approach for diagnostic work-up of common symptoms in primary care
8.2.8. Discuss the initial management of life threatening diseases, limb threatening diseases, diseases requiring the input from subspecialty specialists
8.2.9. Elicit the reason for encounter in every primary care consultation
8.2.10. Approximate chapters and codes in the ICPC for identified RFE in the clinical encounter
8.2.11. Ability to identify and manage somatization
8.2.12. Ability to identify and manage depression and common depressive disorders in primary care
8.2.13. Ability to identify and manage anxiety and common anxiety disorders in primary care
8.2.14. Ability to identify and manage medically unexplained symptoms in primary care
8.2.15. Differentiate between RFE, presenting symptoms, syndromes and hidden agenda
8.2.16. List the indications for antibiotics in primary care
8.2.17. Demonstrate the ability for symptom management in primary care - vomiting, pain, fever, cough, wheeze, diarrhoea
8.2.18. Identify and use placebo response in primary care management
8.2.19. Identify and use natural history of disease for patient's benefit
8.2.20. Knowledge, use and application of counseling in primary care
8.2.21. Knowledge, use and application of CBT in primary care
8.2.22. Knowledge, use and application of problem solving methods in primary care
8.2.23. Knowledge, use and application of conditioning, behavior therapy in primary care
8.2.24. Knowledge, use and application of alternative therapies in primary care
8.2.25. Knowledge, use and application of motivational interviewing
8.2.26. Knowledge, use and application of behavior changing methods in the implementation of TLC
8.2.27. Identify and resolve ethical dilemmas arising in the context of medical encounters

8.2.28. Differentiate the concepts of illness and disease
8.2.29. Identify illness behavior and its impact on the disease in the patients consulting you
8.2.30. Identify abnormal illness behavior and its impact on the patient and its management
8.2.31. Compare and contrast abnormal illness behaviors, somatoform disorders, medically unexplained symptoms
8.2.32. Define and explain somatization, somatization disorders, and abridged somatization
8.2.33. Define and explain emotional disorders/dysfunction
8.2.34. Define and explain anxiety and depression
8.2.35. Define and explain normality orientation of primary care
8.2.36. Define and explain illness behaviors and abnormal illness behaviors
8.2.37. Define and explain RFE
8.2.38. Define and explain the concept of undifferentiated illnesses
8.2.39. Define and explain and compare and contrast illness versus disease
8.2.40. List all the common syndromes seen in primary care with their etiology, pathology and management
8.2.41. Knowledge about symptoms in general - causes of symptoms other than pathology, distribution of symptoms in community and primary care
8.2.42. Identify and respond to primary care co-morbidity
8.2.43. Evaluate the impact of co-morbidity on the overall clinical illness experience of the patient

8.3. Skills

8.3.1. Using a consistent and regular primary care evaluation method
8.3.2. Evaluate and manage all the common symptoms seen in primary care
8.3.3. Evaluate and manage all the common syndromes seen in primary care
8.3.4. Evaluate and manage the common chronic diseases seen in primary care
8.3.5. Use of principle of comprehensive care in the management of a chronic disease
8.3.6. Use of principle of continuity of care in the management of a chronic disease
8.3.7. Use of principle of coordination of care in the management of a chronic disease
8.3.8. Use of self-care and patient education in the management of a chronic disease
8.3.9. Achieve the minimum standard of care in the management of a chronic disease as exposed by local/global authorities
8.3.10. Use of placebo in primary care therapeutics
8.3.11. Use of natural history in primary care therapeutics
8.3.12. Use of conditioning in primary care therapeutics
8.3.13. Use of operant conditioning in primary care therapeutics
8.3.14. Use of behavior methods in primary care therapeutics
8.3.15. Use of counseling in primary care therapeutics
8.3.16. Use of problem solving methods in primary care therapeutics
8.3.17. Use of CBT in primary care therapeutics
8.3.18. Use of Exercise in primary care therapeutics
8.3.19. Use of Medical Nutrition Therapy in primary care therapeutics
8.3.20. Use of problem solving as a method of treatment in the practice

8.4. Attitudes

8.4.1. Recognizing that primary care is diagnostically and therapeutically challenging
8.4.2. Recognizing that primary care can deliver valid and reliable positive outcomes
8.4.4. Acceptance of patient's right for self determination
8.4.5. Recognize the fact that multidisciplinary approach sometimes is required in service delivery
8.4.6. Recognize the variety of the therapeutics in family medicine
8.4.7. Commitment to principles of primary care as espoused by family medicine

8.4.8. Recognition of the complex bidirectional interaction in the patient physician relationship
8.4.9. Recognition of the therapeutic power of the patient physician relationship
8.4.10. Commitment to change social stigmatization of mental ill-health and obesity as personal weaknesses

8.5. Teaching and learning activities

8.5.1. Self-study on dyspepsia in primary care using guided discovery to appreciate the variety
8.5.2. Self-study on chest pain in primary care using guided discovery to appreciate the nature of so called non-specific chest pain syndromes
8.5.3. Self-study on abdominal pain in primary care using guided discovery to appreciate the nature of so called non-specific abdominal pain syndromes
8.5.4. Self-study on backache in primary care using guided discovery to appreciate the nature of so called non-specific back pain syndromes
8.5.5. Self-study on dyspepsia in primary care using inquiry based learning to appreciate the psychological aspects of dyspepsia
8.5.6. Self-study on chest pain in primary care using inquiry based learning to appreciate the nature of muscular causes of chest pain
8.5.7. Self-study on abdominal pain in primary care using inquiry based learning to appreciate the nature of abdominal wall pain
8.5.8. Self-study on backache in primary care using inquiry based learning to appreciate the nature of so called muscle de-conditioning
8.5.9. Self-study - Carry out an audit in to the diagnosis of depression in your practice
8.5.10. Self-study - Carry out an audit in to the diagnosis of anxiety in your practice
8.5.11. Self-study - Carry out an audit in to the diagnosis of somatization in your practice
8.5.12. Experiential learning - abdominal pain patient referred by you to the hospital - follow up, what happened, what couldn't you achieve, what did you miss, what did they do to the patient, what was the outcome
8.5.13. Experiential learning - chest pain patient referred by you to the hospital - follow up, what happened, what couldn't you achieve, what did you miss, what did they do to the patient, what was the outcome
8.5.14. Experiential learning - headache patient referred by you to the hospital - follow up, what happened, what couldn't you achieve, what did you miss, what did they do to the patient, what was the outcome
8.5.15. Experiential learning - list all the patients consulting you for anything other than a common infection. What proportion of these non-infective problems you managed without referral - was there an indication for referral / red flags? Compare your referral rate with other primary care referral rates ?

2.2 Core Curriculum 2. Skills

1. Generalist skills

While many of the following attributes are required of specialists as well as generalists, in general practice they assume sufficient prominence to merit stating in their own right. The ability to integrate the various skills is more important than the possession of any individual one.

1.1 Treating the patient as a unique person

1.2 Being an advocate for the individual patient
1.3 Providing longitudinal or continuous care
1.4 Simultaneously managing both acute and ongoing problems
1.5 Integrating information on physical, psychological, social and cultural factors which impact on patients
1.6 Demonstrating an appropriately focused assessment of a patients' condition based on the history, clinical signs and examination
1.7 Demonstrating the appropriate use of equipment routinely used in general practice and a familiarity with the breadth of tests offered in secondary care
1.8 Emphasizing where appropriate the self-limiting or relatively benign natural history of a problem and the importance of patients developing personal coping strategies
1.9 Managing uncertainty, unpredictability and paradox by displaying an ability to evaluate undifferentiated and complex problems
1.10 Managing conflict, e.g. those which may arise when making decisions about the use of resources, when the needs or expectations of the individual patient and the needs of a population of patients cannot both be fully met
1.11 Demonstrating awareness of individual and family psycho-dynamics and their interaction with health and illness
1.12 Balancing conflicting interests when having a dual responsibility, such as a contractual obligation to a third party and an obligation to patients
1.13 Showing a flexibility of approach according to the different needs of a wide variety of patients irrespective of their age, gender, cultural, religious or ethnic background, sexual orientation or any other special needs
1.14 Practicing medicine which is wherever possible evidence based, with individuals and populations
1.15 Balancing clinical judgment against evidence-based practice as determined by individual patient needs
1.16 Co-ordinating and integrating care by flexibly adopting the various roles (clinician, family physician etc) of a GP in the course of ordinary practice
1.17 Recognizing the GP's frontline role, both by facilitating patients' access to specialized care and by protecting them from unnecessary interventions
1.18 Managing time and workload effectively, and setting realistic goals
1.19 Maintaining comprehensive written and computerized records
1.20 Being able to recognize and meet the doctor's needs as a person including self and family care ('housekeeping')
1.21 Recognizing and working within the limits of one's professional competence
1.22 Being able to work effectively in a team, either as a member or leader, accepting the principles of collective responsibility, and to consult colleagues when appropriate

2. The doctor-patient relationship, communication and consulting skills

2.1 Respecting patients as competent and equal partners with different areas of expertise
2.2 Sharing decision-making with patients, enabling them to make informed choices
2.3 Respecting patients' perception of the experience of their illness (health beliefs); their social circumstances, habits, behaviour, attitude to risk, values and preferences

2.4 Understanding the role of patients' ideas, values, concerns and expectations in their understanding of their problems

2.5 Incorporating patients' expectations, preferences and choices in formulating an appropriate management plan

2.6 Showing an interest in patients, being attentive to their problems, treating them politely, considerately, and demonstrating active listening skills

2.7 Demonstrating communication and consultation skills and showing familiarity with well-recognized consultation techniques

2.8 Establishing effective rapport with the patient

2.9 Responding to patients' verbal and non-verbal cues to any underlying concerns

2.10 Being able to detect, elicit and respond to patients' emotional issues

2.11 Being able to deal with patients' difficult emotions, e.g. denial, anger, fear

2.12 Making links between emotional and physical symptoms, or between physical, psychological and social issues

2.13 Communicating and articulating with patients effectively, clearly, fluently and framing content at an appropriate level, wherever the consultation takes place, including by telephone or in writing

