

“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”

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**POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO, SRI LANKA**



PROSPECTUS

**DOCTOR OF MEDICINE (MD)
AND
BOARD CERTIFICATION
IN
FAMILY MEDICINE
BY
CLINICAL TRAINING AND EXAMINATION**

2013

**BOARD OF STUDY IN FAMILY MEDICINE AND GENERAL
PRACTICE**

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PROSPECTUS
DOCTOR OF MEDICINE (MD) AND BOARD CERTIFICATION IN
FAMILY MEDICINE

1. DESCRIPTION AND NOMENCLATURE OF THE DEGREE PROGRAMME

- 1.1. Name of the degree programme - MD in Family Medicine
- 1.2. Full title –Board Certification in Family Medicine
- 1.3. University – University of Colombo, Sri Lanka
- 1.4. Faculties and institutes – Postgraduate Institute of Medicine (PGIM) of the University of Colombo
- 1.5. Departments, external resources and associated agencies – Board of Study in Family Medicine and General Practice (BOS), other Boards of Study, Ministry of Health, and other academic bodies / institutions approved by the PGIM

2. INTRODUCTION

This Postgraduate in-service training programme (Stages 1, 2, 3) of the Postgraduate Institute of Medicine of the University of Colombo will lead to the degree of MD (Family Medicine) to be awarded by the University of Colombo.

The successful completion of post MD (Family Medicine) training programme will entitle the trainee to be eligible for Certification by Board of Management on the recommendation of Board of Study as a Specialist in Family Medicine.

The main objective of the MD Family Medicine training programme shall be to ensure that the trainee gains adequate knowledge, clinical acumen, procedural skills, communicative skills and attitudes which will enable the candidate to manage problems encountered in family/general practice. This course is also structured to provide utilizable attributes for trainees vis-à-vis acquiring knowledge, skills, and attitudes necessary in the management of patients in outpatient units and / or primary care units of state and non-state hospitals. The trainee should also acquire the professional skills to be an effective leader and a manager of an institution delivering primary care and organization of its services. The trainee will also need to be able to design and conduct audits and research projects, critically appraise research publications and be committed to the practice of evidence based medicine and continuing professional development. The trainee will also be exposed to important areas in professionalism and moral and ethical conduct.

3. RATIONALE FOR PROPOSED CHANGES

In the recent past new changes to postgraduate training has been introduced locally and globally to improve the quality of the postgraduate training and assessments with the objective of producing a specialist to fulfill the expectations of the Higher Education Ministry and patients. To achieve this, the University Grants Commission and the PGIM has introduced guidelines and recommendations. The external examiners who participated in postgraduate examinations in the PGIM have also recommended amendments to the existing prospectus to enhance the quality and standards of the training program in order to meet the new challenges in the field of postgraduate education. These include changes to the assessment instruments and introduction of in-course assessments, a portfolio viva,

structured progress reports, Peer Team Ratings (PTR) and a Pre Board Certification Assessment (PBCA). The rationale to the proposed amendments is to incorporate all the above recommendations into the new prospectus.

4. ELIGIBILITY CRITERIA FOR ENTRY

To be eligible to sit for the Selection Examination and to be selected for admission, a candidate should fulfill all of the following criteria:

- i. Hold a medical degree registered with the Sri Lanka Medical Council
- ii. Complete an internship recognized by the Sri Lanka Medical Council
- iii. Complete one year work experience in Sri Lanka, after internship
- iv. Have passed the Diploma in Family Medicine examination
- v. Produce a medical certificate from a specialist physician, to confirm general mental and physical fitness
- vi. Comply with PGIM rules and regulations

Those who fulfill the above criteria should be successful at the selection examination in order to enter the in-service training programme.

5. NUMBER TO BE ADMITTED

The number to be admitted to the MD training programme from the candidates who pass the Selection Examination will depend on the training facilities available, the requirements of the Ministry of Health and the vacancies allocated for general practitioners (Definition of general practitioner –[annex 1](#)), as determined by the Board of Study in Family Medicine and General Practice(BoS). The number to be admitted each year will be indicated in the PGIM circular/news paper advertisement calling for applications. The number may vary from year to year.

6. THE SELECTION EXAMINATION

This examination conducted by the PGIM is designed to test basic knowledge in Family Medicine related topics. The number of attempts a candidate could sit the selection examination is unlimited. The examiners will be appointed by the Board of Management of the PGIM on the recommendation of the BoS in Family Medicine.

6.1. Components and Marking Scheme of the Selection Examination

C1. MCQ Paper: 260 marks.

This will consist of 40 true / false type and 20 single best answer type (SBA), to be answered in three hours.

In true/false type, each correct response shall score +1, wrong response –1 and if not attempted 0. The range of marking for MCQ will be 0-5 and there shall be negative marking within the question and not carried forward.

In SBA, correct answer will carry 3 marks and there shall be no negative marking.

Total mark for the MCQ paper will be out of 260.

Candidates who obtain a mark of 130 (50%) or more for the MCQ paper will be allowed to proceed to the written paper.

C2. Written Paper: 200 marks

There shall be one essay type question three structured type questions (Total time for the written paper shall be two hours). Each question shall be marked out of 50. **All questions will be on topics related to the discipline of family medicine.**

To pass the selection examination the candidate should score 60% or more of the total aggregate (276 or more out of 460) **and** 50% or more for the MCQ paper (130 out of 260) **and** 50% or more for the Theory Paper (100 out of 200).

7. STAGES AND DURATION OF THE TRAINING PROGRAMME

Pre MD (Stage 1) – 16 months: Training in practices of General Practitioners (GP) approved by the Board of Study, which would include:

- a) GP rotation: Eight months in general / family practice (a minimum period of two months in a particular practice).
- b) University units: Eight months in university family practice centers (a minimum period of two months in each centre).

GP rotation: This will consist of eight months of training during which the trainees will be appointed to accredited GP training units. The BoS in Family Medicine will allocate the training units. There will be four rotations of two months duration each under four different GP trainers subject to satisfactory continuous assessments by the trainers.

University units: This will consist of eight months of training during which the trainees will be appointed to accredited training units in University family medicine departments. The BOS will allocate the training units. There will be four rotations of two months duration subject to satisfactory continuous assessments by the trainers.

Pre MD (Stage 2) - 18 months: Training in hospitals / specialty clinics approved by the Board of Study.

This will be hospital based clinical training. The training period shall be a total of eighteen months in Sri Lanka, subject to satisfactory continuous assessments by the trainers.

During the stages 1 and 2 of the training period the trainee shall maintain the Training and Assessment Portfolio (**Annex 13**) to document and reflect on her/his training experience and identify and correct any weaknesses in the competencies expected of her/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 completed portfolio should be handed over to the PGIM three months before the closing date of applications for the MD examination.

The candidate should demonstrate 80% attendance in each segment of clinical training viz. Pre MD stages 1 and 2.

Pre MD (Stage 3) – One month

This stage shall be of one month duration and involves presentation of the dissertation. Trainees should start preparing the dissertation during pre MD Stages 1 and 2 and submit the completed dissertation to the PGIM by the end of stage 3 the latest.

Post MD (Stage 4): Twelve months

The completion of one year period of supervised training at an accredited centre in Sri Lanka approved by the BoS.

Post MD (Stage 5): Twelve months

The completion of one year period of supervised training at an accredited centre in Sri Lanka or overseas approved by the BoS.

8. TRAINING UNITS AND EDUCATIONAL RESOURCES

8.1. Training Units

- Training Units approved by Board of Study in Family Medicine and General Practice (definition of a trainer/ Training unit – **Annex 2**)
- Hospital Training Units. Eg: Ministry of Health and/ or Private Hospitals
- Diagnostic Laboratories. Eg: Haematology Lab, Blood Bank
- Skills Laboratories. Eg: Colombo, Peradeniya, Ruhuna and USJP Skills Laboratories
- IT Laboratories. Eg: PGIM IT Lab, computer science departments in other universities
- Libraries. Eg: PGIM, SLMA, University and hospital libraries

8.2. GP training Units

Board of Study in Family Medicine and General Practice will allocate the training units for appointments.

Current accredited GP Training Units will be made available at the allocation committee meeting. The BoS in Family Medicine shall accredit other GP training units from time to time.

8.3. University training units and Training objectives

Board of Study in Family Medicine and General Practice will allocate the trainer and respective training units for appointments.

Current approved University Training Units **Annex 3** .The BoS in Family medicine will approve other training units from time to time.

Trainees will be required to maintain a record of all clinical rotations as a section of the portfolio and duly endorsed by the consultant after each rotation.

Training objectives during GP and University rotations: **Annex 4**

8.4. Training in Hospital specialties / subspecialties and Training objectives

a) Hospital Rotations –Annex 5.1 – 5.27

Hospitals and specialty clinics approved for training will be notified at the commencement of the training programme.

9. TRAINING INSTRUMENTS AND CALCULATION OF CREDITS

Training instruments are

- Clinical training in wards/clinics/GP centres
- Lectures (topics are given in Annex 6)
- Tutorials (topics are given in Annex 7)
- Workshops (topics are given in Annex 8)
- Research Project and Presentation of a Dissertation (Annex 15.1, Annex 15.2 and Annex 20)
- Training Portfolio (Annex 13 and Annex 23)

Details of the allocation of credits for the training program are given in table 1

Table 1. Calculation of Credits for the MD programme

Training component	Credits
A. Pre MD GP clinical training [24 hours per week x 32 weeks] 45 hours = 1 credit	17
B. Pre MD university clinical training [24 hours per week x 32 weeks] 45 hours = 1 credit	17
C. Pre MD hospital training[36 hours per week x 72 weeks] 45 hours = 1 credit	57
D. Dissertation and Portfolio	5
E. Tutorials (16x2hours= 32hours) 30 hours = 1 credit	1
F. Lectures (75 x2 hour lecture= 150 hours) 15 hours = 1 credit	10
G. Workshops/Study days (11x 3 hours=33 hours) 30 hours = 1 credit	1
Total	108

10. CURRICULUM AND COURSE CONTENT – MD PROGRAMME

The curriculum described in this section is the framework document for systematic training in Family Medicine. The overall objective is to ensure that the trainee gains adequate knowledge, clinical acumen, procedural skills, communicative skills and attitudes which will enable him/her to practice as a specialist in Family Medicine.

10.1. The curriculum shall include modules listed below:

- Clinical Skills
- Teaching, Appraisal and Assessment
- Information Technology, Clinical Governance and Research
- Ethics and Legal Issues
- Developing Professionalism
- Risk Management
- Clinical Audit

- Minor Surgical Skills
- Primary care
- Comprehensive care
- Continuity of care
- Coordination of care
- Bio-psychosocial evaluations
- Emotional and behavioral dysfunctions
- Medical informatics
- Practice management
- Common symptoms in primary care
- Common syndromes seen in primary care
- Common chronic diseases seen in primary care
- Exercise and physiotherapy
- Medical nutrition therapy
- Counseling
- Psychotherapy and cognitive behavioral therapy
- Primary care therapeutic techniques
- National ,regional and global health policies and health economics
- Health statistics and its applications

Details of modules:

Core curriculum 1- Essentials in practice of Family Medicine- **Annex 9.1**

Core curriculum 2- Skills – **Annex 9.2**

Core curriculum 3- Symptom evaluation-**Annex 9.3**

10.2. Specific outcomes

At the end of the training the trainee should have:

- 10.2.1. Adequate knowledge in the principles and practice of family medicine;
- 10.2.2. By the application of the above knowledge, developed skills in the diagnosis and management of pathological states presenting in the practice of family medicine;
- 10.2.3. Developed correct attitudes for good clinical practice;
- 10.2.4. Developed the skills required to conduct audits and scientific research, with a view to contributing to the scientific knowledge in this field and participating in the task of improving the family practice services in the community;
- 10.2.5. Developed the skills required to be a medical teacher / resource person in order to impart medical education to medical personnel and the public;
- 10.2.6. Gained experience to make clinical decisions pertaining to management, undertake undergraduate and postgraduate training and be able to participate and supervise clinical audit and research, and be equipped with knowledge on current developments and advances in the specialty;
- 10.2.7. Skills to critically appraise research publications and practice evidence based medicine;
- 10.2.8. The ability to maintain the highest standards of professionalism, and moral and ethical conduct;
- 10.2.9. The commitment to continuing professional development.

11. MONITORING / EVALUATION PROCESS

- 11.1. The Progress reports should be submitted directly to the PGIM by the respective GP/ University trainers within one week after each rotation (**Annex 10**).
- 11.2. Hospital training/Specialty clinic component (stage 2) will not require progress reports. The trainees should maintain the portfolio with regular entries.
- 11.3. The Progress reports during post MD training (Stage 4 and 5) should be sent by the trainer every six months (**Annex 10, Annex 11**).
- 11.4. The PTR forms (**Annex 12**) to be submitted only during the GP and University rotations once after each rotation. 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.

11.5. Continuous Assessments

11.5.1. GP/University Assessment

At the end of each GP / University rotation trainer will make an assessment and give a rating based on the given format. The portfolio maintained by the trainee shall be used as a guide during these assessments. Continuous assessment format- **Annex 22**

11.5.2. Training Portfolio

The Portfolio should be started from entry to the training programme up to Board Certification (Stage 1 to 5).

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 at the end of stage 1 and stage 2 during the pre MD training period and also at the Pre Board Certification Assessment for evaluation of his/her competence to practice independently as a Specialist in Family Medicine .

The details of the Portfolio are given in **Annex 13 section I (Pre MD) and Section II (Post MD)**. The main content areas of the Portfolio have to be authenticated by the supervisor/trainer. The candidates shall submit the completed and signed Pre MD portfolio to the PGIM three months before the closing date of the applications for the MD examination.

11.5.3. Research Project Leading To a Dissertation

The objective of this exercise is to expose the trainee to research methodology and writing. The work should be original. In the research project the trainee should demonstrate his ability to identify a problem,

conduct a literature search, design and conduct a study, collect and manage data, carry out appropriate statistical analyses and present the results, and prepare a dissertation with rational conclusions after a discussion.

The Research Proposal for the Dissertation should be on a topic relevant to family medicine and should be submitted to the BoS for approval within six weeks following commencement of the Stage 1 of training component. This has to be prepared as described in **Annex 15.1** and then **Annex 15.2**. The proposal will be assessed by a reviewer as described in **Annex 16**. A supervisor (as much as possible should be one of the trainers) will be appointed by the BoS to assist the trainee. The instructions to the supervisor are described in **Annex 17** and the supervisor should sign the form in **Annex 18** and accept the appointment. The supervisor should submit progress reports as described in **Annex 19**. The completed Dissertation should be at least 8000-10000 words with 20 or more recent references (format described in **Annex 20**). Dissertation should be submitted to the PGIM at least three months before the closing date of applications for the MD Examination. The acceptance and receiving a “Pass Grade” is a prerequisite to be eligible to sit the MD Examination. The dissertation marking scheme is given in **Annex 21**

12. ASSESSMENT PROCEDURE

12.1. Continuous Assessments (In-Course)

The trainees should obtain a pass grade in all components of the in-course assessments to be eligible to sit the MD examination.

C1. Four GP rotations = Pass grade

C2. Four University rotations = Pass grade

C3. Portfolio Clinical Assessments(At the end of stage 1 and stage 2)= Pass grade

C4. Dissertation = Pass grade

C1 and C2 Pass grade –to obtain 40% of marks

C3 and C4 Pass grade –to obtain 50% of marks

C1, C2 - Computation of pass grade

The trainee will be assessed after each rotation by the relevant trainer and this assessment will carry a mark of 100 (**Continuous assessment format- Annex 22**). To pass the assessment the trainee should score 40 % (80 marks out of 200) or more. If it is less than 40%, the trainee should re-do the particular training rotation and obtain 40 % (80 marks out of 200) when the assessment is held again. There will be no limitation to the number of attempts a trainee could sit the assessments after each rotation.

C3. Details of Portfolio Assessments

Each trainee will be evaluated by two examiners (one GP trainer and one hospital trainer) at the end of Stage 1 and Stage 2 of the MD training programme. The trainee’s portfolio will be evaluated (Portfolio evaluation form **Annex 23**) at a viva voce examination over

45 minutes to review the trainee's capabilities in rational clinical decision making, investigatory and analytical thinking, minor surgical skills and evidence based approach to clinical care. When necessary the trainee will be questioned on relevant subject areas as well. Each portfolio assessment shall be marked out of 250 by each examiner based on a predetermined marking scheme. The Final mark for Portfolio Assessment will be the total of the two examiners out of 500 marks.

The minimum pass mark (pass grade) for each Portfolio Assessment shall be 50% (250 marks out of 500). If the trainee has scored 30 - 49%, re-checking in the areas that the trainee has failed will be required and the trainee will be given an opportunity for re-appraisal in the specific area in six to eight weeks. In such a reappraisal the maximum mark to be awarded shall be 50%. If a candidate fails to obtain a pass grade at this attempt it will be deemed as a failure and the candidate will have to undergo re-training for a specified period as determined by the BoS and resubmit the portfolio. The number of times a candidate can sit the portfolio assessment is unlimited.

A score below 30 % at an initial assessment will be considered as a definite failure. This will warrant a re-assessment after re-training for a for a specified period as determined by the BoS and resubmit the portfolio. The number of times a candidate can sit the portfolio assessment is unlimited. In such a reappraisal the maximum mark to be awarded shall be 50%.

C4. Details of Assessment of the Dissertation

Two examiners shall assess and award a mark independently out of 250 using a predetermined marking scheme as described in **Annex 21**. The final mark for the dissertation out of 500 shall be the total of the marks given by the two examiners.

To Pass the Dissertation the trainee shall score **50 % (250 marks) or more**. If it is less than 50%, the trainee should resubmit the Dissertation at a prescribed date, after attending to the recommended amendments, for reassessment by the same pair of examiners. At the repeat assessment the maximum mark to be awarded shall be 50%. This process to be continued in the same manner until a pass grade mark is obtained.

12.2. MD Examination

12.2.1. Eligibility criteria to appear for the MD Examination

- Satisfactory completion of the training programme (Stages 1,2 and 3)
- Satisfactory progress reports (8 reports from 8 rotations) acceptable to the BOS
- Satisfactory Peer Team Ratings acceptable to the BoS
- A duly completed Training Portfolio which is accepted and passed by the examiners
- Completed dissertation which is accepted and passed by the examiners
- Satisfactory professional conduct and attendance during the training period certified by the trainers
- Good health certified by a specialist approved by the PGIM
- Obtain a pass grade for Continuous Assessments– **C1 to C4**
- All eligibility criteria need to be fulfilled by the candidate before the date of closing applications for the MD examination.

12.2.2. Format of the MD Examination

The examination shall be held at the completion of the training period. The examination shall have two components:

S 1. Written Papers = 560 Marks

S1.1 SEQ	-300
S1.2 MCQ	-260

S2. Objective Structured Clinical Examination = 500 Marks

12.2.3. The details of MD Examination

S1. Written Examination

The written examination shall consist of a SEQ paper and a MCQ paper.

S1.1 SEQ paper – Six questions/Three hours/300 marks

There shall be **six structured type questions** in the SEQ paper.

Each Question will be independently marked out of 50 by two examiners, and only multiples of 05 marks will be allocated. As soon as the papers have been marked each examiner should hand over the mark sheets separately under sealed confidential cover to the Examination Branch. The mark for each question 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 7.5 marks of each other. If the two marks are more than 7.5 marks apart for any question, the two examiners will re-correct such questions and arrive at an agreed mark. Total Final mark for SEQ paper shall be the total marks obtained by the candidate for the six questions out of 300.

S1.2 Multiple Choice Question Paper - 60 MCQs/Two and half hours/260 marks

There shall be 60 questions to be answered in Two and half hours. This will include 40 true/false type MCQs and 20 Single Best Answer type. The true/false type MCQ will carry +5 marks, SBA +3marks.

In a True / False type MCQ, (five responses) each correct response shall score +1, wrong response –1 and if not attempted 0. Negative marks of a question will not be carried forward. In a SBA type question (five responses) the correct response shall score +3, a wrong response 0 and if not attempted 0.

S2. Objective Structured Clinical Examination (OSCE)–ten stations/each station 50 marks (500 marks)

There shall be 10 stations and each station shall consist of two examiners. The duration in each station shall be 10 minutes. Each station will be independently marked out of 50 by the two examiners based on a predetermined marking scheme. The mark for each station will be the average of the two marks given by the two examiners, provided the two marks are within 7.5 marks of each other. If the two marks are more than 7.5 marks apart for any station, the two examiners will discuss

and arrive at an agreed mark. The total marks for the OSCE shall be the total of marks obtained by the candidate for the ten stations out of 500.

12.2.4. The Requirements to Pass the MD Examination

Total mark of 636 or more out of 1060 (60% or more)

AND

50% (150 marks out of 300) or more for S1.1 (SEQ)

AND

50 % (130 marks out of 260) or more for S1.2 (MCQ)

AND

50% (250 marks out of 500) or more for S2 (OSCE)

If a candidate fails the MD examination, the candidate will have to re-sit all components of the MD examination in the next attempt.

13. NUMBER OF ATTEMPTS

The maximum number of attempts allowed to sit the MD Examination will be six (6) within eight years of the first attempt.

14. POST MD TRAINING Stages 4 and 5

14.1. Duration

This shall consist of 12 months of training locally and 12 months of training at a recognized centre overseas, approved by the PGIM. The 12 months of local training can be done en bloc or in two parts before or after the period of overseas training.

To be board certified as a Specialist in Family Medicine in Sri Lanka, on completion of the 24 month period in-service training after the MD (Family Medicine) Examination, the trainee should have achieved all the objectives described in Section 2 post MD portfolio (post MD training). **Annex 13 Portfolio evaluations Annex 27**

The trainers should evaluate the progress of each trainee at regular intervals recommended by the BoS and complete the relevant sections of the portfolio.

