CURRICULUM ON PATIENT CARE
MSU INTERNAL MEDICINE RESIDENCY PROGRAM

Faculty representatives: Davoren Chick, M.D., Kelly Morgan, M.D, and Francesca C. Dwamena, M. D.

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I. Educational Purpose and Goals

Patient care comprises the Internist's action skills. Such skills include compassionate collection of highly personal data, performance and interpretation of complete physical exams, assimilation of information collected by multiple providers, 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 in these pursuits.

II. Principal Teaching Methods

a. Supervised Direct Patient Care Activities
    i. Supervised Direct Patient Care: Residents participate in hospital and ambulatory medical care. Community-based and University faculty supervise residents directly. Where appropriate, senior residents assist junior trainees. Patient care rotations are required in the following disciplines: general medicine – inpatient, general medicine – outpatient, general medicine – consultative medicine, emergency medicine, intensive care medicine, cardiology, neurology, rehabilitation medicine, geriatrics, hematology/oncology, office orthopedics, and combined dermatology/ophthalmology/ENT.
b. Simulated Patients and Standardized Patients
    i. A nurse educator teaches all residents female pelvic examination with standardized patient models.
    ii. Invasive procedures are taught at the MSU Learning and Assessment Center and during procedure conferences, using simulators for central lines, arterial lines, lumbar puncture, dermatology procedures, phlebotomy, peripheral intravenous lines, arthrocentesis, and other procedures. Simulators are used to teach examination of breasts, testes, and rectum/prostate.
c. Small Group Discussion
    i. Interviewing skills, shared decision making, and patient education are taught and practiced in the mandatory biopsychosocial medicine rotation.

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 range from the adolescent to the geriatric patient. Patients are of manifold racial and socioeconomic backgrounds.
c. Learning venues - Approximately 65% inpatient and 35% ambulatory based on the total three-year curriculum.

i. Inpatient: two University-affiliated community hospitals, an inpatient rehabilitation unit, an inpatient psychiatric unit, inpatient hospice, nursing home settings, a long-term acute care unit, inpatient detox center
ii. Ambulatory: home hospice, dialysis center, level one trauma center/emergency ward, pathology lab including the regional medical examiner's autopsy site, MSU Clinical Center ambulatory care building (for all continuity clinics), MSU Learning and Assessment Center (simulations), numerous community specialty and primary care offices. Residents may visit work sites during the elective Occupational and Environmental Medicine rotation.

IV. Principal Ancillary Educational Materials

Residents may access libraries at both hospitals and Michigan State University. Audiovisual online modules are available on physical exam skills through the MSU Echt computing center. Simulators are available for additional supervised instruction when necessary.

V. Methods of Evaluation

a. Resident Performance
   i. Faculty and peers complete resident rotation evaluations and quarterly continuity clinic evaluations, including assessment of competency in Patient Care.
   ii. A full CEX is performed using a model patient for all PGY1 residents, providing feedback on interviewing skills, physical examination, and identification of patient problems.
   iii. Night Float residents participate in targeted mini-CEX's.
   iv. Procedure conference performance, OSCEs, and Pap/pelvic training receive separate evaluations.
   v. All procedures are supervised until designated minimums are performed without difficulty.
b. Program and Faculty Performance

   Residents complete rotation evaluations of faculty, facilities, and service experience. They comment on faculty modeling 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.

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.
b. Weaknesses – Some patient care settings are geographically disparate. There is no setting for care of transplant patients.

VII. Patient Care Competency Objectives

a. Relationship-building skills. Residents must demonstrate the importance of effective communication when caring for patients as they collect highly personal information.

    i. PGY –1 and PGY-2 residents should consistently demonstrate integrity, respect, compassion and empathy for patients and their families. They will engage in shared decision making with patients and their families. See the MSU Professionalism curriculum.
    ii. PGY-3 residents should demonstrate the above and aid junior peers in effective communication with patients.

b. History taking. Residents must demonstrate an understanding of the importance of the complete bio-psychosocial history in deriving a differential diagnosis (see the residency manual for "Minimum data required for all complete write-ups").
    i. PGY-1 residents will consistently gather essential, accurate, and relevant physical, personal, and emotional information. The database will be organized in a manner consistent with accepted medical convention and charted in a timely and efficient manner. Information will be comprehensive and include data gathered by other providers and laboratory investigations. By completion of PGY1, histories will be hypothesis driven.
    ii. PGY-2 and PGY-3 residents will be precise, logical, and efficient in their data collection in addition to the above.