2.14 Involving patients' significant others such as their next of kin or carer, when appropriate, in a consultation

2.15 Sensitively minimising any potentially embarrassing physical or psychological exposure by respecting patients' dignity, privacy and modesty

2.16 Explaining to the patient the purpose and nature of an examination and offering a chaperone when appropriate

2.17 Where appropriate, facilitating changes in patients' behaviour

2.18 Having an understanding of family or group dynamics sufficient to allow effective intervention in patients' family contexts

2.19 Demonstrating an awareness of the doctor as a therapeutic agent, the impact of transference and counter-transference, the danger of dependency, and displaying an insight into the psychological processes affecting the patient, the doctor and the relationship between them

2.20 Understanding the factors, such as longer consultations, which are associated with a range of better patient outcomes

3. Research skills

3.1 Write a protocol related to family practice.
3.2 Write and submit research ethics committee submissions.
3.3 Identify, review and analyze relevant literature.
3.4 Draft papers for publication.
3.5 Communicate with co-workers and agree on a final manuscript for submission
3.6 Demonstrate communication skills in effective presentation of a paper at scientific meetings

4. Audit skills

To progressively develop the ability to perform an audit of clinical practice and to apply the findings appropriately

Knowledge

- Understand the different methods of obtaining data for audit including patient feedback questionnaires
- Understand the role of audit (developing patient care, risk Management)
- Understand the steps involved in completing the audit cycle
- Understands the working and uses of national and local databases used for audit such as specialty data collection systems, cancer registries etc.

Skills

Design, implement and complete audit cycles
Recognize the need for audit in clinical practice to improve your performance according to accepted standards.

1. Attendance at audit meetings
   Contribute data to a local or national audit

2. Identify a problem for a local audit

3. Compare the results of an audit with criteria or standards to reach conclusions
   Use the findings of an audit to develop and implement change
   Organize or lead an audit meeting

4. Lead a complete clinical audit cycle including development of conclusions, implementation of
   Changes and re-audit to assess the effectiveness of the changes
   Become audit lead for an institution or organization

5. Practical Skills

The ability to perform general clinical examination of organ systems, including digital, rectal and vaginal examinations

Proficient use of the following:

- Auroscope
- Ophthalmoscope
- Sphygmomanometer
- Stethoscope

- Foetal stethoscope and/or 'Sonicaid'
- Patella hammer
- Thermometer
- Tuning fork.
- Visual acuity and colour tests
- Proctoscope
- Vaginal speculum

Proficiency in the following:

- Cardio-pulmonary resuscitation including use of a defibrillator
- Controlling a haemorrhage
- Venepuncture
- Giving intravenous, intramuscular, subcutaneous or intradermal injections including via a syringe driver
- Performing and interpreting an electrocardiogram
- Performing basic respiratory function tests
- Administering oxygen safely
- Use of a nebuliser
- Near patient testing e.g. urinalysis
- Removal of ear wax
- Passing a urinary catheter
- Performing a cervical smear
- Collecting other relevant samples including endocervical or per-nasal swabs
- Suturing a wound
- Minor surgical procedures e.g. cryotherapy, joint injection and aspiration, and surgical excisions as appropriate for approved practitioners, and including referral of relevant samples for histology

2.3 Core curriculum 3. Symptom evaluation

The document details the conditions referred to as **topics** that all family medicine consultants are expected to manage. For each topic in the list given below the following learning objectives are to be achieved.

LEARNING OBJECTIVES

1) The natural history of the untreated condition including whether acute or chronic
2) An accurate idea of the prevalence and incidence across the ages and any changes over time
3) Typical and atypical presentations
4) Risk factors
5) Diagnostic features
6) Recognition of 'alarm' or 'red flag' features
7) Treatment including initial, emergency and continuing care
8) Prognosis

TOPICS.

COMMON SYMPTOM LIST

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Abdominal pain
Ankle pain
Ankle swelling
Anorexia
Arm pain
Backache
Behavior problems of childhood
Breast symptoms
Breathing difficulty
Calf pain
Chest pain
Colds
Constipation
Cough acute
Cough chronic
Cramps
Crying inconsolable
Developmental milestone problems
Diarrhea
Diplopia
Distension abdominal
Dizziness
Dysphagia
Dyspnea
Earache
Ear discharge
Elbow pain
Enuresis nocturnal
Epistaxis
Eye pain
Facial pain
Facial swelling
Facial weakness
Failure to thrive
Falls
Fatigue
Fecal soiling
Feeding problems of children
Fever
Floaters and flashing lights
Foot pain
Foot swelling
Forearm pain
Generalized body aches
Generalized body swelling
Genital discharge
Genital ulcers
Goiter
Gynaecomastia
Hair fall
Halitosis
Hand pain
Headache
Head injury
Hearing loss
Heel pain
Hematemesis – melena
Hematuria
Hemoptysis
Hiccups
Hip pain
Hirsuitism
Hoarseness
Hyperactivity
Intoeing
Jaundice
Knee pain
Leg pain
Limb pain
Limp
Multiple Multi-system Symptom Combinations OR Medically unexplained symptoms
Memory problems
Menstrual abnormalities
Nasal obstruction
Neck pain
Obesity/Overweight
Oral lesions
Oral ulcers
Palpitations
Paresthesiae
Paralysis
Pruritus
Queer turns
Rashes
Recurrent infections childhood
Rectal bleeding
Rectal pain
Red eyes
Scrotal pain
Seizures
Sexual problems female
Sexual problems male
Short stature
Shoulder pain
Sick baby OR ill-looking baby

Sleep problems
Sore throat
Squint
Stridor
Suicidal thoughts and ideas
Syncope
Thigh pain
Tinnitus
Toe walking
Tremor
Umbilical discharge
Urinary symptoms – irritative voiding syndrome
Urinary symptoms – obstructive voiding syndrome
Urinary incontinence
Urticaria and/or angioedema
Vaginal discharge
Vision loss
Vomiting
Weight loss
Wrist Pain

Examples of symptom evaluation

Abdominal Pain

The trainee will be able to assess a patient presenting with abdominal pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Outline the different classes of abdominal pain and how the history and clinical findings differ between them
- Identify the possible causes of abdominal pain, depending on site, details of history, acute or chronic
- Define the situations in which urgent surgical, urological or gynaecological opinion should be sought
- Determine which first line investigations are required, depending on the likely diagnoses following evaluation
- Define the indications for specialist investigation: ultrasound, CT,MRI, endoscopy

Skills

- Elicit signs of tenderness, guarding, and rebound tenderness and interpret appropriately
- Order, interpret and act on initial investigations appropriately: blood tests; x-rays; ECG; microbiology investigations
- Initiate first line management: the diligent use of suitable analgesia; 'nil by mouth'; IV fluids; resuscitation
- Interpret gross pathology on CT abdominal scans, including liver metastases and obstructed ureters with hydronephrosis

Attitudes

- Exhibit timely intervention when abdominal pain is the manifestation of critical illness or is life-threatening, in conjunction with senior and appropriate specialists
- Recognize the importance of a multi-disciplinary approach including early surgical assessment when appropriate
- Display sympathy to physical and mental responses to pain
- Involve other specialties promptly when required

Acute Back Pain

The trainee will be able to assess a patient with a new presentation of back pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the causes of acute back pain
- Specify abdominal pathology that may present with back pain
- Outline the features that raise concerns as to a sinister cause ('the red flags') and lead to consideration of a chronic cause ('the yellow flags')
- Recall the indications of an urgent MRI of spine
- Outline indications for hospital admission
- Outline secondary prevention measures in osteoporosis

Skills

- Perform examination and elicit signs of spinal cord / cauda equina compromise
- Practice safe prescribing of analgesics / anxiolytics to provide symptomatic relief
- Order, interpret and act on initial investigations appropriately: blood tests and x-rays

Attitudes

- Involve neurosurgical unit promptly in event of neurological symptoms or signs
- Ask for senior help when critical abdominal pathology is suspected
- Recognize the socio-economic impact of chronic lower back pain
- Participate in multi-disciplinary approach: physiotherapy etc
- Recognize impact of osteoporosis and encourage bone protection in all patients at risk

Blackout / Collapse

The trainee will be able to assess a patient presenting with a collapse to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the causes for blackout and collapse
- Differentiate the causes depending on the situation of blackout +/or collapse, associated symptoms and signs, and eye witness reports
- Outline the indications for temporary and permanent pacing systems
- Define indications for investigations: ECHO, ambulatory ECG monitoring, neuroimaging

Skills

- Elucidate history to establish whether event was LOC, fall without LOC, vertigo (with eye witness account if possible)
- Assess patient in terms of ABC and degree of consciousness and manage appropriately
- Perform examination to elicit signs of cardiovascular or neurological disease and to distinguish epileptic disorder from other causes
- Order, interpret and act on initial investigations appropriately: ECG, blood tests including . glucose
- Manage arrhythmias appropriately as per ALS guidelines

- Detect orthostatic hypotension
- Institute external pacing systems when appropriate

Attitudes

- Recognize impact episodes can have on lifestyle particularly in the elderly
- Recognize recommendations regarding fitness to drive in relation to undiagnosed blackouts

Breathlessness

The trainee will be able to assess a patient presenting with breathlessness to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the common and/or important cardio-respiratory conditions that present with breathlessness
- Differentiate orthopnoea and paroxysmal nocturnal dyspnoea
- Identify non cardio-respiratory factors that can contribute to or present with breathlessness e.g. acidosis
- Define basic patho-physiology of breathlessness
- List the causes of wheeze and stridor
- Outline indications for CT chest, CT pulmonary angiography, spirometry

Skills

- Interpret history and clinical signs to list appropriate differential diagnoses:
- Differentiate between stridor and wheeze
- Order, interpret and act on initial investigations appropriately: routine blood tests, oxygen saturation, arterial blood gases, chest x-rays, ECG, Peak flow test, spirometry
- Initiate treatment in relation to diagnosis, including safe oxygen therapy, early antibiotics for pneumonia
- Perform chest aspiration and chest drain insertion
- Recognize disproportionate dyspnoea and hyperventilation
- Practice appropriate management of wheeze and stridor
- Evaluate and advise on good inhaler technique
- Recognize indications for ventilatory support, including intubation and non-invasive ventilation