14.2. Objectives

The objectives for local post-MD training are set out in **Annex 24**

14.3. Progress Reports

During the post MD training period, progress reports will have to be submitted once in six months using the forms shown in **Annex 10 Annex 11**

14.4. Guidelines for maintenance of Post MD Training Portfolio

During this 24 month training period, the trainee has to document the progress and maintain a comprehensive record in the form of a Training Portfolio. This will enable the trainee to reflect on his/her training experience and identify and correct any weaknesses in the competencies expected of 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 given in **Annex 13 Section II**

1. Log of Clinical Activities
2. Reflective Practice
3. Teaching
4. Research and Audit (**Annex 14**)
5. Information Technology
6. Ethics and Medico-legal Issues
7. Professional Development

15. PRE BOARD CERTIFICATION ASSESSMENT (PBCA)

15.1. Eligibility criteria

After the completion of the prescribed post MD training programme, to be eligible to appear for the PBCA, the trainee should provide the following one month before the PBCA:

- Completed Training Portfolio Section II (Post MD)–on both local & overseas training
- Evidence of research work undertaken / done / presented / published etc.
- Local and overseas training satisfactory progress reports
- Certificate of good standing
- Certificate of good attendance

15.2. Format of the Pre Board Certification Portfolio Assessment

A pair of examiners will conduct the viva and award a grade independently (**Annex 27**).

16. REQUIREMENTS TO BE ELIGIBLE FOR BOARD CERTIFICATION

A trainee who has fulfilled the following criteria shall be deemed to be eligible for Board Certification:

- (a) Passed the MD Examination
- (b) Satisfactory completion of one year local and one year overseas training in units approved by the Board of Study
- (c) Submitted satisfactory progress reports from the local supervisor appointed by the Board of Study
- (d) Submitted satisfactory progress reports from the overseas supervisor appointed by the Board of Study
- (e) Passed the pre-Board Certification Assessment

- (f) Made an Oral presentation -Approximately 30 minutes duration oral presentation to the BOS regarding his / her post-MD training and future vision regarding improvement of quality of patient care/family medicine/ diagnostic services in Sri Lanka.

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

- 17.1. The date of Board certification shall be determined by the Board of Study in Family Medicine and General Practice based on general rules and regulations of the PGIM and recommended for approval by the Board of Management.
- 17.2. If a candidate is unsuccessful in the first attempt at the PBCA such a candidate should follow a counseling session and sit for the assessment again within a maximum period of three (3) months. If successful at this attempt after counseling, the date of Board certification will not be deferred and recommended for approval by the Board of Management.
- 17.3. If a candidate is unsuccessful in the PBCA for a second occasion, such candidates should follow a counseling session and sit for the PBCA as and when it is next conducted by the Board of Study in Family Medicine and General Practice. The date of Board certification will be deferred and decided by the Board of Study in Family Medicine and General Practice and recommended for approval by the Board of Management.

18. 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 25**

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

19. RECOMMENDED BOOKS/JOURNALS FOR READING – Annex 26

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ANNEX 1

Definition of a General Practitioner

A General Practitioner (GP) is defined as:

1. A medical officer registered with the Sri Lanka Medical Council who is practicing person centered medicine to provide comprehensive and continuing care or providing first contact care, longitudinal care, comprehensive care, continuing care and coordinated care for a minimum of 30 hours a week in a private institution or clinic registered with the Private Health Services Regulatory Council under the Private Medical Institutions Act No. 21 of 2006

OR

A medical officer registered with the Sri Lanka Medical Council who is an academic staff member attached to a Family Medicine Department (or unit) in a Faculty of Medicine (or Medical sciences) in a University established under the Universities Act of Sri Lanka

ANNEX 2

Definition of Trainer and Training unit/centre

TRAINER

MD Training programme

A trainer in the specialty of Family Medicine shall be a general practitioner as having three years experience after Board certification in family medicine or eligibility for privileges of Board certification or equivalent postgraduate qualification in the relevant field approved by the PGIM.

TRAINING CENTRE

A training centre for the MD training programme shall be a private institution or clinic registered with the Private Health Services Regulatory Council under the Private Medical Institutions Act No. 21 of 2006 or Family Practice Centre of a University with the minimum number of student contact hours, registered patients, support staff, laboratory facilities, facilities for patients, record keeping and other requirements determined by the board of management on the recommendation of the Board of study in family medicine

ANNEX 3

University Training Units

1. Department of Family medicine
Faculty of Medical Sciences
University of Sri Jayewardenepura
2. Department of Family Medicine
Faculty of Medicine
University of Kelaniya
Ragama

ANNEX 4

University and GP training objectives

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

ANNEX 5**Hospital Rotations**

	Clinical attachment	Duration (months)
5.1	Medicine	1.5
5.2	Surgery	1.5
5.3	Psychiatry	1
5.4	Ophthalmology	0.5
5.5	Orthopedics	0.25
5.6	Otorhinolaryngology	0.5
5.7	Radiology	0.5
5.8	Dermatology	0.75
5.9	Neurology	0.5
5.10	General cardiology and Electrophysiology	0.5
5.11	Gynaecology & Obstetrics	1
5.12	Rheumatology/Rehabilitation	0.5
5.13	Care of The Critically ill Adult	0.5
5.14	Emergency Medicine	0.5
5.15	Chest Medicine	0.25
5.16	STI / HIV infection / AIDS	0.25
5.17	General Paediatrics and Neonatology	1.25
5.18	Clinical Oncology	0.5
5.19	Community Health-MOH/FHB/Epid Unit	0.5
5.20	Medical Informatics	0.25
5.21	Medical Administration	0.25
5.22	Forensic /Legal Medicine	0.25
5.23	Dental Surgery	0.25
5.24	Anti Malaria and Anti Filaria campaign	0.25
5.25	Diagnostic services and Immunology	0.5
5.26	Sports medicine	0.25
5.27	Genetic/Molecular Medicine unit	0.25
		15

ANNEX 5.1

General Medicine

Knowledge

1. History taking ,general examination and systemic examination
2. Detection of common physical signs and their clinical significance
3. Management of patients presenting with
 - (a) Continued fever-PUO
 - (b) Chronic and recurrent wheeze
 - (c) Dyspnoea –Sudden onset and life threatening
 - (d) Upper GIT symptoms-haematemesis, recurrent vomiting etc.
 - (e) Poisoning
 - (f) Generalized skin rash
 - (g) Chest pain due to cardiac origin
 - (h) Jaundice
4. In ward management of the following
 - (a) Anaemia
 - (b) Diabetes / complications
 - (c) Hypertension / complications
 - (d) CVA
 - (e) Hepato-splenomegaly
 - (f) Bronchial asthma
 - (g) IHD

Learn more in other medical specialties Ex. neurology

ANNEX 5.2

Surgery

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies defined by BOS in FM.

Preamble

Care of the surgical patient is an important part of the education and practice of family physicians. Although few family physicians perform major surgeries, some assist during major surgical procedures. Family physicians are called upon by their surgical specialist colleagues to evaluate patients for surgery, make preoperative assessment and peri-operative ambulatory care, assist in the postoperative medical management of patients and perform minor surgeries in their office. Family physicians are often asked to help their patients understand their appropriateness for surgery and the risks and benefits of surgical procedures. Some patients may turn to their family physicians to help them understand the exact nature of a surgical procedure. Importantly, family physicians need to know how to appropriately refer patients for surgery, particularly in emergent or life-threatening situations.

Competencies

At the completion of pre MD training, a family doctor should:

- Be able to perform a surgical assessment(Medical Knowledge, Patient Care)
- Coordinate ambulatory, in-patient and institutional care across health care providers, institutions and agencies. (Systems-based Practice, Patient Care)

- Demonstrate the ability to communicate effectively with the patient, as well as the patient's family and caregivers, to ensure that the diagnosis and treatment plan are clearly understood. (Communication)
- Demonstrate the ability to communicate effectively with the surgeon supervisor/consultant about the patient's symptoms, physical findings, test results and proposed plan of care. (Communication, Professionalism)
- Recognize his or her practice limitations and seek consultation with other health care providers when necessary to provide optimal care. (Professionalism, Practice-based Learning)

Attitudes

The trainee should demonstrate attitudes that encompass:

- Recognition of the importance of collaboration between the family physician and the surgeon as partners in the evaluation of surgical patients and the decision-making process regarding their care.
- An awareness of the principles involved in differentiating the causative origin of clinical symptoms that result in the need for medical and/or surgical intervention.
- Sensitivity to concerns and anxieties of the patient and the patient's family members regarding the potential for surgical intervention.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

1. Basic principles of surgical diagnosis
 - i. Basic surgical anatomy
 - ii. Wound physiology, care and healing processes
 - iii. Clinical assessment, including history, physical examination, laboratory evaluation, and differential diagnosis of key signs and symptoms of surgical conditions
 - iv. Invasive versus noninvasive diagnostic tests
2. Anesthesia
 - i. Premedication
 - ii. Agents and routes of administration
 - iii. Resuscitation methods
3. Recognition of surgical emergencies
4. Ethical, legal and socioeconomic considerations
 - i. Informed consent
 - ii. Quality of life
 - iii. Cultural sensitivity
 - iv. End-of-life issues
5. Preoperative assessment
 - i. Recognition of appropriate surgical candidates
 - ii. Surgical risk assessment
 - iii. Co morbid diseases
 - iv. Antibiotic prophylaxis prior to surgery
 - v. Need for chest physiotherapy
 - vi. Patient preparation (bowel, medication, schedule, etc.)
 - vii. Medication – that needs to be adjusted/withheld/informed

ANNEX 5.3

Psychiatry

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees in MD. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies described in the prospectus,

Most of the trainees knowledge will be gained by caring for ambulatory patients who visit the family practice clinics.

Preamble

Family physicians incorporate knowledge of human behavior, mental health and mental disorders into their everyday practice of medicine. This guideline provides suggestions for appropriate curricula in human behavior and mental health for family medicine trainee. It is suggested that the relationship between the patient and the patient's family be considered basic to an understanding of human behavior and mental health through out the curriculum. The family medicine resident should have sensitivity to, and knowledge of, the emotional aspects of organic illness.

Family physicians must be able to recognize interrelationships among biologic, psychologic and social factors in all patients. It is important that the ethical dimensions of patient care be considered among these interrelationships. To facilitate learning, attention must be paid to these principles as a continuum throughout the family medicine residency program.

Competencies

At the completion of pre MD training, a family doctor should:

- Understand normal and abnormal psychosocial growth and development across the life cycle and be able to apply this knowledge to the care of the individual patient.(Medical Knowledge and Patient Care)
- Be able to recognize, initiate treatment for and utilize appropriate referrals for mental health disorders to optimize patient care. (Systems-based Practice and Practice based Learning)
- Demonstrate the ability to effectively interview and evaluate patients for mental health disorders using appropriate techniques and skills to enhance the doctor-patient relationship. (Interpersonal and Communication Skills, Patient Care)
- Have sensitivity to and knowledge of the emotional aspects of organic illness.(Patient Care, Professionalism)
- Be able to intervene effectively and professionally in emergent psychiatric, domestic violence, child abuse, and disaster situations. (Professionalism, Systems-based Practice)

Attitudes

The trainee should demonstrate attitudes that encompass:

- An awareness of and willingness to overcome the physician's own attitudes and stereotypes of mental illness and social diversity, as well as a recognition of how attitudes and stereotypes affect patient care.
- Recognition of the complex bidirectional interaction between family and social factors and individual health.
- Acceptance of patient's right to self-determination.

- Respect and compassion for the psychosocial dynamics that influence human behavior and the doctor/patient relationship.
- Recognition of the prevalence of abuse in society and willingness to help patients escape abusive situations.
- The importance of a multidisciplinary approach to the enhancement of individualized care.
- Commitment to lifelong learning about the interaction of the biological, social, psychological and psychiatric interaction of the human life cycle.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

1. Basic behavioral knowledge
 - i. Normal, abnormal and variant psychosocial growth and development across the life cycle
 - ii. Recognition of interrelationships among biologic, psychologic and social factors in all patients
 - iii. Reciprocal effects of acute and chronic illnesses on patients and their families
 - iv. Factors that influence adherence to a treatment plan
 - v. Family functions and common interactional patterns in coping with stress
 - vi. Awareness of one's own attitudes and values, which influence effectiveness and satisfaction as a physician
 - vii. Stressors on physicians and approaches to effective coping
 - viii. Ethical issues in medical practice, including informed consent, patient autonomy, confidentiality and quality of life
2. Mental health disorders
 - a) Disorders principally diagnosed in infancy, childhood or adolescence
 - i. Mental retardation
 - ii. Learning disorders
 - iii. Motor skills disorders
 - iv. Communication disorders
 - v. Pervasive developmental disorders
 - vi. Attention deficit and disruptive behavior disorders
 - vii. Feeding and eating disorders of infancy or early childhood
 - viii. Tic disorders
 - ix. Elimination disorders
 - x. Other disorders of infancy, childhood or adolescence - hyperactivity, autism, temper tantrums, Adolescent health
 - b) Delirium, dementia, amnesia and other cognitive disorders
 - c) Substance-related disorders
 - i. Alcohol
 - ii. Amphetamines
 - iii. Caffeine
 - iv. Cannabis
 - v. Cocaine
 - vi. Hallucinogens
 - vii. Inhalants
 - viii. Nicotine
 - ix. Opioids
 - x. Phencyclidine

- xi. Sedative-, hypnotic- or anxiolytic-related disorders
- xii. Poly-substance-related disorder
- d) Schizophrenia and other psychotic disorders
 - i. Paranoid
 - ii. Disorganized
 - iii. Catatonic
 - iv. Undifferentiated
 - v. Residual
- e) Mood disorders
 - i. Major depressive disorder
 - ii. Dysthymic disorder
 - iii. Bipolar disorders, including hypomanic, manic, mixed and depressed
- f) Anxiety disorders
 - i. Panic attack
 - ii. Phobias
 - iii. Obsessive-compulsive disorder
 - iv. Post-traumatic stress disorder
 - v. Acute stress disorder
 - vi. Generalized anxiety disorder
- g) Somatoform disorders
 - i. Somatization disorder
 - ii. Conversion disorder
 - iii. Pain disorder
 - iv. Hypochondriasis
- h) Factitious disorders
- i) Dissociative disorders
- j) Sexual and gender identity disorders
 - i. Sexual desire disorder
 - ii. Sexual aversion disorder
 - iii. Orgasmic disorders
 - iv. Sexual pain disorders
 - v. Sexual dysfunction related to a general medical condition
 - vi. Paraphilias
 - vii. Gender identity disorder
- k) Eating disorders
 - i. Anorexia nervosa
 - ii. Bulimia nervosa
- l) Sleep disorders
 - i. Insomnia
 - ii. Hypersomnia
 - iii. Narcolepsy
 - iv. Breathing-related sleep disorder
 - v. Circadian-rhythm sleep disorders
 - vi. Parasomnias
- m) Impulse control disorders
- n) Adjustment disorders
 - i. Depressed mood
 - ii. Anxiety
 - iii. Mixed anxiety and depressed mood
 - iv. Disturbance of conduct

- o) Personality disorders
 - i. Paranoid
 - ii. Schizoid
 - iii. Schizotypal
 - iv. Antisocial
 - v. Borderline
 - vi. Histrionic
 - vii. Narcissistic
 - viii. Avoidant
 - ix. Dependent
 - x. Obsessive-compulsive
- p) Problems related to abuse or neglect
- q) Additional conditions
 - i. Noncompliance
 - ii. Malingering
 - iii. Borderline intellectual functioning
 - iv. Age-related cognitive decline
 - v. Bereavement
 - vi. Academic problem
 - vii. Occupational problem
 - viii. Identity problem
 - ix. Religious or spiritual problem
 - x. Acculturation problem
 - xi. Phase-of-life problem

Skills

In the appropriate setting, the trainee should demonstrate the ability to independently perform or appropriately refer:

1. Use of evaluation tools and interviewing skills, which enhance data collection in short period of time and optimize the doctor/patient relationship
2. Techniques to elicit the context of the visit (BATHE [background, affect, trouble, handling and empathy] or other techniques)
3. Mental status examination
4. Evaluation of indications for special procedures in psychiatric disorder diagnosis, including psychologic testing, laboratory testing and brain imaging
5. Elicit and recognize the common signs and symptoms of the disorders under Knowledge
6. Assessment of depression (Beck, Zung, Hamilton Scales, SIG-E-CAPS mnemonic[sleep, interest, guilt, energy, concentration, appetite, psychomotor and suicidal ideation])
7. Evaluation of indications for psychiatric consultation
8. Management of emotional aspects of non-psychiatric disorders
9. Techniques for enhancing compliance with medical treatment regimens
10. Initial management of psychiatric emergencies: the suicidal patient, the acutely psychotic patient
11. Proper use of psychopharmacologic agents
 - a. Diagnostic indications and contraindications
 - b. Dosage, length of use, monitoring of response, side effects and compliance
 - c. Drug interactions
 - d. Associated medical problems
12. Family support therapy

13. Behavioral modification techniques
 - a. Stress management
 - i. Breathing
 - ii. Muscle relaxation
 - iii. Imagery
 - iv. Cognitive restructuring
 - b. Smoking cessation, obesity management and other lifestyle changes
 - c. Chronic pain management
14. Utilization of community resources
 - a. Community resources
 - b. Patient care team of other mental health professionals
15. Crisis-counseling skills
16. Modification of patient environment
17. Variations in treatment based on the patient's personality, lifestyle and family setting
18. Identification of, intervention in and therapy for drug and alcohol dependency and abuse
19. Appropriate care of health disorders listed under psychopathology
20. Appropriate referral procedures to ensure continuity of care, provide optimal information sharing and enhance patient compliance
 - a. Indications
 - b. Process
 - c. Follow-up

Implementation

Training in human behavior and mental health should be accomplished primarily in the outpatient setting through a combination of longitudinal experiences, supervised experiences and didactic teaching. This combination should include experience in diagnostic assessment, psychotherapeutic techniques and psychopharmacologic management. Learning tools such as video review, direct observation and role-playing are useful and recommended. Collaboration with multiple mental health professionals, including psychiatrists, psychologists and others working as a team, is often useful.

ANNEX 5.4

Ophthalmology

Objectives-Knowledge and Skills

1. Red Eye

- a. Different causes of red eye
- b. Diagnosis and management
 - Conjunctivitis
 - Acute anterior uveitis
 - Acute angle closure glaucoma
 - Corneal ulcer
 - Scleritis
 - Subconjunctival haemorrhage
- c. Skill- Examination of a patient on the slit lamp

2. Ocular injuries

Mechanical (blunt and penetrating) and chemical

- a. Identify injuries to each part of the eye (lids, conjunctiva, cornea, iris, lens, retina; hyphaema and globe rupture)
- b. Management (first aid and hospital management)
- 3. Glaucoma**
 - a. Types of Glaucoma (open angle and closed angle)
 - b. Tests available for diagnosing glaucoma
 - c. Skill – learn measurement of intra ocular pressure
 - d. Skill – examination of the optic disc with direct ophthalmoscope to identify the glaucomatous disc
- 4. Refractive errors**
 - a. Visual assessment in adults and children
 - b. Types of refractive errors and their management
 - c. Skill – visual assessment with the Snellen chart and diagnosis of refractive errors with the pinhole
- 5. Cataract**
 - a. Different causes of cataract
 - b. Management of cataract
 - c. Skill – identify cataract with torch and ophthalmoscope
- 6. Squints**
 - a. Types of squints
 - b. Amblyopia
 - c. Management of squints including occlusion therapy
- 7. Disorders of the lids and adnexae**
 - a. Knowledge on the diagnosis and management of-
 - a. Ptosis, ectropion, entropion
 - b. Styes and chalazia
 - c. Nasolacrimal duct obstruction in adults and children
- 8. Ocular surface disease**

Diagnosis and management of

 - a. Pterygium, *pinguecula*
 - b. Dry eye
 - c. Allergic conjunctivitis
- 9. Retinal disease**
 - a. Classification, diagnosis and management of diabetic retinopathy
 - b. Diagnosis and management of retinal arterial and venous occlusions
 - c. Skill – Identifying retinal lesions –haemorrhages, cotton wool spots, hard exudates, new vessels
- 10. Orbital disease**

Diagnosis and management of thyroid related eye disease
- 11. Neuro ophthalmology**

Diagnosis and management of

 - a. Optic neuritis
 - b. Optic atrophy
 - c. Anterior ischaemic optic neuropathy

- d. Papilloedema
- e. Palsy of the 3rd, 4th and 6th cranial nerves
- f. Eye management in a patient with lower motor neuron 7th nerve palsy
- g. Ocular myasthenia gravis

ANNEX 5.5

Orthopedics

Knowledge

1. Examination of a patient presenting with an orthopaedic problem
e.g. Fracture
2. Detection of fractures and dislocations
 - a. History
 - b. Examination
 - c. X – ray findings
3. Management of patients presenting with prolapsed inter-vertebral discs

Skills

1. Reduction of simple fractures and splinting
2. Reduction of dislocations
 - a. Shoulder
 - b. Temporo-mandibular joint
 - c. Other joints

Accident surgery

1. List the common injuries following road traffic accidents (RTA)
2. Recognize injuries needing early treatment following RAT and immediate management
3. Management of common fractures and dislocations including P.O.P
4. Recognizing stab injury and immediate treatment
5. Recognizing head injuries and assessment of the patient during the period of observation.
6. Methods used to stop bleeding during injuries, including suturing

ANNEX 5.6

Otorhinolaryngology

Objectives

- * Develop the skill in Examination of the Ear, Nose and Throat
- * Identification of commonly used ENT Instruments
- * Procedures to be observed
- * Procedures to be done by the trainee
- * Knowledge in diagnosing, treating and identification of complications of common ENT diseases
- * To achieve these objectives Attend –ENT Clinics -4
-Ward rounds -4
-Operating Theatre sessions- 4

Examination of the Ear, Nose and Throat

Ear:

Inspection, palpation, Otoscopy, hearing assessment

Nose

Inspection, palpation, Anterior Rhinoscopy, Posterior Rhinoscopy, Nasal air way assessment
- eg. Cold spatula test, testing for smell

Mouth and throat

Lips, tongue, palate and teeth, Indirect Laryngoscopy (IDL)

Examination of the Neck

Identification of ENT Instruments

Otoscope, Aural speculums, Nasal speculums, Laryngeal mirror, Post nasal mirror, Tongue depressor, Nasal packing forceps, Head mirror, Tuning forks 256Hz, 512Hz, Jobson horn wax probe, Ear forceps, Operating Microscope, Micro Drill, Endoscopes –Rigid and flexible (nasal, laryngeal, bronchial, oesophageal)

Procedures to be observed

Audiometry, Speech therapy, Examination under microscope (EUM), Sleep Lab – Polysomnography, Endoscopic procedures

Procedures to be done by the trainee

Nasal packing, Ear syringing, Tracheostomy management, foreign body removal from ear and nose

Knowledge in diagnosing, treating and identification of complications of common ENT diseases

Epistaxis, Hoarseness of Voice, Hearing Impairment, Ear infections, Rhino Sinusitis, Tonsillitis, Snoring and sleep apnoea, Vertigo, Traumatic injuries to the ear; nose and throat, Wax in the ear, Nasal tumours, Laryngeal tumours, Neck Lumps.