c. Physical Examination. Residents will demonstrate the importance of performing an appropriate and relevant physical exam.
    i. PGY-1 residents will perform a comprehensive physical exam with a consistent sequence. They will identify normal from abnormal and describe physiological and anatomical bases for findings. They will demonstrate ability to augment the physical exam to elicit additional data.
    ii. PGY-2 residents, in addition, will correctly detect subtle findings and understand their significance. They will teach appropriate physical exam skills to PGY1's and students.
    iii. PGY-3 residents additionally will strive to perform a focused physical exam at a level similar to a sub-specialist, and understand the sensitivity and specificity of maneuvers.

d. Clinical Judgment, Medical Decision-Making and Management Plans. Residents will progressively become more adept at assimilating information that they have gathered from the history and physical exam.
    i. PGY-1 residents will be able to identify all bio-psychosocial problems of patients and develop prioritized differential diagnoses. PGY-1 residents will begin to develop therapeutic plans that are based on evidence or guidelines. They will establish an orderly succession of testing based on their history and exam findings and demonstrate appropriate use of diagnostic and therapeutic procedures.
    ii. PGY-2 residents will, in addition, regularly integrate medical facts and clinical data while weighing alternatives and keeping in mind patient preferences. They will regularly incorporate consideration of costs, risks, and benefits when considering diagnostic tests and therapies. They will consistently monitor and follow-up patients appropriately.
    iii. PGY-3 residents will in addition demonstrate appropriate reasoning in ambiguous situations, while continuing to seek clarity. Residents at this level of training will not overly rely on tests and procedures.

They will assist junior trainees and medical students to become efficient managers through appropriate use of clinical judgment and effective decision-making. PGY-3 residents will consistently establish monitoring procedures and demonstrate ability to change therapeutic plans for ineffectiveness or adverse side effects.

e. Oral Case Presentation Skills. All residents will deliver appropriately concise summaries of patients' bio-psychosocial histories, physical examinations, laboratory data, assessments, and plans that are tailored to situations ranging from brief conversations with colleagues to formal presentations at medical meetings. Presentations will be hypothesis-driven. Assessments will include discussions of prioritized differential diagnoses with supporting data and important psychosocial contexts. Assessment of chronic problems will include discussions of underlying etiologies, precipitating factors and complications. Hypothesis-driven diagnostic and therapeutic plans will be presented for each active problem. Residents will also effectively answer audience questions.

f. Counseling. Residents will recognize the importance of clear and accurate instructions for patients and their families.
    i. PGY-1 residents will give patients accurate instructions regarding usage of their medications and follow up care.
    ii. PGY-2 residents will effectively counsel and educate patients about pertinent health issues, tests and treatments. They will recommend gender- and age-appropriate screening exams.
    iii. PGY-3 residents, in addition, will consistently and thoroughly educate patients and their families, using patient education as a form of intervention and partnering.

g. Use of technology. Residents will understand the increasing role that technological advancements bring to the bedside. See the MSU curriculum on Practice-Based Learning and Improvement.

h. Procedures. Residents will competently perform medical procedures essential for the practice of general internal medicine.
    i. PGY-1 residents will demonstrate 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.
    ii. PGY-2/3 residents will demonstrate extensive knowledge and be facile in the performance of procedures while minimizing risk and discomfort to patients. They will assist junior peers in skill acquisition.

i. Preventive Care. Residents will understand the importance of disease prevention and health maintenance
    i. PGY-1 residents will use EHR prompting tools to ensure that their continuity patients receive recommended screening tests and other preventative practices. They will utilize EHR chronic care tools in an effort to decrease the incidence of complications in those with chronic disease states.
    ii. PGY-2 and PGY-3 residents, in addition to the above, will deliver up-to-date evidence-based or guideline-based preventive care.

    iii. PGY-3 residents will also demonstrate understanding of public health and its broad implications to the population being served.

j. Patient-focused care. Residents at all levels of training will demonstrate sensitivity and responsiveness to patients' age, culture, gender and disabilities. Residents will work effectively with allied health care professionals and physician consultants to provide effective patient-focused care.