Attitudes

- Exhibit timely assessment and treatment in the acute phase
- Recognize the distress caused by breathlessness and discuss with patient and carers
- Recognize the impact of long term illness
- Consult senior when respiratory distress is evident
- Involve Critical Care team promptly when indicated
- Exhibit non-judgemental attitudes to patients with a smoking history

Chest Pain

The trainee will be able to assess a patient with chest pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Characterize the different types of chest pain, and outline other symptoms that may be present
- List and distinguish between the common causes for each category of chest pain and associated features: cardio respiratory, ,musculoskeletal, upper GI
- Define the patho-physiology of acute coronary syndrome and pulmonary embolus
- Identify the indications for PCI and thrombolysis in ACS
- Identify the indications and limitations of cardiac biomarkers and dimer analysis
- Outline emergency and longer term treatments for PE
- Outline the indications for further investigation in chest pain syndromes: CT angiography and tread mill

Skills

- Interpret history and clinical signs to list appropriate differential diagnoses: esp. for cardiac pain & pleuritic pain
- Order, interpret and act on initial investigations in the context of chest pain appropriately: such as ECG, blood gas analysis, blood tests, chest radiograph, cardiac biomarkers
- Commence initial emergency treatment including coronary syndromes, pulmonary embolus and aortic dissection
- Elect appropriate arena of care and degree of monitoring
- Formulate initial discharge plan

Attitudes

- Perform timely assessment and treatment of patients presenting with chest pain
- Involve senior when chest pain heralds critical illness or when cause of chest pain is unclear
- Recognize the contribution and expertise of specialist cardiology nurses and technicians
- Recommend appropriate secondary prevention treatments and lifestyle changes on discharge
- Communicate in a timely and thoughtful way with patients and relatives

Confusion, Acute / Delirium

The trainee will be able to assess an acutely confused / delirious patient to formulate a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- List the common and serious causes for acute confusion / delirium
- Outline important initial investigations, including electrolytes, cultures,full blood count, ECG, blood gases, thyroid function tests
- Recognize the factors that can exacerbate acute confusion / delirium.g. change in environment, infection
- List the pre-existing factors such as dementia that pre-dispose to acute confusion / delirium

- Outline indications for further investigation including head CT, lumbar puncture

Skills

- Examine to elicit cause of acute confusion / delirium
- Perform mental state examinations (abbreviated mental test and mini-mental test) to assess severity and progress of cognitive impairment
- Recognize pre-disposing factors: dementia, psychiatric disease
- Understand and act on the results of initial investigations e.g. CT head, LP
- Interpret and recognize gross abnormalities of CT head/MRI Brain. Mid line shift and intracerebral haematoma

Attitudes

- Recognize that the cause of acute confusion / delirium is often multifactorial
- Contribute to multi-disciplinary team management
- Recognize effects of acutely confused / delirious patient on other patients and staff in the ward environment

Cough

The trainee will be able to assess a patient presenting with cough to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- List the common and serious causes of cough (top examples refer to system specific lists)
- Identify risk factors relevant to each aetiology including precipitating drugs
- Outline the different classes of cough and how the history and clinical findings differ between them
- State which first line investigations are required, depending on the likely diagnoses following evaluation

Skills

- Order, interpret and act on initial investigations appropriately: blood tests, chest x-rays and PFT
- Awareness of management for common causes of cough

Attitudes

- Contribute to patients understanding of their illness
- Exhibit non-judgmental attitudes to patients with a history of smoking
- Consult seniors promptly when indicated
- Recognize the importance of a multi-disciplinary approach

Diarrhoea

The trainee will be able to assess a patient presenting with diarrhoea to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Specify the causes of diarrhoea
- Correlate presentation with other symptoms: such as abdominal pain, rectal bleeding, weight loss
- Recall the patho-physiology of diarrhoea for each aetiology
- Describe the investigations necessary to arrive at a diagnosis
- Identify the indications for urgent surgical review in patients presenting with diarrhea

- Recall the presentation, investigations, prevention and treatment of *C.difficile*, diarrhea
- Demonstrate knowledge of infection control procedures

Skills

- Evaluate nutritional and hydration status of the patient
- Assess whether patient requires hospital admission
- Perform rectal examination as part of physical examination
- Initiate and interpret investigations: blood tests, stool examination, endoscopy and radiology as appropriate (AXR – intestinal obstruction, toxic dilatation)

Attitudes

- Seek a surgical and senior opinion when required
- Exhibit sympathy and empathy when considering the distress associated with diarrhoea and incontinence

Fever

The trainee will be able to assess a patient presenting with fever to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the patho-physiology of developing a fever and relevant use of anti-pyretics
- Recall the underlying causes of fever: infection, malignancy, inflammation
- Recall guidelines with regard to antibiotic prophylaxis
- Differentiate features of viral and bacterial infection
- Outline indications and contraindications for LP in context of fever
- Recognition and awareness of management of neutropenic sepsis

Skills

- Recognize the presence of septic shock in a patient, commence resuscitation and liaise with senior colleagues promptly
- Order, interpret and act on initial investigations appropriately: blood tests, cultures, CXR
- Perform a Lumbar puncture and interpret, ensure appropriate investigation of and act on results.
- Arrange appropriate investigation of CSF and interpret results
- Identify the risk factors in the history that may indicate an infectious disease e.g. travel, sexual history, IV drug use, animal contact, drug therapy
- Commence empirical antibiotics when an infective source of fever is deemed likely in accordance with local prescribing policy
- Commence anti-pyretics as indicated

Attitudes

- Adhere to local antibiotic prescribing policies
- Highlight importance of nosocomial infection and principles for infection control
- Consult senior in event of septic syndrome
- Discuss with senior colleagues and follow local guidelines in the management of the immunosuppressed e.g. HIV, neutropenia
- Promote communicable disease prevention: e.g. immunisations, antimalarials, safe sexual practices

Fits / Seizure

The trainee will be able to assess a patient presenting with a fit, stabilise promptly, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the causes for seizure
- Recall the common epileptic syndromes
- Recall the essential initial investigations following a 'first fit'
- Recall the indications for a CT head
- Describe the indications, contraindications and side effects of the commonly used anti-convulsants
- Differentiate seizure from other causes of collapse **ills**
- Recognize and commence initial management of a patient presenting with status epilepticus
- Obtain collateral history from witness
- Promptly recognize and treat precipitating causes: metabolic, infective, malignancy
- Differentiate seizure from other causes of collapse using history and examination

Attitudes

- Recognize need for urgent referral in case of uncontrolled recurrent loss of consciousness or seizures
- Recognize the principles of safe discharge, after discussion with senior colleague
- Recognize importance of Epilepsy Nurse Specialist
- Recognize the psychological and social consequences of epilepsy

Haematemesis & Melaena

The trainee will be able to assess a patient with an upper GI haemorrhage to determine significance; resuscitate appropriately; and liaise with endoscopist effectively

Knowledge

- Specify the causes of upper GI bleeding, with associated risk factors including coagulopathy and use of NSAIDs/Aspirin /anticoagulants
- Recall scoring systems used to assess the significance and prognosis of an upper GI bleed
- Recall the principles of choice of IV access including central line insertion, fluid choice and speed of fluid administration
- Recall common important measures to be carried out after endoscopy, including helicobacter eradication, acid suppression

Skills

- Recognize shock or impending shock and resuscitate rapidly and assess need for higher level of care Distinguish upper and lower GI bleeding
- Distinguish upper and lower GI bleeding
- Demonstrate ability to site large bore IV access
- Safely prescribe drugs indicated in event of an established upper GI bleed using the current evidence base

Attitudes

- Seek senior help and endoscopy or surgical input in event of significant GI bleed
- Observe safe practices in the prescription of blood products

Headache

The trainee will be able to assess a patient presenting with headache to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the common and life-threatening causes of acute new headache, and how the nature of the presentation classically varies between them
- Understand the patho-physiology of headache
- Recall the indications for urgent CT/MRI scanning in the context of headache
- Recall clinical features of raised intra-cranial pressure
- Demonstrate knowledge of different treatments for suspected migraine

Skills

- Recognize important diagnostic features in history
- Perform a comprehensive neurological examination, including eliciting signs of papilloedema, temporal arteritis, meningism and head trauma
- Order, interpret and act on initial investigations
- Perform a successful lumbar puncture when indicated with minimal discomfort to patient observing full aseptic technique
- Interpret basic CSF analysis: cell count, protein, bilirubin, gram stain and glucose
- Initiate prompt treatment when indicated: appropriate analgesia; antibiotics; antivirals; corticosteroids

Attitudes

- Recognize the nature of headaches that may have a sinister cause and assess and treat urgently
- Liaise with senior doctor promptly when sinister cause is suspected
- Involve neurosurgical team promptly when appropriate

Jaundice

The trainee will be able to assess a patient presenting with jaundice to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the patho-physiology of jaundice in terms of pre-hepatic,hepatic, and post-hepatic causes.
- Recall causes for each category of jaundice with associated risk factors
- Recall issues of prescribing in patients with significant liver disease
- Recall basic investigations to establish aetiology

- Demonstrate knowledge of common treatments of jaundice

Skills

- Take a thorough history and examination to arrive at a valid differential diagnosis
- Recognize the presence of chronic liver disease or fulminant liver failure
- Interpret results of basic investigations to establish aetiology; recognise complications of jaundice
- Recognize complications of jaundice
- Recognize and initially manage complicating factors: coagulopathy, sepsis, GI bleed, alcohol withdrawal, electrolyte disturbance

Attitudes

- Exhibit non-judgmental attitudes to patients with a history of alcoholism or substance abuse
- Consult seniors and gastroenterologists promptly when indicated
- Contribute to the patient's understanding of their illness
- Recognize the importance of a multi-disciplinary approach