ANNEX 5.7

Radiology

1. Basics of radiology, its limitations and hazards
2. The correct use of radiological investigations by the family physician and the preparation of patients for radiological investigations
3. Interpretation of films
4. New techniques in imaging-
 - USS
 - CT
 - MRI
 - PET scan
 - Doppler-hand Doppler/Duplex
5. Interpretation of USS, CT, MRI, PET Scan, Doppler

ANNEX 5.8

Dermatology

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees. Attitudes, knowledge and skills that are critical to family medicine should be

attained through longitudinal experience that promotes educational competencies described in the prospectus,
Knowledge will be gained by caring for ambulatory patients who visit the family practice clinics.

Preamble

Family physicians are on the front line of managing dermatologic conditions. Pattern recognition is extremely important with skin complaints. A thorough history must be taken with attention to environmental, infectious and occupational factors that may irritate the skin. The adage “a picture is worth a thousand words” remains key to dermatologic care. Family physicians must develop keen observational skills and use appropriate terminology to characterize different skin lesions.

The attitude of the physician in taking all complaints seriously and doing a methodical work up will go a long way to combat patient anxiety. A family physician must have knowledge of different diagnoses associated with different lesion types and must know where to access appropriate information in a timely manner using textbook or online resources. Family physicians are experts at treating the whole patient and are well suited to detecting systemic disease that may have dermatologic manifestations. Early diagnostic biopsy and definitive surgical or medical treatment are often well within the scope of a family physician’s skills. Family physicians must be proficient on a systems level in providing timely, cost-effective and cosmetically excellent skin surgery. Patients should be given realistic expectations on wound healing and warned in advance of possible untoward outcomes.

Timely referral to a dermatologist is key in challenging, potentially life-threatening cases or cases that require treatment modalities exclusive to a dermatologist. Lastly, family physicians have the wonderful opportunity to promote behaviors that can prevent skin cancers and other skin diseases to ensure the future health of the skin– our body’s largest organ.

This Curriculum Guideline provides an outline of the attitudes, knowledge and skills that should be among the objectives of training programs in family medicine and which will lead to optimal care of dermatologic conditions by future family physicians.

Competencies

At the completion of pre MD training, a family doctor should:

- Provide compassionate and culturally appropriate patient care that recognizes the effect of skin problems on the patient and emphasizes the importance of comprehensive preventative care. (Patient Care)
- Be proficient in the diagnosis and treatment of common dermatologic diseases and be adept at performing common dermatologic procedures. (Medical Knowledge)
- Utilize diagnostic and evidence-based treatment guidelines as well as maintain up-to-date knowledge of appropriate usage of evolving dermatologic treatment technology. (Practice-based Learning, Improvement)
- Demonstrate the ability to communicate effectively with the patient so that dermatologic diagnosis and treatment is provided in a non-judgmental, caring manner. (Interpersonal Communications, Professionalism)
- Incorporate knowledge of the dermatology specialty in order to determine which problems can be managed by a family physician and to understand how to coordinate needed referrals to specialty providers. (Systems-based Practice)

Attitudes

The trainee should demonstrate attitudes that encompass:

- A willingness to manage the majority of dermatologic conditions.

- A positive approach to psychosocial issues in patients who have skin disorders.
- The consideration of counseling of patients who have dermatologic conditions as a priority.
- A willingness to learn and perform common dermatologic procedures.
- A constructive collaboration with dermatologists when appropriate.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

1. Classification and description of skin disorders
2. Diagnosis and management of common dermatologic disorders
3. Prevention of skin diseases
4. Management of skin injuries
5. Skin manifestations of systemic diseases
6. Prevention, recognition and management of skin cancers
7. Dermatologic medications
 - a. Systemic
 - b. Topical

Skills

In the appropriate setting, the trainee should demonstrate the ability to independently perform or appropriately refer

1. History and physical examination appropriate for dermatologic conditions
2. Preventive skin examination
3. Biopsy of skin lesions
 - a. Punch biopsy
 - b. Shave biopsy
 - c. Excisional biopsy
4. Scraping and microscopic examination
5. Injection
 - a. Local anesthesia
 - b. Steroids
6. Incision and drainage
7. Destruction of lesions
 - a. Cryosurgery
 - b. Electro desiccation
 - c. Curettage
8. Counseling for dermatologic disorders

ANNEX 5.9

Neurology

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees in MD. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies described in the prospectus,

Most of the trainees' knowledge will be gained by caring for ambulatory patients who visit the family practice clinics.

A range of learning methods and activities are appropriate to the curricular objectives; these substantially overlap but include:

1. Observation of and case discussion with other staff / trainees
2. Supervised clinical practice (inpatient, outpatient, primary care, referral and on-call)
3. Clinical attachments (predominant observation, discussion and modeling)
4. Clinical and other presentations: preparation of case reports
5. Participation in clinical meetings, seminars & tutorials
6. Self directed learning by reading of texts, reviews and papers, e-learning
7. Specific lectures or focused courses
8. General (generic or specific) courses and appropriate educational meetings
9. Research and presentation of research
10. Teaching of undergraduates & postgraduates (medical and other health professionals)

Preamble

A solid understanding of normal neurological development, anatomy and neurophysiology is imperative to the treatment of neurological pathology. The goal of these guidelines is to sensitize the family medicine resident to the role of neurological disease in patients and familiarize residents with its particular place in the overall practice of family medicine. Neurological problems are estimated to comprise 10 to 15 percent of a family physician's workload. The specialty of family medicine is vitally interested in all aspects of neurological disease. History-taking in neurology and performance of a comprehensive neurological examination are essential skills for all family physicians. Emphasis on good diagnostic and therapeutic skills and the appropriate consideration of bio-psychosocial and cultural factors must be included in the curriculum.

The maturation of the nervous system is complex, and it changes based on genetic, environmental, learned and acquired influences. Both the variability of presentation and degree of patho-physiology can make diagnosis very difficult. Many of the processes are marked by slow episodic degeneration, which patients often learn to overcome or hide.

Although many disorders are genetic, detailed family history may not always be helpful.

Diseases such as seizure disorders, amyotrophic lateral sclerosis (ALS) and dystonia (as well as many other neurological disorders) carry significant social stigma. Family physicians must be capable diagnosticians as well as efficient, compassionate managers of diseases of the nervous system. Diagnosis is the beginning of a long struggle with neurological disease. Family physicians must address both the medical stress and the often extreme psychosocial

stress that each disorder can cause in the patient and his or her family. Cultural differences influence how patients integrate medical care into their own life and family systems.

This Curriculum Guideline provides an outline of the attitudes, knowledge and skills that should be among the objectives of training programs in family medicine and which will lead to optimal care of patients with neurological disorders by future family physicians.

Competencies

At the completion of pre MD training, a family doctor should:

- Be able to perform standardized comprehensive neurological assessments, obtain necessary further investigation and develop acute and long-term comprehensive treatment plans based on the basis of presenting and progressively deteriorating neurological processes. (Patient Care, Medical Knowledge)
- Be able to understand normal neurological development, anatomy and physiology. (Patient Care, Medical Knowledge)
- Be able to optimize treatment plans based on knowledge of local resources that include local, state and federal agencies. (Systems-based Practice, Practice-based Knowledge)
- Coordinate ambulatory, in-patient and institutional care across health care providers, institutions and governmental agencies. (System-based Practice)
- Be able to communicate in a compassionate, knowledgeable manner and address complex psychosocial issues based on the patient and his or her family unit. (Interpersonal Communications)
- Be able to recognize his or her own practice limitations and seek consultation with other health care providers to provide optimal care. (Medical Knowledge)

Attitudes

The trainee should demonstrate attitudes that encompass:

- A compassionate approach to the care of the patient who has a neurological disease in context of the patient's own cultural, religious and social context, especially in the case of patients who have chronic disorders.
- The recognition of the importance of family, home and social support in the overall life of patients who have neurological disease.
- The recognition of the physician's own level of competence in handling neurological problems and the need for further consultation as appropriate.
- The utilization of self-directed learning toward further knowledge and competence in neurology.
- An understanding of the role played by the neurology consultant and the concept of shared care for certain neurological conditions. (One example is the progressive disease of multiple sclerosis, where the patient may be stable and managed routinely by a family physician, but may also need periodic consultation by a neurology specialist.)
- Support of the patient through the process of consultation, neurological evaluation, treatment, rehabilitation and possible long-term neurological degeneration

- An understanding of the appropriate limitation of investigation and treatment for the benefit of the patient.
- Lifelong learning and contribution to the body of knowledge about neurological disease, health and the medical management of the neurologically-impaired patient.
- An awareness of the importance of a multi-disciplinary approach to the enhancement of individualized care.
- The willingness to be accessible to and accountable for his or her patients.
- An awareness of the importance of cost containment.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

1. Normal anatomy, physiology and anatomic principles that allow localization of neurological disease
2. Normal growth, development and senescence of the nervous system
3. Pathologic neurological disorders, including:
 - a. Disorders of motor function
 - i. Upper and lower motor neuron disorders
 - ii. Coordination
 - iii. Movement disorders
 - 1). Hypokinetic
 - a). Parkinson's disease
 - b). Parkinson plus syndrome
 - 2). Hyperkinetic
 - a). Athetosis
 - b). Chorea
 - c). Dystonia
 - d). Tics
 - e). Tremors
 - b. Disorders of sensation
 - i. Central
 - ii. Peripheral
 - c. Disorders of vision
 - i. Visual field defects
 - ii. Monocular and binocular blindness
 - iii. Diplopia and gaze palsies
 - iv. Nystagmus
 - v. Pupillary abnormalities
 - d. Cerebrovascular diseases
 - i. Ischemic stroke
 - 1). Thrombolytics
 - a). Indications and use
 - b). Risks and benefits
 - ii. Hemorrhagic stroke
 - iii. Vasculitis
 - iv. Transient ischemic attacks

- v. Symptomatic and asymptomatic carotid stenosis
- vi. Aneurysmal disease
- e. Head and spinal cord trauma
 - i. Evaluation
 - ii. Management to include long-term complications
 - iii. Consequences and prevention
- f. Multiple sclerosis
 - i. Diagnostic criteria
 - ii. Laboratory findings
 - iii. Management
- g. Dizziness and disorders of hearing
 - i. Central vs. peripheral hearing loss
 - 1). Acute
 - 2). Chronic
 - ii. Central vs. peripheral vertigo
 - 1). Acute
 - 2). Chronic
 - 3). Evocative testing (e.g., Dix-Hallpike maneuver)
 - iii. Tinnitus
- h. Disorders of higher cognitive function and communication
 - i. Dementia
 - 1). Differential diagnosis
 - 2). Evaluation
 - 3). Management
 - ii. Encephalopathies (acute, chronic)
 - 1). Toxic
 - 2). Metabolic
 - iii. Aphasia and apraxia
 - i. Disorders of consciousness
 - i. Syncope
 - ii. Epilepsy
 - 1). Generalized at onset seizures
 - 2). Simple partial seizures
 - 3). Complex partial seizures
 - 4). Treatment
 - a). Medical management with anticonvulsant medications
 - b). Surgical management
 - c). Vagal nerve stimulation
 - iii. Recognition and treatment of increased intracranial pressure
 - iv. Stupor and coma
 - 1). Toxic and metabolic
 - 2). Structural disease
 - 3). Herniation syndromes

- v. Brain death
- i. Headache
 - i. Migraine and variants
 - ii. Cluster headache
 - iii. Tension-type headache
 - iv. Headache associated with a structural lesion
 - v. Benign intracranial hypertension (pseudotumor cerebri)
 - vi. Chronic daily headache
 - vii. Emergent headaches
 - 1). Subarachnoid hemorrhage
 - 2). Meningitis
 - 3). Giant cell arteritis and temporal arteritis
- j. Brain tumors
 - i. Anterior or posterior fossa
 - 1). Primary
 - a). Benign
 - b). Malignant
 - 2). Metastatic
- k. Infections (e.g., meningitis, encephalitis)
 - i. Bacterial
 - ii. Viral or retroviral (human immunodeficiency virus)
 - iii. Fungal
 - iv. Tuberculosis
 - v. Prion disease
 - vi. Parasitic (especially Cystercicosis)
- l. Spinal cord disorders
 - i. Anatomy and localization
 - ii. Extrinsic compressive lesions
 - iii. Intrinsic lesions
- m. Sleep disorders (e.g. central and peripheral sleep apnea, periodic limb movement disorder)
- n. Disorders of peripheral nerve, neuromuscular junction and muscle
 - i. Muscular dystrophy
 - ii. Peripheral neuropathy
 - iii. Mononeuritis multiplex
 - iv. Myopathy
 - v. Guillain-Barre syndrome
 - vi. Myasthenia gravis
 - vii. Plexopathy
 - viii. Radiculopathy
 - ix. Diagnostic studies (e.g., nerve conduction velocity, electromyograph, neural scan, muscle biopsy)
- o. Congenital disorders
 - i. Brain and spinal cord malformations

- 1). Arnold-Chiari malformation
- 2). Meningomyelocele
- 3). Cortical malformations
- p. Chromosomal abnormalities (e.g., Down's syndrome)
- q. Abnormal head growth
 - i. Microcephaly
 - ii. Macrocephaly (including hydrocephalus)
- r. Aberrant development
 - i. Development delay
 - ii. Mental retardation
 - iii. Neurodegenerative diseases
- s. Developmental disorders of higher cerebral function
 - i. Mental retardation
 - ii. Developmental language disorders
 - iii. Learning disabilities (e.g., dyslexia)
 - iv. Attention deficit disorder, with or without hyperactivity
 - v. Pervasive developmental disorders (e.g., autism)
- t. Psychiatric disorders mimicking neurological disease
 - i. Non-epileptic spells (e.g., pseudo-seizures)
 - ii. Dementia of depression (e.g., pseudo-dementia)
 - iii. Conversion disorder
 - iv. Malingering
 - v. Disorders of somatization and hypochondriasis
4. Principles of pain management
 - a. Pharmacologic agents
 - b. Surgical management nervous system
5. The psychological and rehabilitation aspects of patient management, especially for chronic or long-term neurological conditions. The use of other specialties including physical/manipulation, massage, occupational therapy and integrative medicine adjuncts to patient management
6. The genetic basis of certain neurological disorders as they affect the patient, his or her family and education of the family regarding the benefits of genetic counseling
7. An understanding of the neurological disabilities of elderly patients and the importance of assessing, restoring and maintaining their functional capacity (see also the Curriculum Guidelines for Care of Older Adults)
8. Neurological complications of systemic illness especially zoonotic diseases (such as Cystercicosis).
9. Understand the normal clinical and radiological findings in the elderly
 - a. Understand the special presentations of neurological disease in the elderly diagnosis, investigation and management of dementia
 - b. Understand the effects of drugs in the elderly
 - c. Understand the hospital-based and community services for the elderly
 - d. Understand how to communicate with relatives and care agencies for the elderly and the importance of assessing, restoring and maintaining their functional capacity

10. Prevention of neurological disease
11. Special Situations
 - a. Understand the effect of pregnancy on existing neurological disorders and neurological disorders as complications of pregnancy
 - b. Understand the special needs of an adolescent patient's issues of confidentiality and transition disorders
12. Geriatric Issues
 - a. Cognitive and behavioral techniques
 - d. Interventions such as injections, nerve stimulation and nerve root ablation
13. Understand end-of-life issues in neurological disorders, the role of palliative care services and ethical and legal aspects of terminal care.

Skills

In the appropriate setting, the trainee should demonstrate the ability to independently perform or appropriately refer:

1. Evaluation skills
 - a. Recognizing and defining the neurological problem
 - b. To be able to take an appropriate focused and comprehensive history (including necessary information from others) and communicate this verbally or in writing and in summary form
 - c. To be able to examine the mental and physical state (including a complete neurological and mental status examination, Glasgow coma scale and pediatric developmental exam) and communicate verbally or in writing and in summary form to other providers
 - d. Using clinical knowledge to localize the lesion and formulate an ordered differential diagnosis based on an appreciation of the patient, his or her past history, current problems and likely causes
 - e. Assessing the acuity and prognosis of the clinical problem as it relates to the need for immediate management and the requirement for expert assistance
 - f. Formulating a rational plan for further investigation and management
 - g. Knowing the indications, contraindications, risks and significance of ancillary tests
 - i. Lumbar puncture and its performance
 - ii. Electroencephalogram(EEG)
 - iii. Visual, brain stem auditory and somato-sensory evoked potential
 - iv. Nerve conduction study and electromyography (Neural Scan)
 - v. Muscle and nerve biopsy
 - vi. Computed axial tomography with and without contrast
 - vii. Magnetic resonance imaging with and without contrast
 - viii. Magnetic resonance angiography
 - ix. Angiography
 - x. Myelography
 - xi. Carotid ultrasound
 - xii. Sleep study
 - xiii. Genetic testing
 - xiv. Positron emission tomography (PET) scanning

- xv. Single-photon emission computed tomography (SPECT) scanning
- 2. Management skills
 - a) Formulating a diagnostic and management plan and assessing the need for expert advice with an awareness of the risks, benefits and costs of evaluation
 - b) Understanding the role of a neurology specialist and the implications of special testing in patients who have neurologic disease and the implications of the test results for the patient
 - c) Managing the prevalent and treatable conditions listed in this curriculum with consultation as appropriate
 - d) Managing emergent neurology problems and obtaining urgent consultation when appropriate, including:
 - i. Stroke
 - ii. Coma
 - iii. Meningitis and encephalitis
 - iv. Status epilepticus
 - v. Central nervous system trauma
 - vi. Increased intracranial pressure
 - vii. Acute visual loss
 - viii. Rapidly progressive neurological deficit
 - ix. Neurological respiratory failure
 - x. Acute weakness
 - xi. Altered mental status
- 3. Managing the family, cultural and psychosocial issues that accompany the long-term care of patients who have debilitating neurological conditions, including home and community care, the utilization of community resources, the use of a multidisciplinary team and the primary role of the family physician as coordinator of long term care
- 4. Continuing awareness of potential drug interactions and adverse drug effects, especially in elderly patient.

Implementation

Implementation of this Curriculum Guideline is best achieved within the capabilities of the particular residency program and at the discretion of the residency director. The resident must have the opportunity to diagnose and manage (under supervision) both patients who have neurological disorders and patients who have signs and symptoms possibly referable to the nervous system. Neurology consultation should supplement the educational process in the care of patients who have problems referable to the nervous system.

Neurologists should take an active role in all aspects of resident education.

Communication between all members of the multi-discipline management team should be emphasized with the intent on facilitation of patient diagnosis and management.

ANNEX 5.10

General cardiology and Electrophysiology

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees in MD. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies described in the prospectus,

Most of the trainees knowledge will be gained by caring for ambulatory patients who visit the family practice clinics.

Preamble

Cardiovascular disease is a major cause of morbidity and mortality in our society. The family physician should be proficient in the diagnosis and management of a variety of cardiovascular disorders. Family physicians provide comprehensive and continuing care to individuals and families, with particular attention to behavioral and lifestyle factors.

The depth of experience for each trainee depends on the expected practice needs of the trainee, especially in terms of practice location, available facilities and accessibility of consultants. At times the family physician may find it appropriate to seek consultation from a cardiologist to either manage or co-manage a patient for optimal care.

