

# **CURRICULUM ON PATIENT CARE**

## **MSU INTERNAL MEDICINE RESIDENCY PROGRAM**

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### **I. Educational Purpose and Goals**

Patient care comprises the internist's action skills. Such skills include compassionate collection of accurate and appropriate biopsychosocial data, performance and interpretation of complete physical exams, integration of information from multiple sources, prioritization of differential diagnoses, development of diagnostic and therapeutic plans, management of complex problems while facilitating patient care, performing procedures in a competent fashion, and effectively educating patients and their families. Our goal is to train physicians effectively in these pursuits. In addition, residents in the osteopathic-allopathic training program will receive training in the integration of osteopathic principles into the diagnosis and management of patients.

### **II. Principal Teaching Methods**

- a. Supervised Direct Patient Care Activities
  - i. Supervised Direct Patient Care: Residents participate in hospital, subacute rehabilitations and ambulatory medical care under direct supervision of community-based and/or university faculty. Where appropriate, senior residents assist junior trainees.
  - ii. Patient care rotations are required in the following disciplines:
    1. Allopathic-only training: general medicine, consultative medicine including care of the surgical patient, emergency medicine, critical care, cardiology, neurology, geriatrics, hematology/oncology, psychosocial medicine, anesthesiology and women's health.
    2. Osteopathic and allopathic training: as above, plus pulmonary, endocrinology, gastroenterology, infectious diseases, nephrology, and rheumatology. At least two weeks of the women's health curriculum will be ambulatory gynecology.
  - iii. Two to four week selective rotations are available in dermatology, ophthalmology, ENT and outpatient orthopedics.
  - iv. Additional elective experiences are available as described in the Curriculum on Medical Knowledge
- b. Simulated and Standardized Patients
  - i. A faculty member teaches all residents female pelvic examination with standardized patient models.
  - ii. Formal instruction regarding procedure indications, consent, performance technique, complications, and post procedure care are taught through workshops with hands-on learning using simulators.
- c. Small Group Discussion
  - i. Psychosocial. Interviewing skills, shared decision making, and patient education are taught and practiced in the mandatory Psychosocial rotation and biopsychosocial morning report.
  - ii. Teaching morning report. All residents on Firm, SH-Med, and Night Float rotations attend teaching morning report as described in the residency

manual. Each resident is assigned sessions for which he or she identifies at least one learning objective; presents the case; leads the ensuing academic discussion; and when appropriate, directs teaching at the bedside.

### III. Educational Content

- a. Mix of Diseases - The mix of diseases is quite broad and includes common as well as rare physical and psychiatric conditions generally encountered in adolescent and adult (including geriatric) patients.
- b. Patient characteristics - Patients seen by the residents are diverse culturally and socio-economically; and they range from the adolescent to the geriatric patient.
- c. Learning venues - Approximately 67% inpatient and 33% ambulatory based on the total three-year curriculum.
  - i. Inpatient: one university-affiliated community hospital (with emergency department), an inpatient rehabilitation unit, an inpatient psychiatric unit, inpatient hospice, a long-term acute care unit, and an inpatient substance abuse treatment center. Please see the inpatient and hospital medicine curricula.
  - ii. Extended care: adult foster care and subacute rehabilitation unit
  - iii. Ambulatory: home hospice, dialysis center, level one trauma center/emergency department, pathology lab including the regional medical examiner's autopsy site, MSU HealthTeam offices (including the Clinical Center for all continuity clinics and Breslin Cancer Center), MSU Learning and Assessment Center, county health department, numerous community specialty and primary care offices.

### IV. Principal Ancillary Educational Materials

Residents may access electronic and physical libraries at both Sparrow Hospital and Michigan State University. Audiovisual online procedure modules are available through the Sparrow Hospital library (Procedures Consult). Simulators are available for additional supervised instruction when necessary.

### V. Methods of Evaluation

- a. Resident Performance
  - i. *Global evaluations – faculty, peers, nurses.* Faculty, nursing staff and peers complete resident rotation evaluations and quarterly continuity clinic evaluations, including assessment of competency in Patient Care. The evaluations are shared with the resident, are available for on-line review by the resident at their convenience, and are available to the residency office for internal review. Evaluations are part of the resident file and are incorporated into the semiannual performance review for directed resident feedback.
  - ii. *Mini-CEX.* Residents must complete 10 mini-CEXes per year. These may be completed in inpatient and outpatient sites.
  - iii. *Simulation training.* Residents receive separate evaluations for OSCEs and Pap/pelvic training.
  - iv. *Procedures.* Performance of procedures is evaluated by certified clinicians and tracked with an electronic logbook. All procedures are supervised until designated minimums are performed without difficulty.
  - v. *Patient evaluations.* Patients from the continuity clinics complete evaluations of physicians as previously described in the Interpersonal and

- Communication Skills curriculum.
- vi. *Quality improvement data.* See the Practice Based Learning and Improvement curriculum.
  - vii. *Praise/Concern Cards.* Personnel across the spectrum of training sites can complete “on the fly” praise or concern cards using the electronic evaluation system; forward concerns to the program director or another faculty member directly; or use institutional processes present within the hospital for all physicians. Concerns are discussed with the resident(s) with action as described in the residency manual. Praise cards are added to the resident portfolios.
  - viii. *Participation in OMT/OPP training events.* Required for all residents accredited by AOA.
    - 1. *Skills workshop provided at base campus.*
    - 2. *Statewide Campus System educational activities*
    - 3. *AOA Clinical Assessment Program*
    - 4. *Patient logs*
- b. Program and Faculty Performance
- i. *Resident global evaluations.* Residents complete rotation evaluations of faculty, facilities, and service experience. They comment on faculty modeling and teaching of Patient Care skills. These evaluations are sent to the residency office for review and attending faculty physician feedback. The Training and Evaluation Committee reviews results annually.
  - ii. *Graduate Surveys.* The program sends surveys to recent graduates and their employers for global evaluation of preparation across the spectrum of patient care disciplines and settings. Results are shared with the core faculty and Training and Evaluation Committee and used for process improvement.