Limb Pain & Swelling

The trainee will be able to assess a patient presenting with limb pain or swelling to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the causes of unilateral and bilateral limb swelling in terms of acute and chronic presentation
- Recall the different causes of limb pain and the patho-physiology of pitting oedema, non-pitting oedema and thrombosis
- Recall the risk factors for the development of thrombosis and recognized risk scoring systems
- Recall the indications, contraindications and side effects of diuretics and anti-coagulants
- Demonstrate awareness of the longer term management of DVT
- Differentiate the features of limb pain and/or swelling pain due to cellulitis, varicose eczema and DVT

Skills

- Perform a full and relevant examination including assessment of viability and perfusion of limb and differentiate pitting oedema; cellulitis; venous thrombosis; compartment syndrome
- Recognize compartment syndrome and critical ischaemia and take appropriate timely action
- Order, interpret and act on initial investigations appropriately: blood tests, doppler studies, urine protein
- Practice safe prescribing of initial treatment as appropriate (anticoagulation therapy, antibiotics etc)
- Prescribe appropriate analgesia

Attitudes

- Liaise promptly with surgical colleagues in event of circulatory compromise (e.g. compartment syndrome)
- Recognize importance of thrombo-prophylaxis in high risk groups

Palpitations

The trainee will be able to assess a patient presenting with palpitations to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan Assessment

Knowledge

- Recall cardiac electrophysiology relevant to ECG interpretation
- Recall common causes of palpitations
- Recall the categories of arrhythmia
- Recall common arrhythmogenic factors including drugs Recall the indications, contraindications and side effects of the commonly used anti-arrhythmic medications
- Demonstrate knowledge of the management of Atrial Fibrillation

Skills

- Elucidate nature of patient's complaint
- Order, interpret and act on initial investigations appropriately: ECG,blood tests
- Recognize and commence initial treatment of arrhythmias being poorly tolerated by patient (peri-arrest arrhythmias)
- Ensure appropriate monitoring of patient on ward
- Management of newly presented non compromised patients with arrhythmias

Attitudes

- Consult senior colleagues promptly when required
- Advise on lifestyle measures to prevent palpitations when appropriate

Rash

The trainee will be able assess a patient presenting with an acute-onset skin rash and common skin problems to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the characteristic lesions found in the acute presentation of common skin diseases
- Recall basic investigations to establish aetiology
- Recall risk factors, particularly drugs, infectious agents and allergens
- Recall possible medical treatments

Skills

- Take a thorough focused history & conduct a detailed examination, including the nails, scalp and mucosae to arrive at appropriate differential diagnoses
- Recognize the importance of a detailed drug history
- Recognize that anaphylaxis may be a cause of an acute skin rash MRCP Part 2,
- Order, interpret and act on initial investigations appropriately to establish etiology
- Implement acute medical care when indicated by patient presentation/ initial investigations

Attitudes

- Demonstrate sympathy and understanding of patients' concerns due to the cosmetic impact of skin disease
- Engage the patient in the management of their condition particularly with regard to topical treatments
- Reassure the patient about the long term prognosis and lack of transmissibility of most skin diseases

Vomiting and Nausea

The trainee will be able to assess a patient with vomiting and nausea to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the causes and patho-physiology of nausea and vomiting
- Recall the use and adverse effects of commonly used anti-emetics and differentiate the indications for each
- Recall alarm features that make a diagnosis of upper Gastro-intestinal malignancy possible

Skills

- Elicit signs of dehydration and take steps to rectify
- Recognize and treat suspected GI obstruction appropriately: nil by mouth, NG tube, IV fluids
- Practice safe prescribing of anti-emetics
- Order, interpret and act on initial investigations appropriately: blood tests, x-rays

Attitudes

- Involve surgical team promptly in event of GI obstruction
- Respect the impact of nausea and vomiting in the terminally ill and involve palliative care services appropriately

Weakness and Paralysis

The trainee will be able to assess a patient presenting with motor weakness to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Broadly outline the physiology and neuroanatomy of the components of the motor system
- Recall the myotomal distribution of nerve roots, peripheral nerves, and tendon reflexes
- Recall the clinical features of upper and lower motor neurone, neuromuscular junction and muscle lesions
- Recall the common and important causes for lesions at the sites listed above
- Recall the Bamford classification of stroke, and its role in prognosis
- Demonstrate knowledge of investigations for acute presentation, including indications for urgent head CT

Skills

- Elucidate speed of onset and risk factors for neurological dysfunction
- Perform full examination to elicit signs of systemic disease and neurological dysfunction and identify associated deficits
- Describe likely site of lesion in motor system and produce differential diagnosis
- Order, interpret and act on initial investigations for motor weakness appropriately
- Recognize when swallowing may be unsafe and manage appropriately
- Detect spinal cord compromise and investigate promptly
- Perform tests on respiratory function and inform senior appropriate
- Ensure appropriate care: thrombo-prophylaxis, pressure areas

Attitudes

- Recognize importance of timely assessment and treatment of patients presenting with acute motor weakness
- Consult senior and acute stroke service, if available, as appropriate
- Recognize patient and carers distress when presenting with acute motor weakness
- Consult senior when rapid progressive motor weakness or impaired consciousness is present
- Involve speech and language therapists appropriately PACES, ACAT,
- Contribute to multi-disciplinary approach

Abdominal Mass / Hepatosplenomegaly

The trainee will be able to assess a patient presenting with an abdominal mass to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the different types of abdominal mass in terms of aetiology, site, and clinical characteristics (e.g. mitotic, inflammatory)
- Recall relevant investigations related to clinical findings: radiological, surgical, endoscopy
- Recall the common causes of hepatomegaly and splenomegaly

Skills

- Elicit associated symptoms and risk factors for the presence of diseases presenting with abdominal mass, hepatomegaly and splenomegaly
- Elicit and interpret important clinical findings of mass to establish its likely nature
- Order, and interpret following the results of initial investigations including blood tests and imaging

Attitudes

- Recognize the anxiety that the finding of an abdominal mass may induce in a patient
- Participate in multi-disciplinary team approach

Abdominal Swelling & Constipation

The trainee will be able to undertake assessment of a patient presenting with abdominal swelling or distension to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the causes of abdominal swelling and their associated clinical findings
- Recall the common causes of constipation, including drugs
- Recall the patho-physiology of ascites, ileus and bowel obstruction
- Recall important steps in the diagnosis of the cause of ascites including clinical findings, blood tests, imaging and the diagnosis of spontaneous bacterial peritonitis and malignancy
- Recall the alarm symptoms which raise suspicion of colorectal malignancy
- Recall the mode of action and side effects of the commonly used laxatives

Skills

- Examine to identify the nature of the swelling, including a rectal examination, and elicit co-existing signs that may accompany ascites, intestinal obstruction and constipation
- Order and interpret the results of initial investigations
- Perform a safe diagnostic and therapeutic ascitic tap with aseptic technique with minimal discomfort to the patient
- Interpret results of diagnostic ascitic tap
- Institute initial management as appropriate to the type of swelling

Attitudes

- Recognize the multi-factorial nature of constipation, particularly in the elderly
- Recognize the importance of multi-disciplinary approach
- Arrange referral to the appropriate multidisciplinary team if cancer is diagnosed
- Liaise with the Palliative care team as necessary
- Respond sympathetically and with empathy to patient and relatives requests for information and advice when cancer is diagnosed

<u>Abnormal Sensation (Paraesthesia and Numbness)</u>

The trainee will be able to assess a patient with abnormal sensory symptoms to arrive at a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Broadly outline the physiology and neuroanatomy of the sensory components of the nervous system
- Recall the dermatomal distribution of nerve roots and peripheral nerves
- List common and important causes of abnormal sensation and likely site of lesion in nervous system (e.g. trauma, vascular)
- Outline the symptomatic treatments for neuropathic pain
- Outline indications for an urgent head CT
- Be aware of relevance of more specialized investigations: neuroimaging, screening blood tests for neuropathy, neurophysiology studies

Skills

- Take a full history, including drugs, lifestyle, trauma
- Perform full examination including all modalities of sensation to elicit signs of nervous system dysfunction
- Describe likely site of lesion: central, root, mononeuropathy, or polyneuropathy
- Identify early spinal cord or cauda equina compression and take appropriate action

Attitudes

- Recognize the distress chronic paraesthesia can cause

- Consult senior and acute stroke service, if available, as appropriate
- Contribute to multi-disciplinary approach

Acute kidney injury and chronic kidney disease

The trainee will be able to assess a patient presenting with impaired renal function, distinguishing acute kidney injury from chronic kidney disease, and producing a valid differential diagnosis, plan for investigation, and formulating and implementing an appropriate management plan.

Knowledge

- Describe the common conditions that cause acute kidney injury and chronic kidney disease
- Outline the clinical approach required to distinguish chronic kidney disease from acute kidney injury, and to diagnose different common causes of these conditions
- Describe the life-threatening complications of renal failure, in particular of hyperkalaemia, and the indications for emergency renal replacement therapy
- Describe the principles of maintaining fluid balance in the oliguric or polyuric patient
- Describe the effect of renal failure on handling of drugs

Skills

- Identify the presence of significant hyperkalaemia and treat appropriately
- Order, interpret and act on initial investigations, including blood tests and radiological imaging
- Assess fluid balance and prescribe fluids appropriately in the oliguric or polyuric patient

Attitudes

- Recognize the need for specialist renal input when appropriate

Bruising and spontaneous bleeding

The trainee will be able to assess a patient presenting with easy bruising to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the different types of easy bruising
- Identify the possible causes of easy bruising, depending on the site, age of the patient and details of the history, particularly in relation to prescribed medication
- State which first line investigations are required, depending on the likely diagnosis
- Identify the common clinical presentations of coagulation disorders
- Identify the pattern of bleeding associated with thrombocytopenia
- Identify the need for urgent investigations
- Identify differences in presentation between primary haematological causes of easy bruising and drug induced clotting disorders

Skills

- Order, interpret and act on initial investigations appropriately including blood tests, X-rays, microbiological investigations
- Initiate first line management in consultation with senior clinicians

Attitudes

- Recognize the importance of a multidisciplinary approach
- Acknowledge anxiety caused by possible diagnosis of a serious blood condition
- Consult senior if there is concern, bruising is manifestation of critical illness
- Recognize that trauma is an important cause of bruising and that bruising is a common problem in the elderly

Dyspepsia

The trainee will be able to assess a patient presenting with heartburn to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Define dyspepsia and recall principle causes
- Recall the lifestyle factors that contribute to dyspepsia
- Recall the indications for endoscopy as stated in national guidelines
- Recall indications, contraindications and side effects of acid suppression and mucosal protective medications
- Recall the role of H Pylori and its detection and treatment
- Recall the alarm symptoms of upper GI malignancy

Skills

- Identify alarm symptoms indicating urgent endoscopy and arrange referral
- Investigate as appropriate: H pylori testing, endoscopy
- Take a history to differentiate ulcer-like dyspepsia from Gastro esophageal reflux disease and a full drug history
- Carry out an abdominal examination particularly looking for an abdominal mass.