Competencies

At the completion of pre MD training, a family doctor should:

- Understand basic and clinical knowledge of cardiac anatomy and patho-physiology of common cardiovascular diseases. (Medical knowledge)
- Perform an appropriate cardiac history and physical examination, document findings; develop an appropriate differential diagnosis and plan for further evaluation and management. (Patient care, Medical knowledge, Interpersonal and communication skills)
- Use evidence based knowledge regarding primary and secondary prevention of cardiovascular disease. (Medical knowledge, Patient care)
- Review current practices regarding the care of patients with cardiovascular disease and develop plans to improve the care. (Patient care, Medical knowledge, Practice-based learning and improvement, Professionalism)
- Work with physicians, nurses, pharmacists, dieticians and other health care professionals who care for patients with common cardiovascular diseases. (Patient care, Medical knowledge, Professionalism, Systems-based practice)

Attitudes

The trainee should demonstrate attitudes that encompass:

- The importance of physician and patient working as partners to promote optimal cardiovascular health.
- A compassionate approach to the care of patients with cardiac disease.
- The psychosocial and economic impact of cardiovascular disease on the individual and family and use of the health care system to assist as needed.
- Support of the individual and family through consultation, evaluation, treatment and rehabilitation.
- The importance of lifestyle factors on the development and exacerbation of cardiovascular disease.
- A multidisciplinary approach to the care of individuals with cardiovascular disease.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

1. Normal cardiovascular anatomy and physiology
2. Changes in cardiovascular physiology with age and pregnancy
3. Risk factors
 - a) Coronary artery disease
 - i. Hyperlipidemia
 - ii. Cigarette smoking
 - iii. Genetic predisposition
 - iv. Sedentary life style
 - v. Hypertension
 - vi. Diabetes mellitus
 - vii. Obesity
 - viii. Nutrition
 - ix. Hormonal status
 - x. Emotional stress
 - b) Valvular heart disease
4. Cardiovascular history
5. Cardiovascular physical examination
6. Noninvasive examinations
 - a. Electrocardiography
 - b. Chest radiography
 - c. Stress testing, including treadmill/bicycle or pharmacologic techniques
 - d. Echocardiography/Doppler imaging, both rest and stress, using treadmill/bicycle or pharmacologic techniques
 - e. Radioisotope imaging, both rest and stress, using treadmill/bicycle or pharmacologic techniques
 - f. ECG monitoring, in-hospital and ambulatory
 - g. Vascular Doppler and ultrasound examinations
 - h. Computerized tomography (CT)
 - i. Magnetic resonance imaging (MRI) and Magnetic resonance angiogram (MRA)
7. Invasive examinations
 - a) Diagnostic cardiac catheterization and angiography
 - b) Diagnostic carotid and peripheral vascular angiography
 - c) Intracoronary and peripheral vascular intervention using appropriate devices
 - d) Internal monitoring devices
 - i. Central venous and peripheral arterial catheter
 - ii. Bedside hemodynamic monitoring using balloon flotation catheter
 - e) Electrophysiologic studies
 - f) Indications and contraindications of therapeutic interventions
 - i. Coronary artery bypass
 - ii. Angioplasty techniques and stent placement
 - iii. Pacemaker insertion
 - iv. Implantable cardioverter-defibrillator
 - v. Valve replacement/repair, percutaneous balloon valvotomy
 - vi. Electrophysiologic ablation
8. Relevant laboratory interpretation, including serum enzymes, iso-enzymes and lipids
9. Specific diseases/conditions
 - a. Coronary artery disease
 - i. Stable/unstable angina
 - ii. Myocardial infarction, with and without complications
 - 1) Cardiogenic shock

- 2) Dysrhythmias
 - 3) Papillary muscle dysfunction and rupture
 - 4) Ventricular rupture
 - 5) Aneurysm
 - iii. Sudden death
- b. Syncope, cardiogenic and non-cardiogenic
- c. Dysrhythmias
 - i. Tachyarrhythmia
 - 1) Supraventricular
 - 2) Ventricular
 - 3) Re-entrant
 - ii. Bradyarrhythmia
 - iii. Ectopy
 - 1) Atrial
 - 2) Ventricular
- d. Hypertension
 - i. Essential
 - ii. Secondary
 - iii. Pulmonary
- e. Pulmonary heart disease
 - i. Cor-pulmonale
- f. Congestive heart failure
 - i. Systolic dysfunction
 - ii. Diastolic dysfunction
- g. Thromboembolic disease
- h. Valvular heart disease
 - i. Rheumatic
 - ii. Congenital
 - iii. Degenerative
 - iv. Mitral valve prolapse syndrome
- i. Congenital heart disease
 - i. Common left to right shunts (acyanotic)
 - ii. Common right to left shunts (cyanotic)
 - iii. Common obstructive problems
- j. Dissecting aneurysm
- k. Innocent heart murmurs
- l. Peripheral vascular disease
 - i. Aneurysm
 - ii. Carotid atherosclerosis
 - iii. Arterial disease
 - iv. Arteriosclerosis obliterans
- m. Cardiomyopathies
 - i. Congestive (dilated)
 - ii. Restrictive
 - iii. Hypertrophic cardiomyopathy
 - iv. Postpartum
- n. Pericardial disease
- o. Infection-related
 - i. Viral myocarditis
 - ii. Sub acute bacterial endocarditis

- iii. Kawasaki's disease
 - p. Other cardiac disorders
 - i. Immunologic
 - 1) Acute rheumatic fever
 - 2) Autoimmune disorders
 - ii. Psychogenic
 - iii. Traumatic
 - iv. Nutritional
 - v. Myxoma
 - vi. Thyroid dysfunction
 - vii. Marfan syndrome
 - viii. Drug-related such as cocaine, steroids and chemotherapeutic agents
 - q. Evaluation of cardiac patient for non-cardiac surgery
 - i. Cardiac risk including preoperative assessment tools
 - ii. Preoperative and postoperative management
 - r. Antibiotic prophylaxis for valvular disease
10. Cardiovascular pharmacology

Skills

In the appropriate setting, the trainee should demonstrate the ability to perform or appropriately refer:

1. Diagnostic procedures
 - a. Performance of history taking and physical examination
 - b. Mechanics and interpretation of ECG
 - c. Interpretation of chest radiographs
 - d. Treadmill/bicycle stress test monitoring and interpretation
 - e. Ambulatory ECG monitoring and interpretation
2. Therapeutic procedures
 - a. Risk management
 - b. Cardiopulmonary resuscitation (CPR), both basic life support (BLS) and advanced cardiac life support (ACLS)
 - c. Treating dysrhythmias and conduction disturbances
 - d. Use of external temporary pacemakers
 - e. Management of acute myocardial infarction, post-infarction care, and complications
 - f. Congestive heart failure
 - g. Hypertensive emergencies
 - h. Supervision and management of cardiovascular rehabilitation
 - i. Psychosocial issues
 - i. Sexual functioning
 - ii. Depression
 - iii. Family dynamics
 - j. Management of patients after an intervention
 - i. Lifestyle adjustments
 - ii. Coronary artery bypass surgery
 - iii. Valve surgery
 - iv. Congenital heart disease surgery
 - v. Catheter-related interventional procedures

Implementation

Core cognitive ability and skill may be obtained in block rotations or cardiology experiences in intensive care and cardiac care units. Residents will obtain substantial additional cardiology experience throughout the three years of experience in the family medicine center, on their family medicine service and internal medicine rotations. It would be a reasonable goal during this time to accomplish proficiency in ECG interpretation and cardiopulmonary resuscitation.

Family medicine trainee electing additional training in cardiology, particularly residents who are planning to practice in communities without readily available consultation resources, may require skills for which additional training in a structured cardiology education program is strongly recommended. Longitudinal experience in the center for family medicine and on the family medicine hospital service should add experiences in

ECG interpretation, stress testing, coronary care and continued follow-up of patients with cardiovascular problems.

ANNEX 5.11

Obstetrics & Gynecology

Women's health care addresses the unique, multidisciplinary aspects of issues affecting women. In providing a wide range of medical services, the family physician is required to provide preventive care, diagnosis of general medical illnesses, disease processes unique to women and management and treatment of women and their families.

Previous gaps in the scientific knowledge base concerning women's health care are being addressed by research efforts now studying disorders that manifest differently or exclusively in women.

Preamble

As the role of women in society has changed over the last several decades, health care for women has also evolved. Women are no longer excluded from general scientific research and their unique health care issues are being studied and addressed. Family physicians must be trained to care for women throughout the life cycle and must appreciate challenges such as adolescence, sexuality, balance of family life and career, parenting, relationships and aging within the female patient's culture.

The difference between male and female communication styles must be part of the curriculum for different-gender patient encounters in family medicine training. Women seek health care more often than men and want a physician who will listen, provide patient-centered care and treat them with respect when discussing sensitive issues. Psychological disorders are more common in women.

Health promotion, including screening, counseling, immunizations and chemoprophylaxis, is a foundation of family medicine. Genitourinary, menstrual problems, reproductive issues and breast health are also unique aspects of women's primary care. The psychological and physiologic changes of both pregnancy and menopause contribute to challenges for women in many aspects of their lives, requiring clinical skills on the family physician's part to provide education, diagnostic testing when appropriate and treatment that is safe and effective.

Throughout the life cycle, female patients often present their medical problems differently from men. Lifelong learning of the unique features of women's health issues must be an integral part of training for all family physicians. Women are living to an advanced age more frequently than their male partners, so that cognitive, affective and functional assessments, as well as end-of-life discussions are important aspects of care.

This Curriculum Guideline provides an outline of the attitudes, knowledge and skills that family physicians should attain during residency training to provide high quality care to their female patients.

The trainee should be able to demonstrate:

1. Core knowledge of physiology, basic anatomy and biochemistry is essential to understand pregnancy related changes and complications. Early detection of symptoms related to complications of medical disorders in pregnancy may benefit them to advise the patient and to take necessary actions.
2. Core knowledge of physiology in menstruation
3. Initial medical management of abnormal bleeding and referral to institution to exclude pathological causes should be highlighted.
4. Knowledge of adolescent gynaecology and post reproductive problems
5. Knowledge of cervical cancer prevention by Pap smears
6. Knowledge of family planning
7. Knowledge on normal pregnancy, delivery, complications and operative deliveries
8. Skills to perform a proper abdominal and bi manual examination
9. Speculum examination
10. Safe placement and removal of an IUCD
11. Taking high vaginal swabs for investigations
12. Taking Pap smears
13. Any other relevant procedure in gynaecology (should be observed during the training period).

Skills in obstetrics should include examination of an obstetric patient. All other procedures in obstetrics should be observed only. Complications in labour and postpartum are seen in medical institutions and not at the community level.

ANNEX 5.12

Rheumatology

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies defined by the BOS in Family Medicine.

Preamble

Family physicians encounter a significant number of rheumatologic problems in the course of practice. Millions of work days are lost per year due to conditions such as osteoarthritis, rheumatoid arthritis and low back pain. The morbidity of arthropathies results in numerous hospitalizations annually.

Each family medicine trainee should be aware of the impact of this group of diseases on the patient and the family and be capable of performing a history and physical examination with special attention to the musculoskeletal system. The trainee should be able to perform appropriate laboratory tests and basic diagnostic procedures and to initiate a management and therapeutic plan for patients who have these diseases.

Given the number of patients, primary care physicians cannot rely on referral to rheumatologists to identify, diagnose and manage this growing health need. The family medicine physician is an integral part of the health care team that needs to recognize the importance of early diagnosis, treatment and holistic care of the rheumatologic patient. As

part of a comprehensive treatment plan, family physicians need competency in assessing patient understanding of the disease and how to participate in the treatment plan through self-management skills.

Family medicine physicians need to continually update their clinical knowledge given the new advances in rheumatologic diagnosis and treatments. The rheumatologic patient requires full-spectrum care that emphasizes the use of appropriate disease modifying agents and identifying when physical, occupational and rehabilitative therapy are necessary. Because family physicians focus on comprehensive treatment, they have the unique skills to meet the demands of rheumatologic patients.

Competencies

At the completion of residency training, a family medicine resident should:

- Competently perform diagnostic, therapeutic and rehabilitative examination and treatment of the rheumatologic patient. (Medical Knowledge, Patient Care)
- Optimize treatment plans with consultation of the local rheumatologist and arthritis resources that include local, state and federal agencies. (Systems-based Practice, Practice-based Learning)
- Demonstrate comprehensive, culturally competent communication with each patient and his or her family in order to ensure clear understanding of the diagnosis, treatment and rehabilitation. (Interpersonal Skills, Communications, Patient Care)
- Recognize that the treatment of rheumatologic diseases requires a multidisciplinary approach and when necessary, may also require urgent referral and consultation to provide optimal patient care and decrease disability. (Medical Knowledge, Systems based Practice, Practice-based Learning)
- Practice a multidisciplinary approach for rheumatologic patients that emphasize the collaborative use of, physiotherapist, occupational therapist, orthotist, mental health professionals and patient self management skills. (Medical Knowledge, Systems-based Practice)
- Recognize the need and when to refer a patient to a Consultant rheumatologist/ Orthopedic surgeon
- Recognize and emphasize the importance of preventative medicine and physical activity prescriptions that ultimately decrease the disability attributable to rheumatologic disease. (Interpersonal Skills, Communication, Practice-based Learning, Systems-based Practice)
- Practice lifelong learning that incorporates diagnostic and therapeutic skills. (Medical Knowledge)

Attitudes

The resident should demonstrate attitudes that encompass:

- The recognition of the increased health care utilization and potential disability of rheumatic diseases.
- Support of each patient to reach his or her maximum function with minimal disability.
- Taking into account the direct and indirect costs of rheumatic diseases (including treatment, supportive care and burden for patient's family).
- The recognition of how family, psychological and environmental variables impact health status.
- Endorsement of the multidisciplinary approach for the control of rheumatic disease and promotion of function.

- The recognition that each patient's cultural background can impact proposed treatment plans and future disability.

Knowledge

In the appropriate setting, the resident should demonstrate the ability to apply knowledge of:

1. Anatomy and physiology of the normal musculoskeletal system and the immunologic processes that contribute to the pathogenesis of rheumatic disease
2. The appropriate focused history for joint and soft tissue symptoms, screening, a complete musculoskeletal examination, functional assessment and use of laboratory and imaging modalities:
 - a. Indications for and interpretation of arthrocentesis
 - b. Indications for and interpretation of tissue biopsy results
 - c. Indications for arthroscopy
3. The clinical presentation, diagnostic criteria and initial treatment for various rheumatologic conditions with special emphasis on osteoarthritis, gout, rheumatoid arthritis, Systemic lupus erythematosus and polymyalgia rheumatica:
 - a. Arthralgia
 - i. Osteoarthritis (OA) including primary and secondary. Cervical and Lumbar spondylosis
 - ii. Rheumatoid arthritis (RA) with manifestations of articular, extra-articular and juvenile forms
 - iii. Spondyloarthritis
 - 1). Ankylosing spondylitis
 - 2). Reiter's disease (Reactive arthritis)
 - 3). Psoriatic arthritis
 - 4). Arthritis associated with inflammatory bowel disease
 - iv. Infections that cause direct and indirect forms of arthritis
 - 1). Acute rheumatic fever
 - 2). Subacute bacterial endocarditis
 - 3). Post-dysenteric and post venereal (Reactive arthritis)
 - v. Crystal-induced arthropathies
 - 1). Gout
 - 2). Steroid crystal induced arthritis following injection of joints
 - 3). Calcium pyrophosphate dihydrate (pseudogout)
 - 4). Hydroxyapatite deposition
 - vi. Neoplasms that cause arthropathies
 - vii. Drug-induced
 - b. Soft Tissue rheumatism
 - i. Shoulder
 - 1). Rotator cuff tendinitis
 - 2). Adhesive capsulitis (frozen shoulder)
 - 3). Bursitis
 - ii. Elbow
 - 1) Lateral epicondylitis (tennis elbow)

- 2) Medial epicondylitis (Golfer's elbow)
- iii. Hand and wrist
 - 1) De Quervain's tenosynovitis
 - 2) Carpal tunnel syndrome
 - 3) Tenosynovitis of the flexor tendons (Trigger finger)
- iv. Heel –
 - 1) Plantar fasciitis
 - 2) Tendo Achilles tendinitis
- c. Connective tissue disorders
 - i. Lupus erythematosus (LE) with various presentations (including systemic - SLE, discoid and drug-induced)
 - ii. Scleroderma with various presentations (including localized, systemic and drug/toxin-induced)
 - iii. Polymyositis and dermatomyositis and their relationship to connective tissue disorders as distinguished from drug-induced myositis
 - iv. Sjögren's syndrome (primary and secondary)
 - v. Polymyalgia rheumatica
 - vi. Mixed Connective tissue diseases
- d. Anti-phospholipid syndrome
- e. Vasculitis
 - i. Polyarteritis nodosa
 - ii. Microscopic polyangiitis
 - iii. Hypersensitivity angiitis
 - 1). Serum sickness
 - 2). Henoch-Schönlein purpura
 - iv. Granulomatous arteritis
 - 1). Wegener's granulomatosis
 - 2). Giant Cell (temporal) arteritis
 - v. Kawasaki disease
 - vi. Behcet's disease
- f. Regional rheumatic pain syndromes
 - i. Bursitis
 - ii. Tendinitis and tendinosis
 - iii. Low back pain
 - iv. Costochondritis
 - v. Chondromalacia patellae
 - vi. Compression
 - 1). Peripheral entrapment (e.g., carpal tunnel)
 - 2). Radiculitis and radiculopathy
 - 3). Spinal stenosis
 - vii. Raynaud's phenomenon
 - viii. Complex regional pain syndrome
- g. Others
 - i. Osteopenia and osteoporosis

- ii. Osteomalacia
 - iii. Paget's disease
 - iv. Avascular necrosis
 - v. Relapsing panniculitis (Weber-Christian disease)
 - vi. Erythema nodosum
 - vii. Sarcoidosis
 - viii. Adult Still's disease
 - ix. Fibromyalgia and chronic fatigue syndrome
4. The indications, laboratory and exam monitoring, potential side effects and contraindications of pharmacologic agents for analgesia, anti-inflammation disease modification and immunosuppression.
- a. Define the mechanism of action of different analgesic and NSAID medications (including acetaminophen, COX 2 inhibitors, tramadol and narcotics)
 - b. List the mechanisms of the different synthetic disease modifying agents – DMARDs (including methotrexate, sulfasalazine, antimalarials, methotrexate and Leflunomide)
 - c. List the mechanism of action of different biologic Disease Modifying agents DMARDs such as anti-tumor necrosis factor, IL-1 receptor antagonists. IL-6 receptor antagonists and anti B cell therapy)
 - d. List the indications for use of local and systemic preparations of corticosteroids in different rheumatic conditions
 - e. Describe the use of uric acid lowering agents for the treatment and prevention of acute gouty arthritis
 - f. Describe the role of antibiotics in the treatment of rheumatic conditions
 - g. List the various medications and special circumstance for each agent in the treatment of osteoporosis
5. The use of rehabilitation services for joint mobilization, physical conditioning, and modalities for different stages of rheumatologic conditions to promote function and prevent physical disability
6. A multidisciplinary approach to the treatment of rheumatologic conditions that utilizes expertise resources (including a rheumatologist, physiotherapist, occupational therapist, orthotist, orthopedic surgeon and mental health provider) for optimal patient care
7. Complementary therapies and modalities available to rheumatic conditions (including acupuncture)
8. Disability prevention in rheumatologic conditions which includes appropriate general health maintenance with attention to necessary vaccinations, appropriate weight maintenance with nutrition and exercise counseling, and attention to controlling other co-morbid medical conditions.
9. A basic knowledge on the acute management and the rehabilitation of injuries related to sports.

Skills

In the appropriate setting, the resident should demonstrate the ability to independently perform or appropriately refer:

1. The basic elements of a rheumatic assessment including a targeted history, Musculo-skeletal examination (especially the cervical spine, lumbar spine, shoulder, hand, hip, knee, ankle and the foot) and functional assessment.
2. Development of a differential diagnosis based on the pattern of joint and soft tissue involvement such as symmetrical small joints, non-symmetrical large joints and axial skeleton.
3. The ordering of appropriate laboratory tests based on initial evaluation and interpretation of the results.
4. Joint and bursal aspirations and interpretation of results for crystal, inflammatory or infectious causes.
5. The ordering of appropriate imaging views (such as plain X-rays, Ultrasound scans, CT and MRI) of involved joints and interpretation of results with emphasis on soft tissue changes and early erosive changes.
6. The indications and the interpretation of the DEXA scan in Osteoporosis.
7. Evaluation of limitations in activities of daily living and affect on social and psychological status of the patient.
8. Recognition of urgent joint conditions such as “the red hot joint” and performing appropriate synovial fluid aspiration and analysis.
9. Treatment of rheumatologic conditions and the monitoring of the laboratory, physical exam and potential side effects in consultation with a rheumatologist.
10. Prescribing anti-rheumatic drugs for the elderly.
11. The use of many modalities for pain control (including oral pharmacologic agents, physical therapy, acupuncture and intra-articular and soft tissue aspirations and injections.
12. The utilization of traditional treatment modalities (including physical therapy, Splinting devices and assistive or offloading devices).
13. Communication to the patient and family regarding the proposed investigation, treatment and community resources available to promote understanding and compliance for optimal patient care.
14. A focused history, musculoskeletal exam and laboratory evaluation to evaluate disease progression.
15. The importance of referring patients with early inflammatory arthritis to the consultant Rheumatologist (early arthritis clinics)
16. The inclusion of a multidisciplinary approach to the treatment of rheumatologic conditions and appropriate referral to orthopedic surgeons, rheumatologists, Physiatrists, psychologist or psychiatrists, nutritionists and physical and occupational therapists.

Implementation

The implementation of this Curriculum Guideline should be longitudinal throughout the resident's experience and may include block experiences in specialty offices that focus on rheumatic conditions. The residency library should be continually updated with reference materials that cover topics in these educational guidelines. The curriculum guidelines should be integrated into the schedule of conferences and other teaching modalities, such as monographs, films and consultations. Assessment should be made of a resident's competency with diagnostic and therapeutic procedures. The resident should gain hands-on experience by being involved in the management of this group of diseases which emphasizes disability prevention and patient self-management skills.

ANNEX 5.13

Care of the Critically Ill - Adult

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies defined by BOS in FM.

Knowledge will be gained by caring for ambulatory patients who visit the family practice clinics.

Preamble

Family physicians are the most broadly trained specialists in the health care profession.

Therefore, critical care continues to be part of the training and responsibilities of the family physician. There is a need for family physicians to be able to provide care to the critically ill adult, especially in rural areas and in smaller hospitals. The depth of the critical care experience for each resident will depend upon the expected practice situation of the resident, including the practice location, available facilities and accessibility of subspecialist consultants.

Family physicians caring for hospitalized adult patients require skills and knowledge in ascertaining signs, symptoms and laboratory abnormalities of the critically ill. They must become adept in the diagnosis and management of such cases, as well as acquire the ability to coordinate the chronological flow of care in the hospital (from admission to discharge) and take into consideration the psychosocial issues applicable to each individual patient and his or her caregivers.

Preventive medicine, which has traditionally played a key role in ambulatory care, has become an important component in critical care. Strategies have emerged to prevent deep venous thrombosis, maintain euglycemia and prevent hospital-acquired infections.

These infections burden the health care system both economically and in terms of patient outcomes. Inpatient quality and safety measures are being promulgated and evidence-based medicine (EBM) is the ideal approach to management of critically ill patients.

With adequate training and preparation, trainees can acquire skills to provide best practices from admission through discharge and care transitions, leading to safer, patient-centered, cost-efficient quality care.