## **VI. Institutional Resources: Strengths and Limitations**

- a. Strengths –Residents have excellent opportunities to learn from generalists and sub-specialists in a community setting that fosters excellent patient care skills. Faculty members are dedicated clinical educators, striving to involve residents as decision-makers while encouraging the acquisition of new patient-care skills. Osteopathic faculty members train osteopathic-allopathic residents in osteopathic manipulation techniques.
- b. Weaknesses – Some patient care settings are geographically disparate. There is no setting for care of transplant patients.

## **VII. Patient Care Competency Objectives**

Residents will consistently demonstrate these skills and attitudes by the end of the designated training year.

- a. Information gathering – residents will demonstrate that they can gather and synthesize essential and accurate information to define each patient’s clinical problem.
  - i. R1 residents will:
    - 1. Consistently acquire accurate and relevant histories from patients
    - 2. Seek and obtain data from second sources when needed
    - 3. Consistently perform accurate and appropriately thorough physical exams including osteopathic physical and structural examinations as indicated

4. Use collected data to define a patient's central clinical problem(s)
  5. Perform osteopathic treatment and procedures appropriate to his/her medical specialty
  6. Provided health care services consistent with osteopathic philosophy, including preventive medicine and health promotion based on current scientific evidence
- ii. R2 and R3 residents will do the above plus:
    1. Acquire accurate histories from patients in an efficient, prioritized, and hypothesis-driven fashion
    2. Perform accurate physical exams that are targeted to the patient's complaints
    3. Synthesize data to generate a prioritized differential diagnosis and problem list
    4. Effectively use history and physical exam skills to minimize the need for further diagnostic testing.
- b. Management plan – residents will develop comprehensive management plans for each patient
- i. R1 residents will:
    1. Consistently develop appropriate care plans
    2. Recognize situations requiring urgent or emergent care
    3. Seek additional guidance and/or consultation as appropriate
  - ii. R2 and R3 residents will do the above plus:
    1. Appropriately modify care plans based on patient's clinical course, additional data, and patient preferences
    2. Recognize disease presentations that deviate from common patterns and require complex decision-making
    3. Manage complex acute and chronic diseases
- c. Independent practice – residents will acquire progressive responsibility and independence for patient care
- i. R1 residents will:
    1. Require indirect supervision to ensure patient safety and quality care
    2. Provide appropriate preventive care and chronic disease management in the ambulatory setting
    3. Provide comprehensive care for single or multiple diagnoses in the inpatient setting
    4. Under supervision, provide appropriate care in the intensive care unit
    5. Initiate management plans for urgent or emergent care
    6. Gain experience in independently supervising care provided by junior members of the physician-led team
  - ii. R2 and R3 residents will do the above plus:
    1. Independently manage patients across inpatient and ambulatory clinical settings who have a broad spectrum of clinical disorders including undifferentiated syndromes
    2. Seek additional guidance and/or consultation as appropriate
    3. Appropriately manage situations requiring urgent or emergent care
    4. Effectively supervise the management decisions of the team
- d. Procedures - residents will competently perform medical procedures essential for the practice of general internal medicine.
- i. R1 residents will possess basic technical skill for the completion of

- common procedures. This is in addition to the demonstration of knowledge of procedural indications, contraindications, necessary equipment, process for handling specimens and patient after-care. They will participate in informed consent, assist patients with decision making, and attend to patient comfort. Procedures will be thoroughly documented. Osteopathic-allopathic R1 residents will in addition demonstrate knowledge of indications and contraindications of osteopathic manipulative treatments
- ii. R2/3 residents will possess technical skill for all procedures required for certification. In addition, they will demonstrate extensive knowledge of these procedures and be able to minimize risk and discomfort to patients. They will assist junior peers in skill acquisition. Osteopathic-allopathic R2/3 residents will demonstrate extensive knowledge and be facile in the performance of osteopathic manipulative treatments.
  - iii. All residents will maintain certification in advanced cardiac life support during residency.
  - iv. By graduation, all residents must demonstrate knowledge and competence in performance of:
    1. Arterial puncture
    2. Central venous line placement
    3. Endotracheal intubation
    4. OMM (osteopathic-allopathic residents only)
    5. Pap and endocervical culture collection
    6. Peripheral intravenous line placement
    7. Venipuncture (drawing venous blood)
  - v. Demonstrate knowledge at level previously described for R1 residents for:
    1. Abdominal paracentesis
    2. Arterial line placement
    3. Arthrocentesis
    4. Incision and drainage of abscess
    5. Lumbar Puncture
    6. Nasogastric intubation
    7. Pulmonary artery catheter placement
    8. Thoracentesis
  - vi. Demonstrate knowledge and interpretation of:
    1. ECGs
    2. Exercise stress tests (for osteopathic-certifying residents only)
    3. Holter monitors (for osteopathic-certifying residents only)
- e. Consultative care – residents will appropriately request and provide consultative care.
- i. R1 residents will build skill in being able to:
    1. Provide consultation services for patients with clinical problems requiring basic risk assessment
    2. Ask meaningful clinical questions that guide the input of consultants
  - ii. R2 residents will be able to consistently perform the actions above for R1 residents
  - iii. R3 residents will:
    1. Provide consultation services for patients with basic and complex clinical problems requiring detailed risk assessment
    2. Appropriately weigh recommendations from consultants in order

to effectively manage patient care