Attitudes

- Reflect findings of a previous endoscopy when patients have an exacerbation of symptoms

Dysuria

The trainee will be able to assess a patient presenting with dysuria to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall anatomy of the genito-urinary tract
- Be aware of the causes of dysuria in males and females
- Outline the patho-physiology of infective causes of urethritis
- Outline the principles of management of dysuria
- Outline general measures to prevent recurrent urinary tract infection

Skill

- Take a full history, including features pertaining to sexual heath
- Initiate appropriate treatment when appropriate
- Order, interpret and act on initial investigations
- Apply knowledge of local microbiological advice in commencing appropriate treatment

Attitudes

- Recognize the need for specialist Genito-urinary/ID/renal input when appropriate
- Participate in sexual health promotion

- Use microbiology resources in the management of patients with dysuria when appropriate

Genital Discharge and Ulceration

The trainee will be able to assess a patient presenting with genital discharge or ulceration to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the disorders that can present with genital discharge
- Recall the disorders that can present with genital ulceration
- Recall the investigations necessary: urinalysis; urethral smear and culture in men; high vaginal and endo-cervical swab in women, genital skin biopsy
- Recall the systemic modes of presentation of sexually transmitted diseases

Skills

- Take a full history that includes associated symptoms, sexual, menstrual and contraceptive history and details of previous STDs
- Perform full examination including inguinal lymph nodes, scrotum, male urethra, rectal examination
- Be able to pass a speculum competently and sensitively without discomfort to the patient

Attitudes

- Recognize the re-emergence of sexually transmitted diseases
- Recognize the importance of contact tracing
- Promote safe sexual practices
- Advocate the presence of a chaperone during assessment

Haematuria

The trainee will be able to assess a patient with haematuria to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the anatomy of the urinary tract
- Outline the causes of microscopic and macroscopic haematuria
- Determine whether glomerular cause is likely, and indications for a nephrology opinion

Skills

- Perform a focused examination, including a rectal examination
- Demonstrate when a patient needs urological assessment and investigation
- Order, interpret and act on initial investigations such as: urine culture, cytology and microscopy; blood tests

Attitudes

- Involve renal unit when rapidly progressive glomerulo-nephritis is suspected

Haemoptysis

The trainee will be able to assess a patient presenting with haemoptysis to produce valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Identify the presenting features of haemoptysis
- Recognize the common and potentially life threatening causes of haemoptysis: bronchiectasis, tuberculosis pneumonia, pulmonary embolism and carcinoma
- Describe initial treatment including fluids and oxygen management

Skills

- Perform a detailed history and physical examination to determine an appropriate differential diagnosis
- Order, interpret and act on initial investigations appropriately: routine bloods, clotting screen, chest radiograph and ECG, sputum tests
- Initiate treatment including indications for starting or withholding anticoagulants and antibiotics

Attitudes

- Involve seniors and respiratory physicians as appropriate

Hoarseness and Stridor

The trainee will be able to assess a patient presenting with symptoms of upper airway pathology to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Explain the mechanisms of hoarseness
- Explain the mechanisms of stridor
- List the common and serious causes for hoarseness and stridor

Skills

- Differentiate hoarseness, stridor and wheeze
- Assess severity: cyanosis, respiratory rate and effort
- Perform full examination, eliciting signs that may co-exist with stridor or hoarseness e.g. bovine cough, Horner's syndrome, lymphadenopathy, thyroid enlargement, fever
- Order, interpret and act on initial investigations appropriately: blood tests, blood gas analysis, chest radiograph, flow volume loops,FEV1/peak flow ratio

Attitudes

- Involve senior and anaesthetic team promptly in event of significant airway compromise
- Involve specialist team as appropriate: respiratory team, ENT or neurological team

Hypothermia

The trainee will be able to assess a patient presenting with hypothermia to establish the cause, investigate appropriately, formulate and implement a management plan

Knowledge

- Define hypothermia and its diagnosis
- Recall perturbations caused by hypothermia, including ECG and blood test interpretation
- Recall the causes of hypothermia
- Recall the initial management of hypothermia
- Recall complications of hypothermia

Skills

- Employ the emergency management of hypothermia as per ALS guidelines

- Correct any predisposing factors leading to hypothermia
- Request appropriate monitoring of the patient

Attitudes

- Recognize the often multi-factorial nature of hypothermia in the elderly and outline preventative approaches
- Recognize seriousness of hypothermia and act promptly to re-warm
- Recognize that death can only usually be certified after re-warming

Immobility

The trainee will be able to assess a patient with immobility to produce a valid differential diagnosis, investigate appropriately, and produce a management plan

Knowledge

- Recall the risk factors and causes of immobility
- Define the roles in a multidisciplinary team
- Define the basic principles of rehabilitation
- Recall the conditions causing immobility which may be improved by treatment and or rehabilitation

Skills

- Take appropriate and focused collateral history from carers/family/GP
- Construct problem list following assessment
- Be able to play a meaningful role in the multidisciplinary team in management of these patients
- Formulate appropriate management plan including medication, rehabilitation and goal setting
- Identify conditions leading to acute presentation to hospital
- Order, interpret and act on relevant initial investigations appropriately to elucidate a differential diagnosis
- Perform evaluation of cognitive status

Attitudes

- Recognize the importance of a multidisciplinary approach and specialist referral as appropriate
- Display ability to discuss plans with patients, family members and of carers
- Recognize the anxiety and distress caused to patients, their families and carers by underlying condition and admission to hospital

Involuntary Movements

The trainee will be able to assess a patient presenting with involuntary movements to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Differentiate and outline the differential diagnoses of parkinsonism and tremor: be aware of myoclonus, and other less common movement disorders
- Recall the main drug groups used in the management of movement disorders

Skills

- Assess including a full neurological examination to produce a valid differential diagnosis

Attitudes

- Exhibit empathy when considering the impact of movement disorders on the quality of life of patients and their carers
- Recognize the role of therapists in improving function and mobility
- Recognize the importance of specialist referral

Knowledge Assessment

Joint Swelling

The trainee will be able to assess a patient presenting with joint pain or swelling to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledgedge Assessment

- Recall the generic anatomy of the different types of joint
- Differentiate between mono-, oligo-, and polyarthritis and recall principal causes for each
- Recall the importance of co-morbidities in the diagnosis of joint swelling
- Recall treatment options for acute arthritides e.g. analgesia, NSAIDs, steroids, physiotherapy etc

Skills

- Recognize the importance of history for clues as to diagnosis
- Perform a competent physical examination of the musculo-skeletal system
- Elicit and interpret extra-articular signs of joint disease
- Order, interpret and act on initial investigations appropriately: blood tests, radiographs, joint aspiration, cultures
- Perform knee aspiration using aseptic technique causing minimal distress to patient (Make) basic interpretation of plain radiographs of swollen joints
- Practice safe prescribing of analgesics and NSAIDs for joint disease
- Awareness of 2nd line therapy and its complication

Attitudes

- Recognize that monoarthritis calls for timely joint aspiration to rule out septic cause
- Recognize appropriate situation where surgical intervention in septic arthritis should be considered
- Recognize importance of multi-disciplinary approach to joint disease: orthopaedic surgery, physiotherapy , OT, social services

Lymphadenopathy

The trainee will be able to assess a patient presenting with lymphadenopathy to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Outline the anatomy and physiology of the lymphatic system
- Recall the causes of generalised and local lymphadenopathy in terms of infective, malignant, reactive and infiltrative
- Outline the initial investigations of lymphadenopathy and the indications for fine needle aspiration and lymph node biopsy

- Outline the investigations indicated when tuberculosis is considered

Skills

- Elicit associated symptoms and risk factors for the presence of diseases presenting with lymphadenopathy
- Examine to elicit the signs of lymphadenopathy and associated diseases
- Order, interpret and act on initial investigations appropriately
- Initiate treatment if appropriate

Attitudes

- Recognise patient concerns regarding possible cause for lymphadenopathy
- Recognise the need for senior and specialist input
- Recognise the association of inguinal lymphadenopathy with STDs, assess and refer appropriately

Loin Pain

The trainee will be able to assess a patient presenting with loin pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- List the common and serious causes of loin pain and renal colic
- Outline other symptoms that may classically accompany loin pain and renal colic
- Outline indications and contraindications for an urgent IVU/CT KUB

Skills

- Elucidate risk factors for causes of loin pain
- Perform full examination to elicit signs of renal pathology
- Order, interpret and act on initial investigations appropriately: blood tests, urinalysis, urine culture and microscopy, radiographs, ultrasound
- Prescribe appropriate analgesia safely
- Commence appropriate antibiotics when infective cause is likely
- Recognize co-existing renal impairment promptly

Attitudes

- Involve senior and renal team if there is associated renal impairment
- Involve urology team as appropriate
- Recognize local guidelines in prescribing antibiotics
- Recognize the importance of familial disorders in the origin of renal pain e.g. adult polycystic kidney disease

Memory Loss (Progressive)

The trainee will be able to assess a patient with progressive memory loss to determine severity, differential diagnosis, investigate appropriately, and formulate management plan