Competencies

At the completion of pre MD training, a family doctor should:

- Be able to perform standardized comprehensive critical care assessments and develop acute treatment plans. (Patient Care, Medical Knowledge)
- Be able to optimize treatment plans using a systematic approach to medical decision-making and patient care, combining scientific evidence and clinical judgment with patient values and preferences. Knowledge should be evidence based and from nationally recognized resources. (Systems-based Practice, Performance-based Learning, Improvement)
- Coordinate admissions, inpatient care and throughout within the hospital system. (Systems-based Practice)
- Demonstrate the ability to communicate in multiple modalities with patients, families, other health care providers and administrators. Effective communication is central to the role of the family physician to promote efficient, safe and high quality care. (Interpersonal Communication, Professionalism)

- Recognize self limitations with regards to practice and seek consultation with other health care providers to provide optimal care. Assess medical information to support self-directed learning (Medical Knowledge, Practice-based Learning, Improvement)
- Demonstrate compassion, empathy and sensitivity towards hospitalized patients and appreciate that informed adults with decision-making capacity may refuse recommended medical treatment. (Professionalism)

Attitudes

The trainee should demonstrate attitudes that encompass:

- An ability to balance working quickly and effectively in acute critical care situations as well as maintaining vigilant care oversight of patients needing longer term care in the critical care unit.
- The recognition that appropriate subspecialist physician consultation is important in the care of the critically ill adult.
- The capacity to communicate effectively and work well with all members of the health care team.
- Compassionate sensitivity to and appropriate support of the needs of the family members of the critically ill adult while communicating effectively with them.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

1. The underlying physiologic changes in the various body systems, including diminished homeostatic abilities, altered metabolism, effects of drugs and other changes relating to the critically ill patient.
2. The conditions encountered in the hospital setting that are significantly life threatening or likely to have significant impact in changing care processes leading to quality improvement and efficiency.
3. The unique modes of presentation of critically ill patients, including altered and nonspecific presentations of diseases.
4. The financial aspects of critical care and the mechanisms by which medical innovations influence health care patterns and decisions.
5. The processes and systems of care that span multiple disease entities and require multidisciplinary input to create quality care and efficiency.
6. The processes and communication required for the safe transition of patients from one clinical setting to another.
7. The formulation of pretest probability using initial history, physical examination and preliminary diagnostic information when available, as well as the relevance of sensitivity and specificity in interpreting diagnostic findings.
8. The evaluation of benefits, harms and financial costs of drug therapies for individual patients as well as recognition of risks of adverse drug events at the time of transfer of care. Reconciliation of documentation of medications at the time of discharge.
9. Equitable health resources for patients and the recognition that over-utilization of resources may not promote patient safety, quality care or satisfaction.
10. The relationship between value, quality, cost and incorporating patient wishes into optimal health care.
11. The sources for the best available evidence to support clinical decisions and process improvements at the individual and institutional level.
12. Advocacy for provision of high quality point-of-care EBM information resources within the institution.
13. The role played by an assisting subspecialist consultant in promoting improved care, optimized resource utilization and enhanced patient safety.

14. The access and interpretation of data, images and other information from available clinical information systems.
15. The use of methods and materials to educate, reassure and empower patients and families to participate in the creation and implementation of a care plan.
16. The clinical practices and interventions that improve patient safety and the effects of recommended interventions across the continuum of care.
17. The common types of health care-associated infections, including the risk factors.
18. The use of hospital antibiogram in delineating antimicrobial resistance patterns and the major resources for infection control information.
19. Medical practice conduct to ensure risk management.
20. The following clinical conditions that are relevant to management of the critically ill adult:
 - a) Basic science review:
 - i. Circulation
 - ii. Respiration
 - b) Renal disease and metabolic disorders:
 - i. Renal failure
 - ii. Oliguria
 - iii. Acid-base
 - iv. Electrolyte abnormalities
 - c) Cardiovascular conditions:
 - i. Acute coronary syndromes
 - ii. Cardiopulmonary arrest
 - iii. Dysrhythmias
 - iv. Hypertensive urgency and emergency
 - v. Heart failure
 - vi. Cardiac pulmonary edema
 - d) Endocrine:
 - i. DKA
 - ii. Thyroid storm
 - iii. Hyperosmolar nonketotic coma
 - iv. Adrenal dysfunctions
 - v. Other endocrine emergencies
 - e) Hematologic:
 - i. Bleeding disorders
 - ii. Coagulopathies
 - iii. Transfusion therapy and reactions
 - iv. Venous thromboembolic disease
 - f) Gastrointestinal:
 - i. Acute abdomen
 - ii. Gastrointestinal bleeding
 - iii. Hepatic failure
 - iv. Pancreatitis
 - g) Pulmonary:
 - i. Respiratory failure
 - ii. ARDS
 - iii. Pulmonary embolism
 - iv. Pneumonia
 - v. Pulmonary hypertension
 - vi. Severe airflow obstruction

- h) Neurological:
 - i. Coma
 - ii. Mentation disorders
 - iii. Cerebral vascular accidents
 - iv. Meningitis
 - v. Encephalitis
 - vi. Brain and spinal cord trauma and disease
 - vii. Seizures
 - viii. Movement disorders
 - ix. Neurological emergencies
 - x. Analgesia
 - xi. Sedation
- i) Infectious disease:
 - i. Sepsis
 - ii. Antimicrobial therapy
 - iii. Immunocompromised patients
 - iv. *Clostridium difficile* and *pseudomembranous* colitis
- j) Multisystem:
 - i. Shock
 - ii. Hypothermia
 - iii. Hyperthermia
 - iv. Rhabdomyolysis
 - v. Multisystem organ failure
 - vi. Overdose and poisonings
 - vii. Alcohol and drug withdrawal
 - viii. Trauma
 - ix. Thermal injury
- k) Perioperative care:
 - i. preoperative clearance
 - ii. Preoperative antibiotic therapy
 - iii. Postoperative management (pain, glycemic control, antibiotics)
- l) Preventative practices:
 - i. Alimentary
 - ii. Infection control
 - iii. Venous thromboembolism
 - iv. Decubitus ulcers
- m) Nutrition and metabolism:
 - i. Metabolic requirements
 - ii. Enteral and parenteral feeding
- n) Coexisting conditions:
 - i. Obesity
 - ii. Pregnancy
 - iii. Elderly
- o) End-of-life:
 - i. Palliative care
 - ii. Hospice evaluation
 - iii. Life support
 - iv. Organ donation and transplantation
 - v. Pronouncement of death

Skills

In the appropriate setting, the trainee should demonstrate the ability to independently perform or appropriately refer:

1. Obtaining a comprehensive history and physical examination in the hospital setting.
2. Appropriate selection, interpretation and performance of diagnostic procedures.
3. Developing problem lists in practical, clinical, functional, psychological and social terms.
4. Setting appropriate priorities and limitations for investigation and treatment.
5. Performing the basic elements of the ACLS protocol and procedures:
 - a) Cardioversion
 - b) Electrical and chemical
 - c) External temporary pacemaker application
 - d) Electrocardiogram interpretation
 - e) Obtaining vascular access
6. Performing ATLS as needed, including:
 - a) Thoracocentesis
 - b) Paracentesis
 - c) Arterial blood gas
 - d) Central venous access via jugular, subclavian and femoral veins
7. Ventilator management, including:
 - a) X-ray interpretation
 - b) Non-invasive and invasive ventilation
 - c) Issues in sedation, paralytic agents and airway management
 - d) Ventilator failure
 - e) Weaning from ventilator support
8. Diagnostic and therapeutic procedures:
 - a) ABGs
 - b) Lumbar puncture
 - c) Thoracocentesis
 - d) Arthrocentesis
 - e) Paracentesis abdominis
 - f) Catheter placement (arterial line or central venous access)
9. Glasgow Coma Scale assessment, CIWA scale (alcohol withdrawal)
10. Management of patient monitoring information and technology
11. Utilizing the multidisciplinary approach with regards to patient education, quality improvement, transition of care.
12. Coordinating a range of services appropriate to the patient's needs and support systems.
13. Appropriate communication with patients and/or caregivers regarding the proposed investigation and treatment plans in such a way as to promote understanding, compliance and appropriate attitudes.
14. Dealing with ethical issues in the terminally ill to include:
 - a) Decision-making capacity
 - b) Euthanasia
 - c) Health care rationing
 - d) Palliative and end-of-life care

Implementation

Implementation of this curriculum should be obtained in rotations in the intensive care and critical care units, as well as in related rotations such as cardiology, neurology, gastroenterology and surgery. Trainees will obtain substantial additional experiences

throughout by way of longitudinal experience. Physicians who have demonstrated skills in caring for critically ill adults and who are proficient in hospital medicine should be available to act as role models and consultants for the trainees.

These physicians should be available to give support and advice to trainees in the management of their own patients. A multidisciplinary approach is an appropriate way of structuring teaching experience in this area.

The trainee must have responsibility for critically ill adult patients and be active in the decision making process. A significant number of intensive care and critical care patients should be a part of each resident's panel of patients. It should be required that the resident have the experience of continuing the care of these patients upon discharge to either home, sub acute rehabilitation facilities, long-term care facilities, assisted living facilities and/or the ambulatory setting (i.e. the family medicine center).

ANNEX 5.14

Emergency Medicine

Cardio-Respiratory Arrest

The trainee will have full competence in the assessment and resuscitation of the patient who has suffered a cardio-respiratory arrest, as defined by BOS FM

1. Demonstrate knowledge of causes of cardio-respiratory arrest
 2. Recall the ALS algorithm for adult cardiac arrest
 3. Outline indication and safe delivery of drugs used as per ALS algorithm
 4. Rapidly assess the collapsed patient in terms of ABC, airway, breathing and circulation
 5. Perform Basic Life Support competently as defined by Resuscitation Council (UK): effective chest compressions, airway manoeuvres, bag and mask ventilation
 6. Competently perform further steps in advanced life support: IV drugs; safe DC shocks when indicated; identification and rectification of reversible causes of cardiac arrest)
 7. Break bad news appropriately (see generic curriculum) PACES, ACAT,
 8. Recognise and intervene in critical illness promptly to prevent cardiac arrest such as peri-arrest arrhythmias, hypoxia
 9. Maintain safety of environment for patient and health workers
- Appropriate referral

Patient in a state of Shock

The trainee will be able to identify a shocked patient, assess their clinical state, produce a list of appropriate differential diagnoses and initiate immediate management

1. Identify physiological perturbations that define shock
2. Identify principle categories of shock (i.e. cardiogenic, anaphylactic)
3. Elucidate main causes of shock in each category (e.g. MI, heart failure, PE, blood loss, sepsis)
4. Demonstrate knowledge of sepsis syndromes
5. Recognise significance of major physiological perturbations
6. Perform immediate (physical) assessment (A,B,C)
7. Institute immediate, simple resuscitation (oxygen, iv access, fluid resuscitation)
8. Arrange simple monitoring of relevant indices (oximetry, arterial gas analysis) and vital signs (BP, pulse & respiratory rate, temp, urine output)
10. Order, interpret and act on initial investigations appropriately: ECG, blood cultures, blood count, electrolytes
11. Exhibit calm and methodical approach to assessing critically ill patient
12. Adopt leadership role where appropriate

13. Involve senior and specialist (e.g. critical care outreach) services promptly

Unconscious Patient

The trainee will be able to promptly assess the unconscious patient to produce a differential diagnosis, establish safe monitoring, investigate appropriately and formulate an initial management plan, including recognizing situations in which emergency specialist investigation or referral is required.

1. Identify the principal causes of unconsciousness (metabolic, neurological)
2. Recognise the principal sub causes (drugs, hypoglycaemia, hypoxia; trauma, infection, vascular, epilepsy, raised intra-cranial pressure, reduced cerebral blood flow, endocrine)
3. List appropriate investigations for each
4. Outline immediate management options
5. Make a rapid and immediate assessment including examination of coverings of nervous system (head, neck, spine) and Glasgow Coma Score
6. Initiate appropriate immediate management (A,B,C, cervical collar, administer glucose)
7. Take simple history from witnesses when patient has stabilized
8. Prioritize, order, interpret and act on simple investigations appropriately
9. Initiate early (critical) management (e.g. control fits, manage poisoning) including requesting safe monitoring
10. Recognize need for immediate assessment and resuscitation
11. Assume leadership role where appropriate
12. Involve appropriate specialists to facilitate immediate assessment and management (e.g. imaging, intensive care, neurosurgeons)
13. Involve appropriate specialists to facilitate immediate assessment and management (e.g. imaging, intensive care, neurosurgeons)

Anaphylaxis

The trainee will be able to identify patients with anaphylactic shock, assess their clinical state, produce a list of appropriate differential diagnoses, initiate immediate resuscitation and management and organize further investigations.

1. Identify physiological perturbations causing anaphylactic shock
2. Recognize clinical manifestations of anaphylactic shock
3. Elucidate causes of anaphylactic shock
4. Define follow-up pathways after acute resuscitation.
5. Recognize clinical consequences of acute anaphylaxis
6. Perform immediate physical assessment (laryngeal oedema, bronchospasm, hypotension)
7. Institute resuscitation (adrenaline/epinephrine), oxygen, IV access, fluids)
8. Arrange monitoring of relevant indices
9. Order, interpret and act on initial investigations (tryptase, C1 esterase inhibitor etc.)
10. Be an ALS provider
11. Exhibit a calm and methodical approach
12. Adopt leadership role where appropriate
13. Involve senior and specialist allergy services promptly

ANNEX 5.15

Chest Medicine

Knowledge

1. History and examination of a patient presenting with chronic Cough (Cough with purulent expectoration and / or) and haemoptysis
2. Diagnosis and treatment of pulmonary TB
3. Management of bronchial asthma
4. Management of COPD
5. Management of restrictive lung diseases

Skills

1. Interpretation of chest X- rays
2. Inhaler techniques
3. Nebulization
4. Interpretation of a spirometry tracing
5. Reading Mantoux test
6. Preparation of a patient for bronchoscopy

ANNEX 5.16

STI/HIV Infection/AIDS

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees in MD. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies described in the prospectus,

Most of the trainees knowledge will be gained by caring for ambulatory patients who visit the family practice clinics.

Sexually transmitted infections (STIs) are infections that are spread primarily through person-to-person sexual contact. There are more than 30 different sexually transmissible bacteria, viruses and parasites.

The most common conditions they cause are gonorrhoea, chlamydial infection, syphilis, trichomoniasis, chancroid, genital herpes, genital warts, human immunodeficiency virus (HIV) infection and hepatitis B infection.

Several, in particular HIV and syphilis, can also be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer.

Preamble

Physicians' ultimate concern is the welfare of the patient. The patient's age, background or illness may call for different approaches to care, but appropriate history and physical examination skills, as well as the social and psychological aspects of care are integral parts of physician training.

The pandemic of human immunodeficiency virus (HIV) infection is of vital concern to family physicians, and the diverse population served by family physicians provides a unique opportunity for patient education and prevention. Family physicians are well suited to counsel patients about prevention of HIV infection and to care for those who are infected, including provision of antiretroviral therapy. The basic tenets of family medicine emphasize a compassionate, whole-person approach to patient care, the application of specific knowledge and skills to a wide variety of disease entities, and a comprehensive and continuous commitment to patients and their families. Drawing on these core tenets, family physicians have an important role to play in the care of HIV-infected individuals, especially now as care of HIV-positive individuals continues to transition toward a chronic disease model. Family

physicians should be knowledgeable about the multiple issues related to the care of patients who have HIV disease and the acquired immunodeficiency syndrome (AIDS), and must develop skills to stay abreast of new developments in the treatment of patients who have HIV infection.

These guidelines are intended to assist in the development of a STI/HIV/AIDS curriculum for family medicine residencies. Because the knowledge base and technology related to STI/HIV/AIDS are rapidly changing, family physicians must also be aware of the resources available to maintain updated information and skills.

Competencies

At the completion of pre MD training, a family doctor should:

- Recognize STI/HIV risk factors to actively counsel patients regarding prevention, testing, diagnosis, treatment and management. (Medical knowledge)
- Recognize symptoms of STI/HIV syndrome and appropriately diagnose and treat this infection.
- Synthesize an appropriate diagnosis and management plan for conditions associated with STI/HIV infection/ and AIDS. (Patient care & Medical knowledge)
- Optimize treatment plans based on knowledge of local STI/HIV care resources that include local, state and NGO agencies. (Medical knowledge)
- Communicate effectively with patients to ensure clear understanding of diagnosis and plan of care. (Interpersonal communications)
- Recognize own practice limitations; seek consultation from other health care providers and resources to provide optimal patient care. (Professionalism, systems-based care)
- Understand the legal, ethical and social context of HIV, and its impact on the care of special populations. It is especially important for the resident to understand forms of STI/HIV stigma that exist in the community where they are working. (Professionalism)

Attitudes

The trainee should develop attitudes that encompass:

- An awareness of the importance of the physician's own attitudes toward sexuality, intravenous drug abuse, cultural differences, communicable diseases, and death.
- The willingness to obtain appropriate sexual and drug histories from all.
- An understanding of the importance of quality-of-life issues.
- Compassion and objectivity when dealing with patients who have a chronic and potentially life-threatening illness.
- Recognition of one's professional abilities and recognizing when they will need to obtain specialist consultation.
- A willingness to function in the role of coordinator of medical and non-medical services.
- Recognition of the importance of support from family members and others.
- Acceptance of the physician's continuing responsibility to support the patient and family throughout all stages of the illness.
- An awareness of the importance of setting a positive example for other health care providers and the community.

An awareness of community and cultural attitudes toward the illness and the need for confidentiality as well as STI/HIV disclosure when appropriate.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

A. General considerations

1. Scientific background
 - a. Aetiology STI/ HIV and patho-physiology
 - b. Immunodeficiency manifestations and complications of HIV

- c. Epidemiology
 - i. Local, regional, national, global prevalence and incidence
 - ii. Disproportionate prevalence in minorities, adolescents and women
 - iii. National shift toward heterosexual contact-driven epidemic
- d. Modes of transmission
 - i. Unprotected sexual contact
 - ii. Intravenous drug use
 - iii. Vertical transmission from mother to child (e.g., intrauterine, intra-partum, postpartum, breast-feeding)
 - iv. Other exposure to human body fluids (e.g., blood and blood products, needle sticks, etc., including transmission in the health care setting)
- 2. Definitions
 - a. Centers for Disease Control and Prevention (CDC) HIV classification
 - b. World Health Organization (WHO) HIV classification
- 3. Laboratory testing
 - a. Type of test
 - b. Indications for testing
 - i. Risk assessment and recommendations for voluntary testing
 - Universal prenatal testing recommendations
 - Universal testing recommendations for high-risk patients
 - ii. Clinical assessment
 - Sexually transmitted infections including HIV
 - Acute retroviral syndrome
 - Asymptomatic chronic HIV infection
 - Symptomatic chronic HIV infection
 - Non-life threatening infections and symptoms suggestive of HIV infection
 - AIDS-defining illnesses
 - iii. Public health surveillance
 - iv. Mandatory testing regulations

B. Clinical manifestations

Opportunistic infections in HIV: candidiasis; *pneumocystis jirovecii* pneumonia (PCP); cryptococcosis; cryptosporidiosis; histoplasmosis; cytomegalovirus infections (CMV); herpes simplex and herpes zoster; non-tuberculous Mycobacterial infection; Mycobacterium tuberculosis; toxoplasmosis; candida infections; recurrent bacterial infections; progressive multifocal leuko-encephalopathy (PML).

HIV-associated malignancies: (e.g., Kaposi's sarcoma and lymphoma)

Special presentations in pregnant and non-pregnant women: cervical cancer, cervical and vulvar/vaginal dysplasia, vaginal infections, breast cancer

Hepatitis A, B and C

Anal dysplasia and neoplasia

Other sexually transmitted infections (STIs). Increased risk for cardiovascular disease events, non-HIV associated tumors, and liver disease

C. Treatment and patient-care issues

- 1. Pharmacologic management
- 2. Knowledge of the range and limitations of services available both in ambulatory and inpatient care
- 3. Characteristics of rehabilitation; long-term and alternative care; housing needs
- 4. Collaboration with consultants
- 5. Availability of government STI clinics

D. Psychosocial and ethical issues

Physician responsibility and patient abandonment
Death and dying
Individual rights versus society rights
Confidentiality and record keeping
Concurrent polysubstance abuse, psychiatric comorbidities
Sexual practices and orientation; gender identification
Patient competence determination, conservatorship and durable power of attorney
Family resources and contributions
Impact on family

E. Legal issues

1. Confidentiality of medical records
Disclosure of HIV status to 3rd parties
Local laws regarding HIV disclosure
2. Special considerations for health care providers
Occupational risks and occupational post-exposure prophylaxis for exposure to HIV
Specific psychosocial and ethical issues
Impairment and work-related disability
Post-exposure prophylactic protocols
Post-exposure prophylactic treatment recommendations

Skills

In the appropriate setting, the trainee should demonstrate the ability to independently perform or appropriately refer:

1. Evaluate

- a. Take patient's sexual and substance use history and perform risk factor assessment
- b. Perform a comprehensive physical examination
- c. Select appropriate diagnostic procedures
- d. Interpret the results of testing
- e. Set appropriate priorities with patient, family and friends
- f. Investigate common symptoms (fever, cough, diarrhea)
- g. Recognize life-threatening conditions (e.g., severe hypoxia, cytomegalovirus retinitis, drug overdose)
- h. Know which baseline laboratory or screening tests are (e.g., latent TB infection, HAV, HBV and HCV titers, toxoplasmosis, syphilis, Pap smears, chest x-rays, appropriate laboratory analyses for acid-fast bacterial infections, common bacterial infections, viral and fungal infections, lipid profiles, metabolic analyses, blood count analyses, endocrine analyses, routine primary care prevention measures, etc.)

2. Prevent

- a. Provide health education and preventive counseling
- b. Counsel HIV-positive individuals and contacts regarding risk of virus transmission
- c. Consult with community groups and lead group discussions about risks of HIV transmission
- d. Perform prenatal testing for all women
- e. HIV prevention counseling in high-risk groups
- f. Be informed about and comply with institutional protocols for the protection of employees

3. Manage

- a. Formulate a problem list and prioritize a management plan

- b. Provide appropriate therapy
 - c. Utilize and coordinate appropriate consultants and resources
 - d. Coordinate ambulatory, inpatient and long-term care
 - e. Counsel patients and significant others appropriately about testing and test results, therapeutic modalities and prognosis
 - f. Provide competent palliative/end-of-life care in AIDS
 - g. Manage occupational and non-occupational HIV exposure per guidelines
- 4. Community involvement**
- a. Interact with and assume leadership in medical, social and political communities
 - b. Provide education about HIV infection and AIDS in medical, social and political settings (including middle schools, high schools, colleges and churches)
- 5. Use online and Internet resources to obtain current HIV/AIDS treatment guidelines**

Implementation

Within the capabilities of the residency program, the implementation of these curriculum guidelines is best achieved with the use of outside resources, when necessary.