Knowledge

- Recall the clinical features of dementia that differentiate from focal brain disease, reversible encephalopathies, and pseudo-dementia
- Recall the principal reversible and irreversible causes of memory loss
- Recall factors that may exacerbate symptoms: drugs, infection, change of environment, biochemical abnormalities, constipation

Skills

- Take an accurate collateral history wherever possible
- Form a differential diagnosis
- Perform a full examination looking particularly for reversible causes of cognitive impairment and neurological disease
- Demonstrate ability to use tools measuring cognitive impairment at the bedside
- Order, interpret and act on initial investigations appropriately to determine reversible cause such as: blood tests, cranial imaging, EEG
- Detect and rectify exacerbating factors

Attitudes

- Demonstrate a patient sensitive approach to interacting with a confused patient and their carers
- Recognize that a change of environment in hospital can exacerbate symptoms and cause distress
- Recommend support networks to carers
- Participate in multi-disciplinary approach to care: therapists, elderly care team, old age psychiatrists, social services
- Consider need for specialist involvement

Micturition Difficulties

The trainee will be able to assess a patient presenting with difficulty in micturition to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Outline causes of difficulty in micturition in terms of oliguria and urinary tract obstruction
- Recall techniques that allow oliguria and bladder outflow obstruction to be differentiated
- Recall the investigation and management of prostatic cancer
- Outline drugs commonly used for prostatic symptoms

Skills

- Examine to elicit signs of renal disease, bladder outflow obstruction and deduce volaemic status of patient
- Differentiate oliguric pre-renal failure; acute renal failure and post renal failure
- Order, interpret and act on initial investigations appropriately: urinalysis, abdominal ultrasound, bladder scanning, urine culture and microscopy
- Initiate treatment when indicated
- Perform catheterisation using aseptic technique with minimal discomfort to patient
- Recognize and manage complications of urinary catheterisation
- Recognize incipient shock and commence initial treatment

Attitudes

- Recognise the importance of recognising and preventing renal impairment in the context of bladder outflow obstruction
- Liaise with senior in event of oliguria heralding incipient shock
- Liaise promptly with appropriate team when oliguria from bladder outflow obstruction is suspected (urology, gynaecology)

Neck Pain

The trainee will be able to assess a patient presenting with neck pain to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the common and serious causes of neck pain in terms of meningism; tender mass; musculoskeletal; vascular, intrinsic cord lesion
- Recall indications for lumbar puncture

Skills

- Take a full history, including recent trauma
- Perform a full examination to elicit signs that may accompany neck pain
- Order, interpret and act on initial investigations appropriately: blood tests, plain radiographs, thyroid function
- Recognize meningitis and promptly initiate appropriate investigations and treatment in consultation with senior
- Practice appropriate prescribing of analgesia
- Perform a Lumbar puncture and interpret, ensure appropriate investigation of and act on results.

Attitudes

- Consult senior colleague promptly in the event of focal neurological signs or critical illness

Polydipsia

The trainee will be able to assess a patient presenting with polydipsia to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Understand mechanisms of thirst
- Identify common causes of polydipsia

Skills

- Identify other pertinent symptoms e.g. nocturia
- Order, interpret and act on initial investigations appropriately
- Initiate adequate initial therapy
- Maintain appropriate basic therapy and introduce advanced treatment when required

Attitudes

- Sympathetically explain likely causes of polydipsia to patient
- Use appropriate aseptic techniques for invasive procedures and to minimise healthcare acquired infection

Polyuria

The trainee will be able to assess a patient presenting with polyuria to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledgeledge

- Define true polyuria
- Outline the causes of polyuria (in terms of osmotic diuresis, diabetes insipidus etc)
- Outline the patho-physiology of diabetes insipidus
- Elucidate the principles of treating new onset diabetes mellitus, hypercalcaemia

Skills

- Identify other pertinent symptoms
- Perform full examination to assess volaemic status, and elicit associated signs
- Order, interpret and act on initial investigations appropriately
- Calculate and interpret serum and urine osmolarity
- Commence treatment as appropriate
- Manage fluid balance in polyuric chronic renal failure and polyuric phase of acute renal failure

Attitudes

- Consult senior colleague as appropriate

Pruritus

The trainee will be able to assess a patient presenting with itch to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall principle causes in terms of infestations, primary skin diseases, systemic diseases (e.g. lymphoma), liver disease, pregnancy
- Outline the principles of treating skin conditions

- Awareness of need to refer to specialist

Skills

- Examine to elicit signs of a cause for pruritus
- Describe accurately any associated rash
- Formulate a list of differential diagnoses
- Order and interpret the results of initial investigations
- Recognize the presentation of skin cancer

Attitudes

- Recognize the need for specialist dermatological input
- Recognize the need for other specialists in pruritus heralding systemic disease

Rectal Bleeding

The trainee will be able to assess a patient with rectal bleeding to identify significant differential diagnoses, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the causes of bleeding per rectum
- Recall the indications for surgical review
- Recall the treatments of inflammatory bowel disease

Skills

- Take a history and perform examination including rectal examination
- Recognize and appropriately treat the shocked patient including consultation with surgical colleagues
- Order and interpret the results of initial investigations
- Attempt to clinically distinguish upper and lower GI bleeding

Attitudes

- Liaise with seniors and surgical team when appropriate
- Recognize role of IBD nurse when patient with known IBD present

Skin and Mouth Ulcers

The trainee will be able to assess a patient presenting with skin or mouth ulceration to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- List the common and serious causes of skin (especially leg) or mouth ulceration
- Outline the classification of skin ulcers by cause
- Outline the patho-physiology, investigation and management principles of diabetic ulcers
- Recognize association between mouth ulceration and immune-bullous disease

Skills

- Recognize likely skin and oral malignancy
- Recognize life threatening skin rashes presenting with ulcers, commence treatment and involve senior
- Assess and formulate immediate management plan for diabetic foot ulceration
- Order, interpret and act on initial investigations appropriately

Attitudes

- Recognize the importance of prevention of pressure ulcers and diabetic ulcers

- Participate in multi-disciplinary team: nurse specialists, podiatrist

Speech Disturbance

The trainee will be able to assess a patient with speech disturbance to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Define and recall causes for dysphonia, dysarthria and dysphasia
- Recall the neuro-anatomy relevant to speech and language
- Differentiate between receptive and expressive dysphasia

Skills

- Take a history from a patient with speech disturbance
- Examine patient to define nature of speech disturbance and elicit other focal signs
- List differential diagnoses following assessment
- Order, interpret and act on initial investigations appropriately

Attitudes

- Recognize the role of speech and language therapy input
- Recognize the relationship between dysarthria and swallowing difficulties and advise patients and carers accordingly
- Involve stroke team or neurology promptly as appropriate

Swallowing Difficulties

The trainee will be able to assess a patient with swallowing difficulties to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the physiology of swallowing
- Recall the causes of swallowing problems
- Differentiate between neurological and GI causes
- Recall investigative options: contrast studies, endoscopy, manometry,
- Awareness of treatment options for oesophageal malignancy
- Awareness of the treatment of oesophageal strictures

Skills

- Elicit history, detecting associations that indicate a cause: weight loss, aspiration, heartburn
- Examine a patient to elicit signs of neurological disease and malignancy .be able to evaluate whether patient is safe to eat or drink by mouth

Attitudes

- Recognize importance of multi-disciplinary approach to management

Syncope & Pre-syncope

The trainee will be able to assess a patient presenting with syncope to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Define syncope
- Recall causes of syncope
- Outline the patho-physiology of syncope depending on situation (vasovagal, cough, effort, micturition, carotid sinus hypersensitivity)
- Differentiate from other causes of collapse in terms of associated symptoms and signs and eye witness reports
- Outline the indications for hospital admission
- Outline the indications for cardiac monitoring
- Define the recommendations concerning fitness to drive

Skills

- Take thorough history from patient and witness to elucidate episode
- Differentiate pre-syncope from other causes of 'dizziness'
- Assess patient in terms of ABC and degree of consciousness and manage appropriately
- Perform examination to elicit signs of cardiovascular disease
- Order, interpret and act on initial investigations appropriately: blood tests ECG

Attitudes

- Recognize impact episodes can have on lifestyle particularly in the elderly
- Recognize recommendations regarding fitness to drive in relation to syncope

Unsteadiness / Balance Disturbance

The trainee will be able to assess a patient presenting with unsteadiness or a disturbance of balance to produce a valid list of differential diagnoses, investigate appropriately, formulate and implement a management plan

Knowledge

- Outline the neuro-anatomy and physiology relevant to balance, coordination and movement
- Define and differentiate types of vertigo and list causes
- Define and differentiate sensory and cerebellar ataxia and list causes
- Recognize the importance of environmental hazards
- Recognize the psychosocial aspects of care for the patient
- List the potential drugs or drug interactions contributing to unsteadiness

Skills

- Take history from patient and attempt to define complaint as either pre-syncope, vertigo or unsteadiness
- Perform full physical examination to elicit signs of neurological, inner ear or cardiovascular disease including orthostatic hypotension
- Elucidate signs of vitamin deficiency
- Describe an abnormal gait accurately
- Recognize drug toxicity, intoxication and recreational drug abuse
- Initiate basic investigations and urgent treatment including vitamin supplementation
- Withdraw potentially causative drugs

Attitudes

- Recognize the importance of multi-disciplinary approach: physiotherapy , OT

Visual Disturbance (diplopia, visual field deficit, reduced acuity)

To assess the patient presenting with a visual disturbance to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Broadly recall the basic anatomy and physiology of the eye and the visual pathways
- Recall the different types of visual field defect and list common causes
- Define diplopia and recall common causes
- Recall common causes for reduced visual acuity
- Recall implications for driving of visual field loss

Skills

- Perform full examination including acuity, eye movements, visual fields, fundoscopy, related cranial nerves and structures of head &neck
- Formulate differential diagnosis
- Order, interpret and act on initial investigations appropriately