Residents should have basic knowledge and skills to care appropriately for their own patients and to serve as a community resource for information about HIV-related issues. Any training efforts must also strive to maintain an up-to-date curriculum that includes recent medical advances.

Precise details of implementation may vary among residency programs, depending on interest levels and the frequency of contact with HIV-positive patients.

ANNEX 5.17

General Paediatrics and Neonatology

Definitions:

Domains: term to indicate the various areas the MD Family Medicine trainee would rotate through includes wards, nursery, paediatric outpatients, neonatal intensive care and specialist clinics.

- **WARDS:** general paediatric and post natal wards and labour rooms
- **Special Care Baby Unit (SCBU):** general neonatal nursery catering to ill term infants as well as preterm infants (not requiring neonatal intensive care)
- **NEONATAL INTENSIVE CARE (NICU):** unit that provides ventilation facilities and other aspects of tertiary care to ill term infants and premature infants
- **PAEDIATRIC OUT-PATIENTS DEPARTMENT (POPD):** refers to general outpatient facility catering for 24-hour emergency and non-emergency ambulatory paediatric services
- **SPECIALIST CLINICS:** refers to specific clinics catering for mainly chronic medical conditions and follow up in infants and children on an ambulatory basis

Knowledge: refers to the theoretical knowledge and information associated with that area or discipline

Clinical Skills: refers to the practical examination skills, diagnostic and therapeutic procedures

Diagnostic And Management Integration: a term to indicate the ability of a clinician to use his/her theoretical knowledge and clinical skills, to attempt comprehensive solutions to problems posed by the patient's condition.

Aims

- To provide the family medicine trainee with structured objectives to fulfill specific key areas whilst rotating through various paediatric domains
- To provide a timeframe in which those objectives should be accomplished
- To provide a framework around which the trainee can individually structure his/her own career development in paediatrics

Format:

Three specific areas are looked at:

- Knowledge
- Clinical skills
- Diagnostic and Management integration

In each specific domain there will be given a set objective, (key result measure) to fulfill for each of the above area.

To achieve that objective (goal) - the key result measure set actions referred to as key results actions will be suggested – these are the guidelines that are provided to ensure success in accomplishing that objective

Added advice or hints are given to enable an easier path in accomplishing the key result actions

WARDS /domain	AIM	CORE	TIME FRAME
General Paediatrics- Knowledge	To achieve adequate knowledge in General Paediatrics to attempt the Diploma in Child Health	<p>To read the relevant chapters in the prescribed general textbook covering the following areas:</p> <ul style="list-style-type: none"> • Pallor • Generalized lymphadenopathy • Jaundice • Oedema • Failure to thrive and Malnutrition • Infant nutrition • Breast feeding and associated problems • Fever – febrile child • The bleeding child • Dysmorphic infants/child and the Downs syndrome child • CHD & Cardiac failure at different ages • Cyanotic infant and child • Cardiac murmurs – delete – covered above • Respiratory distress- acute/chronic –upper/lower • Chronic lung disease 	1 Month

		<ul style="list-style-type: none"> • Abdominal pain • Abdominal masses • Acute Surgical problems in children • Chronic Gastroenteritis • Haematuria • Proteinuria • Altered LOC • Limp • Floppy infant • Developmental delay 	
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WARDS	AIM	CORE	TIME FRAME
General Pediatrics-Clinical Skills	To develop all the necessary clinical skills	<p>To OBSERVE / read in prescribed textbook and to INDEPENDENTLY Do the following:</p> <hr/> <p>1. Bedside :</p> <ol style="list-style-type: none"> 1. Blood pressure 2. Ward Hb 3. Glucostix 4. Urine test 5. Reducing substances on stool <p>2.. Procedure</p> <ol style="list-style-type: none"> 1. Venepuncture 2. IV line insertion 3. Lumbar puncture 4. Urine catheterization/bladder tap <p>3. Interpretation</p> <ol style="list-style-type: none"> 1. Interpret all FBC/UE/LFT and blood culture results 2. Interpretation of a CT scan for <ol style="list-style-type: none"> a. Raised ICP b. Ventricular dilatation c. Space occupying lesions <hr/>	

WARDS	AIM	CORE	TIME FRAME
General Paediatrics- Diagnostic and management integration	Comprehensive management	<ol style="list-style-type: none"> 1) To present weekly a full new case to a consultant 2) To do a case study to be presented to consultant 3) To participate at all clinical meetings whenever own patient being discussed 	2 Months
WARDS	AIM	CORE	TIME FRAME
Paediatric emergencies & ambulatory paediatric Knowledge	<p>To achieve adequate knowledge in ambulatory and paediatrics and paediatric resuscitation and emergencies</p> <ul style="list-style-type: none"> • HYPOVOLAEMIC SHOCK • STATUS EPILEPTICUS • STATUS ASTHMATICUS • ACUTE UAO- CROUP • BLEEDING CHILD • HYPOGLYCAEMIC CHILD • SEPTICAEMIC SHOCK 	<ol style="list-style-type: none"> 1) To read the ffg in prescribed textbook: <ol style="list-style-type: none"> 1.1 Clinical aspects of <ul style="list-style-type: none"> • Transporting sick children 2) Child Health services <ul style="list-style-type: none"> • Legal framework/context • Social services • Education –school health services • Welfare services 3) Children with special needs <ul style="list-style-type: none"> • Orphans • Handicapped • Abused children • Street children 4) Preventive aspects of child health <ul style="list-style-type: none"> • IMCI 5) Study all Paediatric emergencies 6) To collate the ffg. Approaches from relevant texts <ul style="list-style-type: none"> • Allergic disorders • Asthma • Common skin abnormalities • ENT disorders • Oral and Dental disorders • Common surgical presentations • Poisoning 	1 Month

		<ul style="list-style-type: none"> • Enuresis • Encopresis <p>7) To get a list of notifiable conditions</p> <p>8) Obtain definitions, figures and profiles of infant and child mortality and morbidity in district, province and country</p>	
PRO/POPD	AIM	CORE	TIME FRAME
General Paediatrics-Clinical Skills	<p>1. To successfully and independently carry out a paediatric resuscitation and that resuscitation be assessed by a consultant as adequate</p> <p>2. To develop all the necessary skills to function as paediatric senior house officer</p>	<p>1. To observe read in prescribed text and independently do the ffg:</p> <p>1.1 Practical skills</p> <ul style="list-style-type: none"> • Intubations • Intra-osseous insertion • IM injections • Subcut injections • Intradermal injections • Immunization • Use of a defibrillator • Supra pubic urine • Use of glucometer • CPR attend in house course and do APLS/PALS course • Nebulization <p>2. Ordering and administration of sedation / analgesia for ward / OPD level procedures</p> <p>3. Clinical skills</p> <ul style="list-style-type: none"> • Examine an abused child • Neuro-developmental assessment <p>Read a basic CXR and AXR</p>	1 Month

NURSERY	AIM	CORE	TIME FRAME
Newborn Care-Knowledge	To train the registrar in primary health care of the newborn, infant and child at level one hospitals and clinics	<p>1.1 Assessment of normal term, premature LGA SGA infant</p> <p>1.2 Care of a normal neonate</p> <p>1.3 warning signs of an ill neonate</p> <p>1.4 Lactation management, breast feeding counseling and recognition and Mx of breast feeding problems</p> <p>1.5 Long term Follow up of normal/preterm neonates</p> <p>1.4 basic neonatal Resuscitation</p> <p>2. Assess, manage and read on the ffg:</p> <p>2.1 Respiratory distress</p> <p>2.2 Neonatal infection</p> <p>2.3 Glucose abnormalities</p> <p>2.4 Jaundice</p> <p>2.5 Heart disease</p> <p>2.6 Neurological abnormalities</p> <p>2.7 Common congenital malformations</p> <p>2.8 Temperature/environmental control</p> <p>2.9 PMTCT</p> <p>2.10 HIV and TB(BCG scar)management in the neonate</p> <p>3. Understand the common respiratory interventions such as conventional ventilation (including NCPAP where relevant) for newborn, infant and child – (only familiarization is enough)</p> <p>4. To develop an understanding of commonly used equipment in neonatal nursery Incubator</p> <ul style="list-style-type: none"> • Servo crib • Phototherapy lights • Resuscitaire- (a visit to SCBU would be adequate) <p>5. Develop the counseling skills relevant to neonatal care</p>	2 Months

NURSERY	AIM	CORE	TIME FRAME
Newborn Care-Knowledge	To train the registrar in primary health care of the newborn, infant and child at level one hospital and clinics	<p>1.1 Assessment of normal term premature LGA SGA</p> <p>1.2 Fluid management</p> <p>1.3 Feeds</p> <p>1.4 Resuscitation</p> <p>2. Assess, manage and read on the ffg:</p> <p>2.1 Respiratory distress</p> <p>2.2 Neonatal infection</p> <p>2.3 Glucose abnormalities</p> <p>2.4 Jaundice</p> <p>2.5 Heart disease</p> <p>2.6 Neurological abnormalities</p> <p>2.7 Common cong malformations</p> <p>2.8 Temperature/environmental control</p> <p>2.9 PMTCT</p> <p>2.10 HIV and TB management in the neonate</p> <p>3. Understand the common respiratory interventions such as conventional ventilation (including NCPAP where relevant) for newborn, infant and child</p> <p>4. To develop an understanding of commonly used equipment in neonatal nursery Incubator</p> <ul style="list-style-type: none"> • Servo crib • Phototherapy lights • Resuscitaire <p>5. Develop the counseling skills relevant to neonatal care</p>	2 Months

NURSERY	AIM	CORE	TIME FRAME
Newborn Care-Clinical Skills	To develop all the necessary clinical skills to function at a senior level	<p>1. To learn and perform clinical examinations of normal neonate and assessment of gestational age</p> <p>2. To observe / read in the prescribed text and to do independently</p> <ul style="list-style-type: none"> • Neonatal resuscitation • Neonatal intubations • Intravenous line • Venepuncture • Lumbar puncture • Umbilical venous and arterial catheters • Arterial stab and blood gas analysis • Administration of surfactant • Hyperoxic test • Prostaglandin Administration • Use and setting up of conventional phototherapy lights • Exchange transfusion • Nasal CPAP 	2 Months

NURSERY	AIM	CORE	TIME FRAME
Diagnostic and management integration	<ol style="list-style-type: none"> To independently resuscitate a newborn <ul style="list-style-type: none"> Term well Term ill Premature Do an appropriate examination provide an adequate problem list with appropriate differential and management plan 	<ol style="list-style-type: none"> To develop a proper evaluation and Mx plan for each category of neonate <ul style="list-style-type: none"> Term Premature SGA LGA To attend all unit management meetings and follow up clinics attend neonatal and perinatal mortality meetings Understand the basic principles of research Be able to communicate with level two and three for referral Be aware of Ethical/medico legal issues in neonatology 	2 Months

Added Advice / Hints**Knowledge:**

1. Essential sources

- *PAEDIATRICS AND CHILD HEALTH* - Coovadia and Wittenberg
- *CHILD HEALTH FOR ALL* - Kibel and Wagstaff
- *DRUG DOSES* – Frank Shann
- *PALS – Paediatric manual – Pals Course*
- *EDL – essential drug list booklet*
- *SLCP/National protocols*

2. Reference books

- *Smiths recognizable patterns of Human Malformation –(not essential)*
- *Text book of paediatrics – NELSON*
- *How to interpret paediatric NCGS*
- *Rudolphs Paediatrics*
- *Neonatology – Avery*
- *Manual of Normal Newborn Care - NRC Robertson*

Clinical Skills

1. Observe all procedures before doing them on your own
2. Do first few procedures under supervision
3. Read the prescribed text – on the correct procedure
4. Ask for help when in difficulty

5. Volunteer for any procedure
6. Competence in clinical skills depend on the frequency of that skill performed
7. Once confident teach the skill to others
8. Always remember that the well-being of your patient is your primary concern
9. Do not exceed your competence
10. You are more likely to get into trouble for not asking too much

Diagnostic and Management integration

1. Always carry a calculator and a drug dosage book.
 2. Attend a session with your patient when he /she attends any allied health professional physiotherapy, OT Audiogram/speech and language therapist, Psychology, Dietician
 3. Attend a pre and post test counseling session with a trained counselor
- Read current journals/ attend journal club.

ANNEX 5.18

Clinical Oncology

- 1) Introduction to the set up at NCIM-One day
- 2) Introduction to methods of Radiation treatments, and day care chemotherapy units-One day
- 3) Introduction to Clinics-Attachment with Consultants: Cases to be shown-3-5 days
- 4) Visit to the Counseling unit
- 5) Small Group Discussion (SGD)on when,where and how to refer patients to NCIM, and how to overcome misconceptions, phobias, and stigma of cancer among patients and doctors
- 6) SGD on Common side effects of Chemotherapy and Radiotherapy-What to do and what not to do.
- 7) SGD on Cancer Prevention.
- 8) SGD on Common cancers, units and treatment facilities in Sri Lanka, and introduction to common cancer management.
- 9) Visit to treatment units, and follow up of one patient through the process of RT
- 10) Visit to Onco-surgeon-Breast clinic
- 11) Visit to Gynae-Oncologist

ANNEX 5.19

Community Health

Health Promotion and Disease Prevention

Introduction

This curriculum guideline defines a recommended training strategy for family medicine trainees in MD. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies described in the prospectus,

Most of the trainees' knowledge will be gained by caring for ambulatory patients who visit the family practice clinics.

Preamble

Health promotion can be described as the application of methods that foster physical and emotional well-being in order to increase the length and quality of life. The concept of

optimal health reflects not merely the absence of disease, but also a level of vitality to maintain enjoyment and contentment with life.

Disease prevention encompasses activities focused on health risk profiling of asymptomatic persons and the appropriate use of screening and surveillance tests for early detection of disease. Patient education and therapeutic intervention, when indicated, are imperative. Principles of disease prevention, applied to individual patients, are based on scientific evidence derived from population studies. Screening protocols should consider age, gender, family history and lifestyle risk factors. Protocols must be dynamic, with regular reevaluation and revision based on the continual availability of new scientific evidence and local community factors.

The patient-centered medical home is an appropriate setting in which to focus on health promotion and disease prevention. By offering continuous, coordinated and comprehensive care throughout the patient's family, community and lifespan, family physicians can be catalysts for health promotion and prevention for their patients. As the cornerstone of the medical home for each patient, the family physician impacts the lives of patients by recommending and supporting positive lifestyle changes and appropriate screening examinations, thus improving health and preventing disease.

Competencies

At the completion of pre MD training, a family doctor should:

- Coordinate preventive health care across providers, institutions and governmental agencies. (Systems-based Practice)
- Demonstrate effective and compassionate communication with the patient and the patient's family regarding reduction of risk factors and recommendations for screening and disease prevention. (Interpersonal and Communication Skills)
- Identify and access up-to-date, evidence-based organizational resources and recommendations for health promotion and disease prevention for patients of all ages. (Practice-based Learning, Patient Care)
- Demonstrate the acceptance of preventive health principles by modeling a healthy lifestyle. (Professionalism, Interpersonal and Communication Skills)
- Perform a detailed history and physical exam with attention to healthy lifestyle promotion and disease prevention. (Patient Care)
- Implement or use an existing system for patient recall in the outpatient setting for screening reminders. (Systems-based Practice)
- Advocate for patients within the current health care system and continually strive toward system improvements to improve health maintenance and prevention of disease. (Professionalism, Patient Care, Systems-based Practice)
- Demonstrate an understanding of and commitment to the patient-centered medical home concept of continuous, coordinated and comprehensive care that is focused on quality, safety and enhanced access for all. (Systems-based Practice, Professionalism)
- Activate, monitor and communicate chronic disease care plans to patients and other team members as a means of secondary prevention. (Patient Care, Systems-based Practice)

Attitudes

The trainee should demonstrate attitudes that encompass:

- An orientation toward health care maintenance and disease and injury prevention, with appreciation of the importance of anticipatory guidance, age- and gender appropriate screening guidelines, and immunizations.
- An expectation of collaboration among patients, patients' families, support systems, other members of the health care team and community resources.
- The ability to address a diverse range of patient behaviors that adversely affect health, such as tobacco, alcohol and illicit drug use, overeating, and sedentary lifestyle, with compassion, empathy, and cultural sensitivity.
- An understanding of the complex dynamics of behavioral change, as well as awareness of each patient's readiness and ability to accomplish recommended lifestyle changes.
- Commitment to personal health and a balanced lifestyle that facilitates professional growth and well-being.
- A basic understanding of current public health issues and concerns on global, national, state and local levels.
- Willingness to advocate for a health care system that is available, accessible and affordable to all.
- An approach that is patient-centered and supported by cultural competence.

Knowledge

In the appropriate setting, the trainee should demonstrate the ability to apply knowledge of:

1. Three categories of prevention: primary, secondary and tertiary
2. Current age-specific dietary recommendations for nutrition and weight management
3. Exercise guidelines for fitness, injury prevention and weight management
4. Influences on psychosocial well-being, including internal perceptions, external stressors and significant life events
5. Injury prevention at home, during recreation and while driving
6. Safe sexual practices regarding sexually transmitted infections and pregnancy planning
7. Pharmacologic prevention through the use of aspirin, folic acid, sunscreen, fluoride and other vitamin supplements
8. Environmental issues that influence personal health, such as secondhand smoke, sanitation, exposure to lead or other toxic substances, housing safety, and occupational exposures
9. Risk stratification based on age, gender, family history, socioeconomic status, lifestyle choices and environmental factors
10. Criteria used for screening tests, such as sensitivity, specificity, predictive values, bias, safety, cost and prevalence
11. Local, regional and national resources to assist patients and their families in the development and maintenance of healthy lifestyles and disease prevention
12. Psychological determinants of patient behavior and action choices
13. Fundamental understanding of the natural history of chronic disease in order to be able to educate patients on potential complications and outcomes

Skills

In the appropriate setting, the trainee should demonstrate the ability to independently perform or appropriately refer:

1. Gather information on personal history, including family history, vaccination history, diet, chemical substance use or abuse, exercise, stress management, socioeconomic status, occupation and recreational activities, health and spiritual beliefs, and safety practices
2. Physical assessment of fitness, BMI and blood pressure
3. Model a healthy lifestyle
4. Implement change through behavior change counseling, motivational techniques, and exercise and nutrition prescriptions
5. Utilize a reminder system for patient follow-up for health maintenance
6. Recognize community resources and the local health department
7. Approach preventive care systematically, using risk assessment, risk reduction, screening, immunization and chemoprophylaxis
8. Ability to explain the natural history and course of chronic diseases to patients in order to reinforce preventive strategies

Implementation

This curriculum should be taught longitudinally, with learning experiences offered throughout the residency program. Curricular content should traverse learning formats, including didactic conferences, journal clubs, preceptor room discussions, residency function committees and patient care in all settings. The curriculum should include content that teaches residents to critically evaluate clinical prevention recommendations and approaches to inciting healthy behavior change for patients. Reference materials should be available to support these endeavors.

Residents should engage in preceptor-supervised interactions with patients in lifestyle and mental health counseling contexts. The family medicine residency clinic should function as a medical home, such that health promotion and preventive medicine become part of patients' active care plans. Residents should actively participate in group determination of clinic policy and procedures regarding preventive medicine and health promotion. Electronic charts should be structured to efficiently support this model of care. Resident records of contact with patients should be reviewed for appropriate inclusion of notes regarding health promotion and disease prevention.

Health promotion and disease prevention in the residency setting should be taught by example and implied by structure. Faculty should model healthy and balanced lifestyles, demonstrating dedication to family, patients, community and care of the self through exercise, community service and other valued activities. The resident's responsibilities should be structured to ensure opportunity for similar self cares. Consideration should be given to residency policies that ensure active connection between residents and their physicians. Residency-sponsored social activities should be focused on healthy themes, such as exercise and safe recreation. Residency programs should seek opportunities for residents to participate in community outreach and education, which can help trainees learn to act as community leaders and experts, as well as provide other settings for the active promotion of healthy lifestyles and behavior.

ANNEX 5.20

Medical Informatics

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine trainees. Attitudes, knowledge and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies defined by the BOS.

Preamble

“Medical informatics is the rapidly developing scientific field that deals with resources, devices and formalized methods for optimizing the storage, retrieval and management of biomedical information for problem solving and decision-making.”

The ultimate concern of the physician is patient welfare, yet the medical knowledge required of physicians is beyond the brain's physical capability. Therefore, physicians must leverage information technology to help ensure safe, high quality care. The acquisition, retrieval and analysis of clinical and administrative data are crucial components of physician proficiency in this expanding field. As commanders of their respective health care teams, physicians must also track tasks and communicate with team members. Electronic health record systems provide the ability to efficiently fulfill these requirements, helping physicians effectively perform their myriad duties and contributing to improved patient outcomes.

This Curriculum Guideline provides an outline of the competencies, attitudes, knowledge and skills that should be among the objectives of training programs in family medicine. This knowledge will lead to optimal patient care through the appropriate evaluation and application of biomedical information and health information technologies at the point-of-care by future family physicians.