Attitudes

- In case of acute visual loss recognise early requirement for review by Ophthalmology team
- Recognize rapidly progressive symptoms and consult senior promptly
- Recognize anxiety acute visual symptoms invoke in patients

Weight Loss

The trainee will be able to assess a patient presenting with unintentional weight loss to produce a valid differential diagnosis, investigate appropriately, formulate and implement a management plan

Knowledge

- Recall the common causes for weight loss (in terms of psychosocial, neoplasia, gastroenterological etc)
- Recall the indications and complications for nutritional supplements, and enteral feeding including PEG/NG feeding

Skills

- Take a valid history highlighting any risk factors for specific disorders presenting with weight loss, and a thorough social history
- Examine fully to elucidate signs of disorders presenting with weight loss, and assess degree of malnutrition
- Order, interpret and act on initial screening investigations
- Initiate nutritional measures including enteral preparations when appropriate
- Pass a fine bore NG feeding tube and ensure correct positioning

Attitudes

- Recognize multi-factorial aspect of weight loss, especially in the elderly
- Liaise with nutritional services appropriately

Head Injury

The trainee will able to assess a patient with traumatic head injury, stabilize, admit to hospital as necessary and liaise with appropriate colleagues, recognizing local and national guidelines

Knowledge

- Recall the patho-physiology of concussion
- Outline symptoms that may be present
- Recall the Glasgow Coma Scale (GCS)
- Outline the indications for hospital admission following head injury
- Outline the indications for urgent head CT scan as per national guidelines
- Recall short term complications of head injury

Skills

- Instigate initial management: ABC, cervical spine protection
- Assess and classify patient in terms of GCS and its derivative components (E,V,M)
- Take a focused history and a full examination to elicit signs of head injury and focal neurological deficit
- Manage short term complications, with senior assistance if required:seizures, airway compromise
- Advise nurses on appropriate frequency and nature of observations

Attitudes

- Recognize advice provided by national guidelines on head injury
- Ask for senior and anaesthetic support promptly in event of decreased consciousness
- Involve neurosurgical team promptly in event of CT scan showing structural lesion
- Recommend indications for repeat medical assessment in event of discharge of patient from hospital
- Participate in safe transfer procedures if referred to tertiary care

ANNEX 9. Training Portfolio

The trainee should maintain a Training and Assessment Portfolio to document and reflect on his / her training experience and identify and correct any weaknesses in the competencies expected of him, and also recognize and analyze any significant clinical events experienced, so that appropriate changes in management could be adopted in order to reduce the risks arising from such situations in the future. The Portfolio should be maintained during the Post MD training programme up to Board Certification. The supervisors/Trainers are expected to review the candidate's progress at regular intervals. It is the responsibility of the trainee to obtain the signatures of the trainers after these reviews, and submit the Training Portfolio for evaluation by the BOS prior to Board Certification.

Training Portfolio: During Post MD training programme

Objectives

To be appointed as a Specialist in Family Medicine to practice independently in Sri Lanka, on completion of the in-service training before and after the MD (Family Medicine) Examination, the Trainee should:

a) have administrative and organizational skills
b) be able to clearly document and prioritize problems
c) have skills appropriate to a specialist (diagnostic, counseling, risk management, management of medico-legal issues)
d) have appropriate attitudes
e) be able to carry out and also supervise research and clinical audits
f) be committed to Continuous Professional Development
g) be able to disseminate knowledge effectively
h) have adequate knowledge of the English Language and be able to communicate effectively
i) have adequate knowledge and skills in Information Technology

The main content areas of the Training Portfolio shall include the following, authenticated by the Supervisor/Trainer:

Components

- Log of Clinical activities (minimum number and skill level of procedures which should be carried out given)
- Reflective Practice (on significant clinical events experienced by the trainee
- Research and Audit
- Information Technology
- Ethics and Medico-legal Issues
- Professional Development
- Record of attendance at essential courses
- Record of experience obtained in tutorials, journal clubs, Clinico-pathological Conferences and audits
- Self-assessment of the Training/ Acquisition of clinical experience by the Trainee
- Assessment of the Trainee's progress by the Educational supervisor

These assessments should include:
Mini Clinical Evaluation Exercises
Case-Based Discussions
Objective Structured Assessments of Technical Skills
Peer Team Ratings

ANNEX 10. Portfolio Evaluation

Adequate training by attendance at GP attachment
Adequate training by attendance at University appointments
Adequate training by attendance at Hospital appointments

Case write up – covers PC morbidity spectrum on the whole
Case write up – covers common chronic diseases
Case write up – shows symptom evaluation
Case write up – shows spectrum of primary care therapeutics
Case write up – shows the primary care clinical evaluation methods

Audit – purpose specified
Audit – criterion standard specified
Audit – performance standard specified
Audit – sampling, statistics, and design specified
Audit – results – analysis, presentation, and discussion
Audit – changes to be implemented

CME – evidence for reading peer reviewed FM journals
CME – attendance at FM seminars, workshops, scientific sessions
CME – certificates of CME credits earned
CME – membership of FM/PC organization
CME – delivery of lectures, presentations, conducting discussion, seminars

ANNEX 11. Format for post-MD progress reports - Local training

MD IN FAMILY MEDICINE

Format for Post-MD progress reports

(To be submitted by Supervisor to Director PGIM at six months and 12 months)

1. Name of trainee
2. Name of supervisor
3. Training institution and unit
4. Period covered by progress report: …….. (dd/mm/yy) to …… (dd/mm/yy)
5. Description of work carried out by trainee in training institution
    a. Course work
    b. Teaching activities
    c. Research projects
    d. Any other
6. Any work carried out away from main training institution?
7. Meetings / conferences / seminars attended by trainee
8. Any publications / presentations by trainee
9. Interaction with colleagues and other staff
10. Overall progress
    a. General comments
    b. Summary:
    Highly satisfactory / satisfactory / unsatisfactory / very unsatisfactory

Signature of supervisor

Date

ANNEX 12. Format for Post MD Progress Reports – Overseas Training

NAME OF TRAINEE:
PERIOD OF TRAINING: **SPECIALTY:**
Clinic /HOSPITAL: **COUNTRY:**
NAME OF THE CONSULTANT:

	Excellent	**Good**	**Average**	**Poor**
Theoretical knowledge				
Participation in Educational Activities (Seminars/ workshops/ Journal club/ Clinical meetings)				
Research interest				
Clinical decision making				
Clinical skills				
Ability to cope with emergencies & Complications				
Ability to identify early referrals / Seek appropriate consultations				
Thinks independently & rationally				
Ability to follow instructions				
Quality of documentation				
Dedication to work				
Professional attitudes				
Reliability				
Availability/punctuality				
Communication skills				
Doctor-patient relationship				
Relationship with colleagues				
Relationship with other staff				

Other Comments:

ANNEX 13. Peer Team Rating for Assessment of MD Family Medicine Trainees

PTR Form of PGIM ***Confidential***

PGIM

PGIM PTR ASSESSMENT OF REGISTRARS/ SENIOR REGISTRARS

(This form is also available in Sinhala and Tamil)

Name of the Trainee **Specialty** **Year training**

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6

Name of Rater

(You can remain Anonymous)

We are very grateful for your independent and honest rating of our trainees.

Please indicate your profession by filling in one of the following circles

○ Consultant	○ Registrars	○ SHO or HO	○ Other Specify
○ Allied Health Professional	○ SR	○ Clerical or Secretarial Staff	……

Please mark one of the circles for each component of the exercise on a scale of 1 (extremely poor) to 9 (extremely good). A score of 1-3 is considered unsatisfactory, 4-6 satisfactory and 7-9 is considered above that expected, for a trainee at the same stage of training and level of experience. Please note that your scoring should reflect the performance of the trainee against that which you would reasonably expect at their stage of training and level of experience. You must justify each score of 1-3 with at least one explanation/example in the comments box, failure to do will invalidate the assessment. Please feel free to add any other relevant opinions about this doctor's strengths and weaknesses.

THE PTR IS NOT AN ASSESSMENT OF KNOWLEDGE OR PRACTICAL SKILLS

1. **Attitude to staff: Respects and values contributions of other members of the team**

○ Don't know	○ 1 ○ 2 ○ 3	○ 4 ○ 5 ○ 6	○ 7 ○ 8 ○ 9
	UNSATISFACTORY	SATISFACTORY	ABOVE EXPECTED

2. **Attitude to patients; Respects the rights, choices, beliefs and confidentiality of patients**

○ Don't know	○ 1 ○ 2 ○ 3	○ 4 ○ 5 ○ 6	○ 7 ○ 8 ○ 9
	UNSATISFACTORY	SATISFACTORY	ABOVE EXPECTED

3. **Reliability and punctuality**

○ Don't know	○ 1 ○ 2 ○ 3	○ 4 ○ 5 ○ 6	○ 7 ○ 8 ○ 9
	UNSATISFACTORY	SATISFACTORY	ABOVE EXPECTED

4. Communication skills: communicates effectively with patients and families

○ Don't know ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9

UNSATISFACTORY SATISFACTORY ABOVE EXPECTED

5. Communication skills: communicates effectively with healthcare professionals

○ Don't know ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9

UNSATISFACTORY SATISFACTORY ABOVE EXPECTED

6. Honesty and Integrity, do you have any concerns? ○ **Yes** ○ **No**

7. Team player skills: Supportive and accepts appropriate responsibility; Approachable

○ Don't know ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9

UNSATISFACTORY SATISFACTORY ABOVE EXPECTED

8. Leadership skills: Takes responsibility for own actions and actions of the team

○ Don't know ○ **1** ○ **2** ○ **3** ○ **4** ○ **5** ○ **6** ○ **7** ○ **8** ○ **9**

UNSATISFACTORY SATISFACTORY ABOVE EXPECTED

9. OVERALL PROFESSIONAL COMPETENCE

○ Don't know ○ **1** ○ **2** ○ **3** ○ **4** ○ **5** ○ **6** ○ **7** ○ **8** ○ **9**

UNSATISFACTORY SATISFACTORY ABOVE EXPECTED

Comments about the trainee (BLOCK CAPITALS PLEASE) – Write in English/ Sinhala/ Tamil

Your Signature: (You can remain Anonymous) **Date:** | | | | | | | | |

Please return to the supervising consultant

DO <u>NOT return to the Registrar or Senior Registrar</u>.