Competencies

- At the completion of training, a family medicine resident should:
- Demonstrate basic computer literacy, utilization and safety in addition to mastery of office productivity and communication software tools. (Systems-based Practice)
- Efficiently use appropriate information resources and tools available to support clinical decision-making at the point-of-care and to promote lifelong professional learning and enrichment. (Patient Care, Medical Knowledge)
- Exhibit understanding of the ways in which medical informatics and information technology can be applied to the continuum of care delivery in order to improve efficiency, quality and safety. (Practice-based Learning, Patient Care)
- Be able to access specific, relevant information by performing and appropriately refining database searches through use of necessarily focused medical terminology and concepts. (Medical Knowledge)
- Be able to access, enter and retrieve data related to patient care and efficiently and accurately document clinical encounters, plans of care and medical decision-making via available clinical information systems. (Systems-based Practice, Practice-based Learning)

Attitudes

The trainees should demonstrate attitudes that encompass:

- The encouragement of other members of the care team to develop comfort and competency in technology use and to participate in process optimization in order to improve the use of informatics within medical practice.
- The recognition of the importance of provider involvement in the planning, selection, design and implementation of information systems and participation in system change processes and utility analysis at the point-of-care.

- An awareness of the impact of implementing technology to facilitate medical practice and participating in policy and procedural development related to medical informatics.
- The recognition of the relevance of aggregation and analysis of clinical data for improving care quality and patient outcomes.
- The recognition of computer hardware and software system limitations and the need for continual learning in informatics skills, applications and knowledge as technology continues to advance rapidly.
- The recognition of personal knowledge deficits in evidence-based medicine and a commitment to perpetual curiosity and inquiry to resolve them.
- Evaluation of internet-based health materials for quality, accountability, reliability, validity and the utilization of multiple information sources for gathering evidence for clinical decision-making at the point-of-care and for professional learning and enrichment.
- An understanding of the impact of information systems on clinical workflow and communication within multidisciplinary teams.
- An upholding of legal and ethical standards related to data security, confidentiality and patients' right to privacy.

Knowledge

In the appropriate setting, the resident should demonstrate the ability to apply knowledge of:

1. Filtering, evaluating and reconciling information considering its accuracy, validity authority, relevance, degree of certainty, availability and intellectual property issues.
2. Information resources and tools available to support care delivery to patients and populations and to promote lifelong learning.
3. Role of medical informatics in continuous quality improvement and process management (including development, implementation and monitoring of compliance with patient care protocols).
4. The ability to collaborate via networks across multiple sites and contexts using electronic mail, discussion lists, news groups, teleconferencing and related communication technologies.
5. Basic components of computer systems, networks and the nature of computer-human interfaces as they impact patient care.
6. Fundamentals of data modeling and database systems (including the definition and application of controlled vocabularies and structured versus unstructured data types).
7. Individual and organizational change management as it applies to self, patient, family and work environments.
8. Application of information technology at the point-of-care to integrate clinical practice guidelines, documentation guidelines, patient education and training.
9. Policies and procedures to insure the security and confidentiality of patient information and the integrity of computer systems and networks.
10. Available sources of clinical and financial decision support, ranging from textbooks to diagnostic expert systems to advisories issued from a computer-based patient record.
11. Application of aggregation and analysis of clinical data for improving care quality and patient outcomes.
12. Limitations of computer hardware and software systems.

Skills

In the appropriate setting, the resident should demonstrate the ability to independently perform or appropriately refer:

1. Basic computer literacy, utilization and safety (including keyboarding, connection and use of peripheral devices, data storage and backup).
2. Retrieval of information by performing and appropriately refining database searches using logical (Boolean) operators, in a manner that reflects understanding of medical language, terminology and the relationships among medical terms and concepts.
3. The ability to access, evaluate, grade and synthesize data, information and knowledge from multiple sources and apply to clinical practice and professional development.
4. The ability to direct patients to credible online medical information and services and the use of information management systems for patient education.
5. The ability to access, enter and retrieve data related to patient care and efficiently and accurately document clinical encounters, plans of care and medical decision-making via available clinical information systems.
6. Effectively use office productivity and communication software, including:
 - a. Word processor
 - b. Presentation (including multimedia)
 - c. Spreadsheet
 - d. Database
 - e. Internet
 - f. Email, instant messaging, video conferencing and other digital messaging tools
7. An understanding of the impact of information systems on clinical workflow and communication within multidisciplinary teams.
8. The ability to analyze patient information needs, access appropriate resources to meet those needs and evaluate effectiveness.
9. The use of applications and devices for structured data entry (including management systems, to record and analyze administrative data).
10. Analysis of ergonomic integrity of work stations, exam rooms and portable technologies in practice.
11. Participation in design of data collection tools for practice decision-making and record keeping and participation in quality management/improvement initiatives related to clinical data in practice.
12. An understanding and evaluation of security effectiveness and parameters of systems for protecting patient information and ensuring confidentiality.

Implementation

Curriculum implementation should include both focused and longitudinal experience throughout the residency program. Didactic lectures and journal club should be augmented with instruction regarding principles of the doctor-patient-computer relationship in daily practice. The model-of-care should shift from a reactive, individual model to a proactive, population-based model through technology application. Communication should be emphasized as integral to the effective use of information. Ready access to computer and information resources in the clinical care, administrative and teaching environments should be provided. An efficient and responsive technical support infrastructure should be in place in addition to a faculty “champion” to direct medical informatics training within the program. A baseline needs assessment at matriculation should lead to appropriate practical training of computer skills literacy through tutorials, group and/or one-on-one instruction. Avoid applying technology for its own sake and intimidating those who are anxious about technology. Departments should also measure and report educational outcomes to promote evidence-based approaches to high quality medical informatics training for family medicine trainees across the nation.

ANNEX 5.21

Medical Administration

What a Family Medicine trainee needs to know on medical administration.

Hospital administration as it applies to the private sector.

Staff:

- Categories of staff and their responsibilities / scope of work of ALL staff
- Line of authority
- Principles of delegation of work
- Maintaining records
- Systems of reporting to hierarchy
- Attendance and shift management
- Handing over / taking over processes and transfer of responsibility
- Principles of HRM and HR development including recruitment process
- Prevention and Management of occupational hazards to staff
- Background knowledge on trade union activities
- Confidentiality

Patients:

- Admission and discharge procedures
- Essential information when clerking a patient and maintaining patient records
- Regulations and rules involved in the overall management of patients in the ward and OPD.
- Consent process
- Pre / post operative management in relation to general clinical and legal requirement
- Basic needs for the patient during stay in hospital OPD / In ward
- Special needs patients.
- Dealing with relatives/friends
- Principles of handling a patient death – legal requirements and ethical and social requirements

Pharmaceuticals / Equipment / instruments:

- Procurement
- Estimates and Inventory management
- Categorization in relation to importance of availability of drugs
- Disposal of empty vials /unused drugs
- Dangerous/restricted drugs management and legal requirements
- Equipment maintenance contracts
- Safety and proper use of equipment
- Stock taking / audit

Sterilization and hygiene:

- Central Sterilization Department processes and management
- Personal cleanliness of staff and patients
- Operating theatre and interventional procedure sterility
- Hospital cleanliness

General safety:

- Radiology department
- Nuclear medicine department
- Laser treatment units etc

Waste disposal

- Segregation of waste
- Removal and disposal of various types of waste

Accident and Emergency care/PCU

Triage

Layouts and flow of patients

Regulatory frameworks and protocols for efficient and safe management of patients

Continuity of uninterrupted responsibility for the patient

Legal aspects

ICU

Protocols of admission and discharge to and from ICU's

Organ donation processes.

Financial aspects

Payroll management

General accounting processes – Balance sheet, Cash flow statements, Profit and loss accounts

Return on Investment issues

Tax management

ANNEX 5.22

Forensic and Legal Medicine

Learning Objectives

At the end of the course in Forensic Medicine, the learner shall be able to: -

1. Identify, examine and prepare report or certificate in medico-legal cases/situations in accordance with the law of land.
2. Perform medico-legal postmortem examination and interpret autopsy findings and results of other relevant investigations to logically conclude the cause, manner and time since death.
3. Be conversant with medical ethics, etiquette, duties, rights, medical negligence and legal responsibilities of the physicians towards patients, profession, society, state and humanity at large.
4. Be aware of relevant legal / court procedures applicable to the medico-legal/medical practice.
5. Preserve and dispatch specimens in medico-legal / postmortem cases and other concerned materials to the appropriate Government agencies for necessary examination.
6. Manage medico-legal implications, diagnosis and principles of therapy of common poisons.
7. Be aware of general principles of environmental, occupational and preventive aspects of toxicology.

ANNEX 5.23

Dental Surgery

Objectives

1. Basic patho-physiology of major chronic diseases encountered in dental patients, Identify the risk factors associated with these common diseases.
2. Fundamentals of Occlusion. The knowledge of dental materials used for impression making, cast making and basic concepts of dental occlusion. The student will develop an understanding of ideal occlusion form and function.

3. Management of dental caries
4. Periodontal diseases encountered in clinical practice as well as basic treatment strategies for these diseases.
5. Fundamentals of Prosthodontics, Orthodontics, endodontics.
6. GPs role in the management of patients with traumatic dental injuries to the permanent dentition.
7. Management of Orofacial Pain, a review of functional anatomy related to the differential diagnosis of orofacial pain conditions.
8. Fundamentals of Pediatric Dentistry. Treatment of the child patient as it relates to treatment planning, soft tissue evaluation, preventive dentistry, behavior management, treatment of the handicapped, child abuse, pulp treatment, trauma, oral surgery, and restorative techniques.
9. Periodontal Treatment. The diagnosis and treatment of gingival and periodontal diseases and the evaluation of initial therapy and continuing supportive periodontal therapy
10. Periodontics in General Practice. To provide the student with a comprehensive approach to the practice of periodontics as a general practitioner, stressing inter- and multidisciplinary treatment of complex cases.
11. Pain Management of the Dental Patient
12. Initial management of common dental emergencies encountered in primary care.

Specific tasks

1. Dental Caries- early signs and symptoms.
2. Gingivitis and periodontal diseases – early signs and symptoms.
3. Dental alveolar infections – signs and symptoms, treatment options.
4. Wisdom tooth and pericoronal infections – signs and symptoms, treatment options.
5. Dento-alveolar trauma /fractures – Signs and symptoms, treatment options.
6. Etiology of common oral ulcers and clinical features.
7. Oral premalignant lesions – signs and symptoms, aetiology.
8. Oral malignancies- aetiology signs and symptoms, and treatment options.
9. Oral manifestations of skin diseases eg; Lichen Planus, SLE, Pemphigus, Pemphigoid, erythema multiformi.
10. Oral manifestations of HIV.
11. Malocclusion – clinical features and treatment options.
12. Drugs and oral lesions – eg: Antihypertensives, NSAIDS, Anticoagulantsetc.

ANNEX 5.24

Anti Malaria and Anti Filaria Campaign

Objectives for the Anti Filariasis Campaign

- Recall the pathogenesis, clinical manifestations, diagnosis, management, prevention and control of lymphatic filariasis in Sri Lanka
- Learn the current status of the disease epidemiology in Sri Lanka
- Learn the diagnostic tests available at different sectors and the advantages and disadvantages of each of them
- Learn the control strategies used by the Anti Filariasis Campaign in Sri Lanka
- Learn the morbidity control programme (management of lymphoedema) and health advice to elephantiasis patients
- Recall the clinical manifestations and diagnosis of zoonotic filariasis (*Dirofilaria* species)

Objectives for the Anti malaria Campaign

- Recall the pathogenesis, clinical manifestations, diagnosis, management, prevention and control of malaria in Sri Lanka
- Learn the current status of the disease epidemiology in Sri Lanka
- Learn the diagnostic tests available at different sectors and the advantages and disadvantages of each of them
- Update your knowledge on the present drug policy for malaria in Sri Lanka
- Learn the current travel advices for prevention of malaria in travelers within the country and overseas.
- Learn the control strategies used at present by the Anti Malaria Campaign in Sri Lanka

ANNEX 5.25

Diagnostic services and Immunology

Objectives

Knowledge and Skills

The family medicine trainees are expected to possess knowledge of theoretical immunology relevant to the understanding and practice of clinical immunology and allergy.

At the conclusion of training, trainees should be able to apply their knowledge of basic immunology and other relevant basic sciences to the understanding of disease processes in which immune mechanisms play a significant role and to the assessment of patients suffering from such diseases.

Their knowledge should thus encompass, with a degree of specific expertise that may vary, the broad field of clinical immunology and allergy, which generally includes atopic diseases, adverse reactions to environmental agents of all types, (i.e. drugs, foods, industrial exposures etc.), autoimmune disorders, immune deficiencies, immune-proliferative disorders, immunotherapy of all types (biological, pharmacological, physical) and the immunological aspects of systemic diseases.

In keeping with the realities of family practice, trainees may develop a broad base of clinical competence and skills allowing them to participate actively in the diagnostic evaluation and treatment of patients suffering from any one of many possible immunological diseases.

Ex. Skin testing

ANNEX 5.26

Sports Medicine

Objectives

A. Knowledge

1. Functional Anatomy, Human Body movement and Anthropometry
2. Pre Participation Physical Examination and General Health considerations in prior to Exercise
3. Principles in training for Fitness and Sports
4. Sports Injuries spectrum – Diagnosis, Emergency and Immediate treatment principles
5. Injuries spectrum – neck, spine, Knee, ankle, shoulder, elbow, wrist, facial, dental eye, chest.
6. Sports Injury Prevention and Rehabilitation including physiotherapy strapping and Bracing
7. Sports Nutrition and Recovery Nutrition Principles in Anti -Doping procedures and Banned substances
8. Special groups – children, adolescents, women, pregnant athlete, elderly, elite and physically challenged athletes.
9. Advice on exercise prescriptions for health and for elite training and Psychology principles in performance enhancement.
10. Infections and Hygiene in sports
11. Advice on dietary analysis and nutrition including fluid and electrolyte balance.

B. Skills

1. Accident and Trauma assessment and monitoring of injuries
2. Arrest haemorrhage, tourniquet principles, suturing
3. Eye, Dental, Maxillo-facial and ENT injuries management principles
4. Neurology impairment assessment in cases due to medical causes and trauma.
5. Orthopaedics – clinical examination of knee, shoulder and spinal injuries and RICE regime.
6. Paediatric trauma and emergency management.
7. Rheumatology and Physiotherapy modalities in treatment
8. Radiology imaging principles and spectrum of investigations
9. CPR and Transport of the Unconscious patient
 - immobilize cervical spine, rescue- breaths, insert airway tube, chest compressions, establish CVP line. Log roll patient and strapping to spinal board
10. Joint aspirations and intra- articular injections
11. Principles of strapping, taping, bracing and orthotics
12. Gym training and exercise routines

ANNEX 5.27

Genetic/Molecular Medicine unit

Learning Outcomes

By the end of this attachment students should have acquired the following knowledge, skills and attitudes:

1. Knowledge

- 1.1. Basic terminology in Human Genetics.
- 1.2. The basic patterns of biological inheritance and variation, both within families and within populations.
- 1.3. How identification of disease-associated genetic variations facilitates development of prevention, diagnosis, and treatment options.
- 1.4. The importance of family history (minimum three generations) in assessing predisposition to disease.
- 1.5. The interaction of genetic, environmental, and behavioural factors in predisposition to disease, onset of disease, response to treatment, and maintenance of health.
- 1.6. The difference between clinical diagnosis of disease and identification of genetic predisposition to disease (genetic variation is not strictly correlated with disease manifestation).
- 1.7. The various factors that influence the client's ability to use genetic information and services, for example, ethnicity, culture, related health beliefs, ability to pay, and health literacy.
- 1.8. The potential physical and/or psychosocial benefits, limitations, and risks of genetic information for individuals, family members, and communities.
- 1.9. The resources available to assist clients seeking genetic information or services, including the types of genetics professionals available and their diverse responsibilities.
- 1.10. The ethical, legal and social issues related to genetic testing and recording of genetic information (e.g. privacy, the potential for genetic discrimination in health insurance and employment).
- 1.11. One's professional role in the referral to or provision of genetics services, and in the follow-up such services.

2. Skills

- 2.1. Gather genetic family history information, including a three-generation history.
- 2.2. Identify and refer clients who might benefit from genetic services or from consultations with other professionals for management of issues related to a genetic diagnosis.
- 2.3. Explain effectively the reasons for and benefits of genetic services.
- 2.4. Use information technology to obtain credible, current information about genetics.
- 2.5. Assure that the informed-consent process for genetic testing includes appropriate information about the potential risks, benefits, and limitations of the test in question.

3. Attitudes

- 3.1. Appreciate the sensitivity of genetic information and the need for privacy and confidentiality.
- 3.2. Seek coordination and collaboration with an interdisciplinary team of health professionals

ANNEX 6

Lecture Topics

1. Comprehensive care
2. Continuity of care
3. Coordination of care
4. Primary care
5. Bio psychosocial model
6. Psychosocial dimensions of primary care morbidity
7. Computers in family practice - Introduction
8. Computers in family practice - Application software
9. Red flags for common primary care symptoms
10. Common diagnoses for common symptoms in primary care
11. Common clinical syndromes in primary care
12. Common musculoskeletal problems in primary care
13. Chronic diseases in primary care
14. Life style management in the chronic disease prevention and treatment
15. Standards of care for chronic diseases
16. Primary care therapeutics
17. Symptoms in primary care - formation, normality orientation, community distribution
18. Genetics for family physicians
19. Immunological basis of common diseases
20. Basics of disaster management
21. Lectures on management
 - 21.1. Introduction to health care – Health and disease, Concepts of primary health care – IT in healthcare, hazards for health care workers.
 - 21.2. Management process and organization behavior – introduction, management process, personal growth and development, individual behavior, thinking and decision making process, Cost benefit analysis,
 - 21.3. Organizational design and organization structure and behavior
 - 21.4. Operations management- economics in healthcare, consumer behavior analysis, work force management, total quality management
 - 21.5. Quality control and management
 - I. Introduction of quality
 - II. Understanding quality
 - III. Requirements for Quality
 - IV. Approaches to quality management
 - V. Quality assurance and control
 - VI. Quality in customer relationships
 - VII. Organizing for quality
 - 21.6. Basic concepts of material management
 - 21.7. Environmental control and waste management
 - 21.8. Business communication
 - 21.9. The framework of financial management – Understanding accounts , concepts in valuation, capital budgeting, working capital management,

- 21.10. Legal aspects in health care
- 21.11. Telemedicine
- 21.12. Emergency and disaster preparedness

ANNEX 7

Tutorials (Each Session 3 Hours)

- 1. How to develop your personal clinical practice
 - 2. Critique of application of bio-psychosocial model in your practice
 - 3. Identification of emotional disorders 02
 - 4. Signs and symptoms of emotional disorders 02
 - 5. Somatization and its application in clinical practice
 - 6. Computers:
 - 6.1 Hands on experience in computing
 - 6.2 Development of a medical record
 - 6.3 Doing an audit
 - 6.4 Medline usage
- Total 33 hrs (01 credit)

ANNEX 8

Workshops (Each Seminar Is 02 Hours Duration)

- 1. Soft tissue injections
 - 2. Development of an exercise programme in your practice
 - 3. Identification of chronic diseases
 - 4. Principles and management of chronic diseases
 - 5. Development of a medical record for the management of chronic diseases
 - 6. Psychology in changing behavior
 - 7. Nutrition intervention in primary care
 - 8. Exercise prescription in your practice
 - 9. Wellness screening in primary care
 - 10. Standards of care in common chronic diseases (04 seminars)
 - 11. Identification of placebo treatment in your practice
 - 12. Natural history of identified diseases
 - 13. Counseling, CBT, Problem solving behavior
- Total 32 hours (01 credit)

ANNEX 9

9.1 Core curriculum 1. Essentials in family medicine

9.2 Core Curriculum 2. Skills

9.3 Core curriculum 3. Symptom evaluation

ANNEX 9.1

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 to 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 ?

ANNEX 9.2

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

- 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.

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

ANNEX 9.3

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

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

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

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 appropriately
- 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

Abnormal Sensation (Paraesthesia and Numbness)

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 health
- 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

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

Knowledge

- 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

Knowledge

- 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 be 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 10**Format For Progress Reports On Trainees (Local)**

 Name of trainee:

Name of trainer:

Training centre:

Period of report:

 Please use the following key to rate your trainee's performance during the period in question, with regard to each of the areas listed below

Outstanding	A
Above average	B
Adequate	C
Below expected	D

PRACTICAL SKILLS	Rating	Specific comments
A. Clinical judgment		
1. Assessment of request forms		
2. Selection of appropriate laboratory investigations		
B. Record keeping		

PROJECTS OR OTHER ACTIVITIES CARRIED OUT DURING THE PERIOD OF TRAINING:

INTERPERSONAL SKILLS	Rating	Specific comments
1) Communication & working with others		
2) Supervising & helping juniors and willingness to serve when required		
3) Power of expression (oral and written)		
4) Standard of punctuality, ethics, professional attitudes and reliability		

ACADEMIC SKILLS	Rating	Specific comments
1) Theoretical background and knowledge		
2) Reads widely in medical literature		
3) Participates actively in academic discussions		
4) Thinks independently and rationally		

GENERAL COMMENTS

Particular strengths

Particular weaknesses

.....

.....

Signature of trainer

.....

Name

Date

ANNEX 11

Format For Progress Reports - Overseas Appointment

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:

Signature of the supervisor

ANNEX 12

Peer Team Rating For Assessment Of MD Family Medicine Trainees

PTR Form of PGIM

Confidential



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 ☐ Clerical or Secretarial
☐ Professional ☐ SR ☐ 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			
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 UNSATISFACTORY	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 SATISFACTORY	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 ABOVE EXPECTED
2. Attitude to patients; Respects the rights, choices, beliefs and confidentiality of patients			
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 UNSATISFACTORY	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 SATISFACTORY	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 ABOVE EXPECTED
3. Reliability and punctuality			
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 UNSATISFACTORY	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 SATISFACTORY	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 ABOVE EXPECTED

4. Communication skills: communicates effectively with patients and families				
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9	
	UNSATISFACTORY	SATISFACTORY	ABOVE EXPECTED	
5. Communication skills: communicates effectively with healthcare professionals				
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9	
	UNSATISFACTORY	SATISFACTORY	ABOVE EXPECTED	
6. Honesty and Integrity, do you have any concerns?				
	<input type="radio"/> Yes	<input type="radio"/> No		

7. Team player skills: Supportive and accepts appropriate responsibility; Approachable				
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9	
	UNSATISFACTORY	SATISFACTORY	ABOVE EXPECTED	
8. Leadership skills: Takes responsibility for own actions and actions of the team				
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9	
	UNSATISFACTORY	SATISFACTORY	ABOVE EXPECTED	
9. OVERALL PROFESSIONAL COMPETENCE				
<input type="radio"/> Don't know	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3	<input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6	<input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 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 NOT return to the Registrar or Senior Registrar.