To supervising Consultant – Please use this information to give a feedback/counsel the trainee and return this form to Director PGIM under confidential cover.

ANNEX 14. Roles and Responsibilities of a Trainer

The roles and responsibilities of a trainer are multiple:

A. MD trainer
B. Academic Appraiser
C. Supervisor of a research project
D. Reviewer/assessor of a research project
E. Supervisor of the Training Portfolio
F. Role model
G. Examiner

A. <u>As a MD trainer,</u> he/she should

1. Be involved in teaching and ensure trainees learn on the job.
2. Allocate time for trainees to discuss academic as well as personal issues.
3. In instances of unsatisfactory behavior, attitude or problems of the trainee, first warn the trainee and if the situation persists, inform the academic appraiser of the trainee to sort out the problem at grass root level. As a last resort, inform the Director PGIM and The Board of Study so that remedial action can be taken. Communications on such issues should be copied to the trainee's academic appraiser.
4. consult the Board of Study and inform the academic appraiser of the trainee, if a trainee is required to repeat any duration of a clinical appointment or any other appointment.
5. send progress reports to the BOS , every six months.
6. supervise the leave arrangements of trainees. (Warn the trainees if in excess and remind them that leave is not a right but a privilege, but give their due)
7. encourage trainees to participate in continuing medical and professional development activities such as time to visit the library, participate in other clinical meetings, work shops, critical appraisal of journal articles etc.
8. encourage presentations by the trainees in clinical meetings, CPD activities etc.
9. conduct workplace based assessments – DOPS and Mini Clinicals as indicated in the portfolio guidelines.
10. inform the BOS if more than 2 weeks of leave is to be taken by you.
11. arrange for cover up of leave for training purposes (since this may be different from work cover up)
12. inform the BOS and give adequate time for the trainee to be moved to another training site if more than 1 month leave is to be taken, since off site cover is not acceptable in such a situation.
13. handover the required letters of release/ attest to the satisfactory completion of portfolio of the trainees on completion of an appointment by the trainee (it might be difficult for them to come later)
14. give constructive feedback continuously, which will help the trainees to improve both academically and professionally. Feedback on negative aspects of a trainee should be dealt with in a confidential manner.
15. provide a pleasant and disciplined environment in your laboratory for the trainee to work.

B. <u>As an academic appraiser</u>, the trainer should

1. have regular meetings with the trainees.

2. be accessible to the trainee and give your contact number and convenient times for meetings.
3. develop an approachable, friendly relationship so that trainees are not hesitant to contact you in times of need.
4. supervise the entries and ensure regular updates of your appraisee's portfolio.

C. <u>As a supervisor of a research project</u>, the trainer should

1. be realistic and ensure the trainee gets hands on experience to do research on his or her own.
2. not have too many goals which will burden the trainee who will find it difficult to finish the project within 4 months.
3. make sure that trainees submit duly filled forms and suggest the name of a reviewer to review the project proposal.
4. assist and advice trainees regarding obtaining funds in time for project commencement.
5. correct the trainee's presentation and writing (including spelling and grammar) before it is presented or sent to the reviewer or submitted for evaluation.
6. encourage them to publish or present in national and international scientific sessions.

D. <u>As a reviewer and assessor of a research project dissertation</u>, the trainer should

1. review the work done in the Sri Lankan context.
2. write a detailed report including the corrections and changes that a trainee has to attend to .
3. complete the review within the allocated time, otherwise trainees will face difficulties in attending to the corrections
4. remember that a delay in submission of your assessor report will delay the procedure of sending all the dissertations to the foreign examiner by the PGIM.

E. <u>As a role model</u> the trainer should

1. be exemplary in your dealings with colleagues of other disciplines and all personnel in the health care team.
2. always be punctual
3. be sympathetic to the trainees appreciating that they too have problems.
4. avoid criticizing other trainers and training sites.

F. **<u>As an examiner</u> the trainer should** read and abide by the guidelines of the PGIM document.

ANNEX 15. Reading Materials: Books And Journals

Learning Resources MD Examination

There are several books, journals and websites available. A few examples are listed below.

Books

1. The 10 – minute Clinical Assessment – Author: Knut Schroeder
2. Symptom Sorter, 4th Edition - Author: K. Hopcroft and V. Forte
3. ABC of Ear, Nose and Throat - Author: H. Ludman and P. Bradley
4. ABC of Palliative Care - Author: M. Fallon and G. Hanks
5. Care of Children and Young People - Author: Kay Mohanna
6. Psychiatry in Primary Care, 4th Edition – Author: Patricia Casey and Richard Byng
7. Primary Child and Adolescent Mental Health (Box Set of all 3 volumes) – Author: Q. Spender, J. Barnsley, A. Davies and J. Murphy
8. A Career Companion to Becoming a GP: Developing and Shaping Your Career Author: Patrick Hutt and Sophie Park
9. CSA Scenario for the MRCGP, 2nd Edition – Author: Thomas Das
10. Injection Techniques in Musculoskeletal Medicine, 4th Edition Author: S. Saunders and S. Long worth
11. John Murtagh's Patient Education – 5th Edition – Author: McGraw Hill, 2008
12. Diagnosis and Risk Management in Primary Care – Author: Wilfrid Treasure
13. Management Essentials for Doctors – Author: R. Shaw, V. Ramachandra, N. Lucas and N. Robinson
14. ENT in Primary Care – Author: Robb and Watson
15. Clinical Audit in Primary Care – Author: Ruth Chambers
16. General Practice : Clinical Cases Uncovered – Author: Storr
17. MRCGP Practice Cases : Clinical Skills Assessment, 2nd Edition – Author: Raj Thakkar
18. Consultation Skills for the New MRCGP : Practice Cases for CSA and COT 1 Author: Prashini Naidoo
19. Making Your Practice Evidence – Based – Author: Kevok Hopayian
20. The Patient- Doctor Consultation in Primary Care – Author: J. Thistlethwaite and P. Morris
21. British Journal of General Practice GBP – 325.00
22. American Family Physician – USD – 362.00
23. General Practice Psychiatry – Author : Blashki, Judd, Piterman
24. Clinical Cases for General Practice Exams – Author : Wearne
25. Computing and Information Management in General Practice – Author: Schattner
26. Fitzpatricals Colour Atlas and Synopsis of Clinical Dermatology SMED Author: Wolff, Johnson, Suurmond
27. Clinical Cases in Obstetrics, Gynecology & Women's Health – Author: Costa, Howat
28. Surface Microscopy of Pigmented Lesions – Dermoscopy 2nd Edition Author: Mezies, Crotty, Ingvar, Mccarthy
29. Murtagh's General Practice Companion Hand Book – Author: Murtagh
30. Essentials Family Medicine : Fundamentals & Cases – Author: Robert E. Rakel
31. Murtagh's General Practice by John Murtagh
32. Murtagh's Patient Education – 5th Edition
33. Current Medical Diagnosis & Treatment 2010- Author: Stephan J. Macphee, Maxine A. Papadikis, Lawrance M. Tuirney, JR

34. Text Book of Primary Care Medicine by John Noble
35. A Text Book of General Practice by Anne Stephanson
36. Treating People with Anxiety an Stress (A Practical Guide for Primary Care)
37. Clinical Method a General Practice Approach (Fraser) – 3rd Edition
38. Churchill's Pocket Book of General Practice
39. A guide to Clinical Skills Assessment
40. Skills for Communicating with Patients – Author: Silverman
41. Consulting: Communication Skills for GP's in Training – Author: Martyn Hull
42. Lecture Notes in Family Medicine – Author: Nandani de Silva
43. Oxford Hand Book of General Practice
44. Fundamentals of Primary Care Prescribing – Author: Crichton
45. The Doctor's Communication Handbook – Author: Tate
46. Patient – Centered medicine: Transforming the Clinical Method – Author: Stewart
47. Resilient Clinicians – Author: Murtagh
48. Geriatric at Your Fingertips
49. Continuing Care – The Management of Chronic Disease – Author: HasterJ, Schchofied T.
50. The Evidence Based Primary Care Hand Book – Author: Mark Gubbay
51. Family Medicine: A Guide Book for Practitioners of the Art – Author: David B. Shires
52. Problem Solving In General Practice – Author: John Mantagh AM
53. Patient Presentations In General Practice – Author: Ian Steven
54. Primary Care for Older People – Author: Sterre Illif, Vari Drenonan
55. Introduction to Medical Statistics (3rd / latest edition) M Bland
56. Introduction to Research Methodology for Specialists and Trainees(latest edition)
57. –Edited by P M Shaughn O'Brien and Fiona Broughton Pipkin (RCOG Press)
58. ABC of Psychological Medicine - By Mayou, Sharpe and Carson, BMJ Books
59. Good practice guidelines for general practice electronic patient records (version 3.1)
    Prepared by The Joint General Practice Information Technology Committee of the General Practitioners Committee and the Royal College of General Practitioners
60. Stuart MR, Lieberman JA. The Fifteen Minute Hour: Practical Therapeutic Interventions
    in Primary Care. 3rd ed. Philadelphia, Pa.: Saunders, 2002.
61. Koopman WJ, Moreland LW. Arthritis and Allied Conditions: A Textbook of
    Rheumatology 15th ed. Philadelphia, Pa.: Lippincott Williams & Wilkins, 2005.

Journals

1. Journal of the Royal College of General Practitioners
2. British Medical J
3. Ceylon Medical J

Other Publications

Educational Bulletins CGP /IMPA

Important Web Sites

www.ncbi.nlm.nih.gov
www.who.int/rhl
www.nice.org.uk
www.cochrane.org
www.nejm.org
www.bmj.com
National Arthritis Foundation
http://www.arthritis.org
The Centers for Disease Control and Prevention
http://www.cdc.gov/arthritis
California HealthCare Foundation
American College of Rheumatology
http://www.rheumatology.org