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

ANNEX 13

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 from entry to the training programme up to Board Certification (stage 1 to stage 5). The supervisors/Trainers are expected to review the candidate's progress at regular intervals. It is the responsibility of the trainee to obtain the signature of the trainer after these reviews, and submit the Training Portfolio for evaluation by the BOS annually and also at the Pre Board Certification Assessment for evaluation of his competence to practice independently as a Specialist in Family Medicine. The Training Portfolio shall be in two sections. Section I (Pre MD) and Section II (Post MD).

Training Portfolio Section I: During Stage 1 – 2 (Pre MD Examination)

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

- Log of Clinical activities (minimum number and skill level of procedures which should be carried out given)

Details of Academic Activities

- 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

Training Portfolio Section II: During stage 4 -5 (Post MD Examination)

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 components of the Training Portfolio are:

- 1) Log of Procedures carried
- 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

ANNEX 14

Audit

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

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

Design, implement and complete audit cycles

Recognise the need for audit in clinical practice to promote standard setting and quality assurance

- 1) Attendance at audit meetings
Contribute data to a local or national audit
- 2) Identify a problem and develop standards 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 findings and re-audit to assess the effectiveness of the changes
- 5) Become audit lead for an institution or organization

ANNEX 15.1

Format of Brief Project Proposal

Section 1

1. Name of trainee
2. Training centre

Section 2

1. Project title
2. Background and justification
3. Objectives of study
4. Research plan

ANNEX 15.2

Format of 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. Design
 - b. Setting
 - c. Method
 - d. Sample size and sampling techniques
 - e. Outcome measures
 - f. Statistical analyses and plan of presentation of results
 - g. Ethical considerations
 - h. Work plan and time lines
5. References
6. Funding for study
7. 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

ANNEX 16

Report of the Research Project Reviewer

1. Name of Trainee:

2. Training Centre:

3. Supervisor:

4. Reviewer:

Name:

Designation:

Address Official:

Tel//Fax:

Email:

5. Title of Project:

6. Please comment on each of the following headings.

6.1 Introduction: Rationale (Justification) – problem identified and quantified.
Hypothesis and expected outcome, impact and relevance of the study.

Comment:

6.2 Literature Review: Adequacy (evidence of a systematic search for related, similar, relevant studies)

Comment:

6.3 Objectives: Clearly defined, relevant and stated in measurable terms .

Comment:

6.4 Method: Appropriate study design to address the objectives with clear detailed description of subjects, sampling technique and sample size, interventions, data collection and management. The study should be internally valid and reproducible. 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. Appropriate statistical tests planned should be mentioned and ethical issues addressed

Comment:

6.5 Results: Order of presentation and appropriate presentation of tables, figures, graphs. Appropriate statistical analyses and interpretations

Comment:.....

6.6 Discussion: The findings of the study should be discussed taking into consideration findings of relevant studies, within and outside the country. The discussion should not be a repetition of the results only. Limitations should be included.

Comment:.....

6.7 Conclusion and recommendation: Based on the results of the study and to address the objectives

Comment:

6.8 Limitations: Any inherent and / or inadvertent biases and how they were dealt with.

Comment:.....

6.9 References: According to the Vancouver system and relevant to the study. Properly documented in the Bibliography and appropriately cited in the text

Comment:

6.10 Institution(s) where work would be carried out:

6.11 Ethical considerations/institution from where ethical approval will be /has been obtained:

Comment:

6.12 Overall presentation: Overall presentation of the proposal (grammar, spelling, typographical mistakes etc.

Comment:

7. Recommendation of reviewer:

Comment:

- Is the dissertation acceptable? Yes / No
- If No, What corrections are required? (Attach a separate sheet of paper if necessary)

Signature:

Date:

8. Recommendation of the BOS:

Signature of Chairperson/Secretary:

Date:

ANNEX 17

Instructions To Dissertation Supervisors

- The dissertation for the MD FM is based on a 1-2 year research project.
- Acceptance of the dissertation is a requirement to sit the MD examination
- The trainee should write up the project work as a dissertation conforming to the format approved by the Board of Study in FM.
- The supervisor should guide the student in planning and designing, carrying out the research and in presentation of the work.
- The supervisor should obtain recommendation of the research proposal from a reviewer.
- The supervisor should forward Progress Report(s) in the prescribed form at the end of 3 months after the trainee commences work on the research project and 3 months after completing the project work.
- The objective of the dissertation is to prove the trainee's capability to plan, carry out and present his / her own research. The purpose of this training is to ensure maturity, discipline and scholarship in research.
- The dissertation should comprise the trainee's own account of his / her research.
- It must contribute to existing knowledge of infective diseases relevant to Sri Lanka and afford evidence of originality as shown by independent, critical assessment and / or discovery of new facts in the area under study.
- It should be satisfactory as regards literary presentation.
- The dissertation should be certified by the supervisor as suitable for submission.
- General Comments on the contents: The objectives should be clearly stated and should be feasible to achieve within the time frame. Other published work relevant to the problem (both international and local) should be comprehensively covered and critically evaluated. An appropriate study design and method should be used to achieve the objectives stated. The results should be appropriately analysed, interpreted and presented effectively. The discussion should include comments on the significance of results, how they agree or differ from published work. If they differ, the probable reasons for these differences need to be discussed. Theoretical / practical applications of the results, if any should be given. The conclusions should be valid and be based on the results obtained on the study.
- Ethics: The candidate should confirm and document that procedures followed were approved by the Ethical Committee of the institution where the work was carried out and ethical approval was obtained by a recognized Ethical Review Committee.
- The trainee is required to make a short (10 min.) presentation of the project proposal in August / September of their year 1 training to obtain a feedback from other trainers and invitees, regarding feasibility, appropriateness of study design and method and statistical considerations, prior to commencement of the project.
- Prior to submission of the dissertation, the trainee will be required to make a short (15 – 20 minutes) presentation of the project once completed, to the BOS members and other invitees This will give the trainee an opportunity to discuss his / her work and

obtain a feedback from peers and colleagues. It will not be used for evaluation in any form. The supervisors will also be invited for these presentations.

- The trainee will be questioned on the dissertation at the viva-voce examination.
- If at any time the supervisor is not satisfied with the work progress of the trainee, the trainee should be made aware of the deficiencies and corrective measures suggested. This should be conveyed in writing to the trainee with a copy to the BOS. In such instances, a follow-up report should be forwarded within three months or earlier if necessary to the BOS.

ANNEX 18

Dissertation Supervisor Consent Form

- 1. Name of Supervisor:**
- 2. Address**
- 3. Email:**
- 4. Phone Number:**
- 5. Training Centre:**
- 6. Name of trainee:**
- 7. Title of Project:**
- 8. Where the Research Project will be carried out :**

ANNEX 19

Dissertation Progress Report

To be forwarded by the supervisor to the BOS at least once in SIX months

1. Name of trainee:

2. Training Centre:

3. Supervisor:

4. Title of project:

5. Description of work carried out to date:

To be filled in by trainee: briefly describe progress in lab / field work and dissertation writing

Supervisor's comments

6. Is the work on schedule? Yes / No

7. Progress in dissertation writing: satisfactory / unsatisfactory

8. Constraints (if any)

9. Recommendation of supervisor:

Signature:

Date:

10. Recommendation of the BOS:

Signature of Secretary :

Date:

ANNEX 20

Dissertation Submission Format

General instructions

It is essential to start writing the dissertation early and in all cases before the data collection is completed. 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. To avoid 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.

Length

An ideal length of text is approximately 8000 words, which equals to about 20 - 30 pages. With figures, references, etc., the total length is likely to be in the region of 30 - 40 pages.

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.

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. Maps, 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

Date of submission

2. Statement of originality: The work presented in the dissertation should be the trainee's own and no part of the dissertation should have been submitted earlier or concurrently for any other degree. The statement should be signed by the author, and countersigned by the supervisor.
3. Abstract: Should be structured (introduction, objectives, method, results, conclusions)
Should not include figures, tables, graphs or references
Should be limited to 500 words or less
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. Topics of the sections should not be mixed, e.g. Results should not appear in the Materials and Methods.

- 6.1** Section 1 – Introduction: The current position and the reasons for carrying out the present work (Rationale /Justification and problem/s identified and quantified.) Hypothesis and expected outcome, impact and relevance of the study should be stated. Generally, only a few references should be cited here.

Section 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 should be 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.

Section 3 – Objectives Clearly defined, general, specific and any subsidiary objectives should be stated

Section 4 – Materials and Methods: Appropriate study design to address the objectives with clear detailed description of subjects, sampling technique and sample size, interventions, data collection and management. The study should be , internally valid and reproducible. 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. Appropriate statistical tests planned should be mentioned and ethical issues addressed

Section 5 – Results: Presentation of data in a logical sequence commencing with the basic / baseline characteristics of the subjects. Summarize the data with a figure, table or graph when appropriate. Present appropriate statistical analyses and interpretations. Each figure, table or graph should be complete and clear without reference to the text. Concise explanations in legends and explanation of abbreviations are needed. The text should complement the figure, table or graph not simply describe them but should give valid interpretations of the results. Complete (raw) data should not be included but should be contained in tables in an Appendix if needed. Only data from the present study should be included and in particular no comparison should be made at this stage with results from other studies.

Section 6 – Discussion: Interpret and explain the results so as to provide answers to the study question(s). Comment on the relevance of these answers to the present knowledge of the subject. Consider alternate interpretations. Comment on interesting or unexpected observations and about the method. Critically compare the results with results and conclusions of other published studies within and outside the country, and explain possible reasons for any differences observed. Comment on unexpected outcomes. Comment on further follow-up research required on the subject.

Section 7 Limitations: Any inherent and / or inadvertent limitations / biases and how they were dealt with should be described

Section 8 Conclusions and recommendations: Based on the results of the study and to address the objectives

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 Vancouver style is widely accepted in scientific writings, and is recommended for MD (Family Medicine) dissertation.

List all references that are cited in the text, using the Vancouver System

Type the references double - spaced in the Vancouver style (using superscript numbers and listing full references at the end of the paper in the order in which they appear in the text). Online citations should include date of access. Use Index Medicus for journal names. If necessary, cite personal communications in the text but do not include in the reference list. Unpublished work should not be included. References should be listed in the following style:

The arrangement of the references at the end of the dissertation should be in numerical order as they are cited in the text.

The order of the items in each reference should be:

- (a) for journal references: name(s) of author(s), title of paper, title of journal, year, volume number, page numbers.
- (b) for book references: name(s) of author(s), , title of book, edition,, volume, , town of publication, publisher. year ,chapter and/or page number, Authors' names should be in roman letters, and arranged thus:
Smith CO, James DE, Frank JD.

Where an author's name is repeated in the next reference it should also be spelt out in full. The title of the paper is then included, without quotation marks The journal title should be unabbreviated, *in italics*, and be followed by year ; **volume number in bold** (the issue /number): and the first and last page numbers.

- 1) Mathiesen ER, Ringholm L, Damm P. Still birth in diabetes pregnancy.*Clinical Family Medicine* 2011; **25**(1): 105 – 111.
- 2) Lestrud S. Broncho-Pulmonary Dysplasia. In: *Nelson Text Book of Pediatrics. 18thEd, Vol 1*: Saunders, Elsevier New Delhi, India. 2008. p 1840-1841
- 3) World Health Organization. *Priority Medicines for Mothers and Children* 2011. Department of essential medicines and pharmaceutical policies. Geneva, World Health Organization 2011 (WHO/EMP/MAR/2011.1).

Websites

Author's name (if available) must be listed first, followed by the full title of the document in italics, the date of publication or last revision (if available), the full http address (URL). And the date accessed in parentheses

Examples:

- 1) National Institute for Health and Clinical Excellence.*Induction of Labour NICE Clinical Guideline 70, 2008*.available at <http://www.nice.org.uk/CG070fullguideline> (Accessed 21 October 2011)
- 2) Hofmeyr JG. *Antenatal corticosteroids for women at risk of preterm birth: RHL Commentary* (last revised 2 February 2009) The WHO Reproductive Health Library 2011, Geneva, World Health Organization www.who.int/rhl . (Accessed 21 October 2011)
- 3) Crowther CA, Hardin JE. *Repeat doses of prenatal corticosteroids for women at risk of preterm birth for preventing neonatal respiratory disease*. Cochrane Data Base of Systematic Reviews 2007, Issue 3. Art .No: CD003935. DOI: 10.1002/ 14651858. CD003935 pub 2. (Accessed 21 October 2011)

ANNEX 21

Dissertation Marking Scheme

The two examiners appointed by the BOS shall use the following marking grid to allocate marks for the dissertation.

1. Title (05)
2. Author's name and address
3. Abstract (10)
4. Table of contents
5. List of tables
6. List of figures
7. Introduction (20)
8. Objectives (15)
9. Review of literature (20)
10. Materials and methods (50)
11. Results (40)
12. Discussion (including limitations) (45)
13. Conclusion and recommendations(if any) (10)
14. Acknowledgements
15. References (15) (Vancouver system should be used)
14. The overall presentation (20 marks)

Two examiners will be appointed by the BoS to assess and award a mark independently out of 250 using the marking system described above. The final mark for the dissertation out of 500 shall be the total of the marks given by each examiner.

To obtain a pass grade in the Dissertation the trainee should score 50 % (250 marks) or more. If it is less than 40% the trainee should resubmit the Dissertation at a prescribed date attending to the recommended amendments and improvement for reassessment by the same pair of examiners. At the repeat assessment the maximum mark to be awarded shall be 40%. This process to be continued in the same manner until the minimum 40% is obtained.

ANNEX 22

Continuous assessment format

At the end of each GP and University rotation the trainer should assess the trainee in the following domains and give a mark. These graded forms should be submitted to the BOS/FM by the trainer within one week of completing each training period.

Domains to be assessed

1. Communication
2. Data gathering-History taking
3. Diagnosis/Problems identified
4. Management options
5. Professionalism

The trainer could identify the patients from his/her practice to demonstrate the following situations

1. Symptom evaluation
2. Chronic diseases
3. Psycho-Social issues
4. Referral consultations
5. Preventive care
6. Opportunistic health promotion

Pass grade

Evaluation of symptom marks 40% or more

Assessment of chronic illness marks 40% or more

Ex. Symptom Evaluation Ex. Abdominal Pain	Maximum mark	Marks
Domains to be tested		
Communication		
Recognize the reason/s for consultation		
Questions in an appropriate sequence		
Allows the patient to relate the story		
Listen carefully and take over the consultation with relevant direct Qs		
Respects the patients ideas		
Close consultation and recognize the success		
Total 20		
Data gathering-History		
Asks relevant Qs related to abdominal pain-duration, type, diurnal variation, severity		
Asks-relieving factors, aggravating factors		
Red flags-bleeding PR,LOW,LOA,fever,		
Relevant PMH-abd.surgery, bowel illness, diabetes, GB disease, UC		
F/H-similar illness, CA,TB		
Drug history-present medication, previous medications-laxatives,antibiotics		
Inquire-concerns, ideas, expectations		
Inquire –smoking, food,bowel habits,passing dark coloured urine		
Total 30		
Examination		
Correct technique-consent,explanation		
G/E-look for anemia, clubbing, ankle oedema,jaundice		
Focussed Ex. elicit LIF tenderness,carnett's sign		
Requests PR-----		
Try to use the proctoscope in the tray for examination		

Make the pt comfortable		
Total 20		
Management		
Evaluate the symptom for DD-diverticulitis, CA, GB disease, amoebic colitis (presence of pain, pain colicky initially and now constant, symptoms worsens with eating, Late onset, relieved by flatus and motions		
Look at the Ix to recognize neutrophil leucocytosis, exclude other possibilities-CA, GB disease		
Diagnosis in favour of acute episode-diverticulitis		
Initial use of augmentine or cipro with metronidazole		
Suggest Ix after the acute period-stools AOC, occult blood for 3 days, ESR, Colonoscopy, CT-no place for USS		
Identify the pts concern		
Professional approach		
Explore the importance of referral		
Follow up		
Total 30		
Total 100		

Pass grade marks 40% or more**Assessment Grid for a Chronic Illness****Skills to be tested****Marks**

Opening of a consultation
 Establishing rapport- patient centered approach
 Explores pts ideas, expectations & concerns, summarises

/20

Asks relevant questions (explores cardio vascular risk factors & symptoms and signs of target organ damage e.g. chest pain, dyspnoea)
 Appropriate use of open & closed ended Qs history regarding diet and exercise and smoking

/30

Whether candidate arrived at the problem
 Explains what is hypertension, patient negotiation
 (B/W side effects of drugs and complication of high BP)
 appropriate investigations (ECG, urine D/R, Lipids, FBs, Creatinine)
 advises life style modification negotiates the need to prescribe ace inhibitor
 / ARB blocker not Beta blockers

/40

Closing the consultation with summarization and feedback

/10

Total

/100

Name and sig: of the trainer

ANNEX 23

Marking Grid for the Pre MD Portfolio Evaluation

Training 30 marks

Adequate training by attendance at GP attachment

Adequate training by attendance at University appointments

Adequate training by attendance at Hospital appointments

Case Write Up 50 marks

Case write up – covers primary care 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 carried Out 40 marks

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

Continued Professional Development 50 marks

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

Community Involvement 30 marks

Community Contribution – membership in local organizations

Community Contribution – delivery of lectures, presentations, conducting discussion, seminars

Community Contribution – helping public health authorities in their endeavor

Critical appraisal 50 marks

Critical appraisal – relevance

Critical appraisal – review of literature

Critical appraisal – summarize what is known/unknown

Critical appraisal – formulate research question

Critical appraisal – method of solving the problem – sampling, design, statistics

Critical appraisal – results – clarity, validity, reliability, conclusion

Critical appraisal – discussion – balanced evaluation of results, limitations of study,

Critical appraisal – application of findings in personal clinical practice

Total marks 250

Pass grade 50% (125 marks out of 250)

ANNEX 24

Post MD Training (Pre Board Certification)

Objectives for Post MD Training

Local Post MD Training

The trainee should review his portfolio & log book with the trainer 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 CDP 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 fora 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 constant dialogue with the trainers. Trainees are expected to understand that 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 post graduate program and the country, try to ascertain assistance to the post graduate program in Sri Lanka and the country at large.

The candidates prior to the board certification need to be attached to a GP trainer or University Family Medicine Department. During post MD training they will work as Senior Registrars in Family Medicine. They need to gain hands on experience in certain areas.

1. Consultation skills which will include communication, data gathering, examination, arriving at a working diagnosis and management plan to treat patients.
2. Developing counseling skills and conducting counseling the sessions.
3. To perform minor surgical procedures in the clinic with aseptic procedures.
4. To recognize the emergencies and manage accurately. You should manage these emergencies in the primary care setting. Unlike hospital registrars. You tend to work alone and need to arrive at a decision in managing the patient.

5. You should be able to take correct steps in managing the problems encountered in General Practice.
Ex: Will you treat or refer for secondary care.
6. Organize your clinic setup
 - a. Recruiting staff
 - b. Drug ordering
 - c. Accounting and Taxes
 - d. Audit your practice
7. Should be able to work in a team.
 - a. shared care with other consultants
8. Update your knowledge
 - a. Attending to academic sessions
 - b. Presenting scientific papers at academic sessions
9. Maintaining patient based and electronic medical records.
10. Arrange locum officers during your off days, so that clinic will function.
11. Competency in Information Technology.
 - a. Internet browsing (Pub Med ,Medline)
12. Take part in research in primary care.

If you are attached to a University Family Medicine Department during your post MD training, in addition to above you need to be actively involved in the undergraduate and postgraduate training.

You are going to be a future trainer in Family Medicine. You should conduct the following sessions.

1. Small group discussion with trainees.
2. Conducting tutorials and making tutorial topics.
3. Delivering lectures to medical students and DFM trainees.
4. Making question
 - a. MCQ
 - b. SEQ and
 - c. Preparing model answers
5. Preparation of Distance Education modules for DFM on line course.
6. Skills teaching.

ANNEX 25

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. As a MD trainer, 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 Board of Study in microbiology 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, workshops, 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. As an academic appraiser, 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. As a supervisor of a research project, 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. As a reviewer and assessor of a research project dissertation, 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. As a role model 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. As an examiner the trainer should**
- Read and abide by the guidelines of the PGIM document.

ANNEX 26

Reading Material: Books and Journals

Reading Material for Selection Examination

There are several books available. A few examples are listed below.

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. Fitzpatrick's 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: Meziès, 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, Lawrence 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 and 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.
62. Training modules for the syndromic management of sexually transmitted infections
2007
ISBN 978 92 4 159340 7 (WHO publication)

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>

ANNEX 27

Pre Board Certification Portfolio Assessment

1. Components

- 1.1 Log of Procedures carried out
- 1.2 Reflective Practice
- 1.3 Teaching (undergraduates/postgraduates / nurses /midwives)
- 1.4 Research and Audit
- 1.5 Information Technology
- 1.6 Ethics and Medico-legal Issues
- 1.7 Professional Development

2. Evaluation

The Trainers should evaluate the progress of each Trainee at regular intervals as recommended by the BoS and complete the relevant sections of the portfolio

3. Post MD Portfolio Assessment and Post MD Portfolio Viva

A pair of examiners will mark independently the submitted Post MD Portfolio and the performance at the Post MD Portfolio Viva based on the scale given below.

- 3.1 Log of Procedures carried out (marks 20)
- 3.2 Reflective Practice (marks 20)
(on significant clinical events experienced by the Trainee)
- 3.3 Teaching (marks 20)
- 3.4 Research and Audit (marks 10)
- 3.5 Information Technology (marks 10)
- 3.6 Ethics and Medico-legal Issues (marks 10)
- 3.7 Professional Development (marks 10)

Pass grade 50% or more (50 marks or more)