CURRICULUM ON OSTEOPATHIC MANIPULATIVE MEDICINE
MSU INTERNAL MEDICINE RESIDENCY PROGRAM

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I. Educational Purpose and Goals

Doctors of osteopathy place three basic tenets at the center of their clinical practice. These tenets are:

1. The body is a unit with mind, body, and spirit interrelations.
2. The body has self-regulating, self-healing.
3. The body has structure-function interrelations.

Residents in our program will receive longitudinal training in Osteopathic Principles across the three years of training and demonstrate incorporation of OPP – including diagnosis and treatment of somatic dysfunction - into their clinical practice.

II. Principal Teaching Methods

a. *Supervised Direct Patient Care*. Residents encounter patients in both inpatient and ambulatory settings. Faculty supervise patient care, including resident documentation of osteopathic examinations, assessments and plans.
b. *Lectures and Hands-on Laboratories*. The OPP curriculum will be incorporated as a two-year cycle of lecture and hands-on laboratories. Part of these will be offered at Sparrow Hospital as part of a multidisciplinary conference, and others as part of the Statewide Campus System. Core topics include: Sacral flexions/torsions; Pelvis; Lumbar techniques: MFR, Still, HVLA, ME; Thoracic techniques: MFR, Still, HVLA, ME; Cervical techniques: MFR, Still, HVVLA, ME; treatment of upper and lower extremities, neurologic impingement syndromes, headaches, TMJ, respiratory tract, cranial strain, OMM documentation and billing

III. Educational Content

a. Mix of diseases: Residents will encounter patients with common diseases and symptoms, including but not limited to musculoskeletal, neurologic, respiratory, cardiac, and GI.
b. Patient characteristics: Adult and adolescent patients
c. Learning venues: Residents will encounter patients in inpatient and ambulatory settings, including their own continuity clinics. In addition, they will learn skills in laboratory/skill-building settings.
d. Procedures/techniques learned:
    i. Myofascial release (MFR)

ii. Muscle energy (ME)
iii. High velocity low amplitude (HVLA)
iv. Still technique

e. Structure of rotation
   i. Osteopathic journal club
   ii. Statewide Campus System
   iii. Sparrow OMM skills training

IV. Principal Ancillary Educational Materials

a. Residents are assigned readings from texts, papers, electronic resources, videos, etc. Full service, 24-hour libraries are available at Sparrow Hospital and Michigan State University (electronic access).

V. Methods of Evaluation

a. Resident Performance
   i. Rotation evaluations. Faculty complete web-based electronic resident evaluation forms provided by the Internal Medicine Residency office. The evaluation is competency-based, fully assessing core competency performance. The evaluation will be shared with the resident, is available for on-line review by the resident at their convenience, and is sent to the residency office for internal review. The evaluation will be part of the resident file and will be incorporated into the semiannual performance review for directed resident feedback.
   ii. Formative feedback. Residents are observed during hands-on skills training and receive immediate oral formative feedback.
   iii. CEX: Faculty assess residents' abilities to diagnosis and treat patients using OPP on a yearly basis. The evaluation will be shared with the resident, is available for on-line review by the resident at their convenience, and is sent to the residency office for internal review. The evaluation will be part of the resident file and will be incorporated into the semiannual performance review for directed resident feedback.
b. Program and Faculty Performance
   i. Using the web-based evaluation system upon completion of the rotation, residents complete a service evaluation commenting on the faculty, facilities and service experience. The program reviews evaluations and faculty physicians receive annual feedback. Collective evaluations serve as a tool to assess faculty development needs. The Training and Evaluation Committee reviews results annually.

VI. Institutional Resources: Strengths and Limitations

a. Strengths: Osteopathic faculty at both Michigan State University and Sparrow Hospital are nationally known for their skills in OMM. The Statewide Campus System provides additional opportunities for learning and mentoring.
b. Weaknesses: Supervising faculty come from both osteopathic and allopathic backgrounds. Allopathic physicians have varying levels of knowledge in skill in the performance of musculoskeletal, neurologic, and osteopathic evaluation and treatment.

VII. OMM Specific Competency Objectives

This document describes the expected developmental progression for each residency training year. Competence should be demonstrated by the end of the specified training year.

1. Proficiency in the following types of treatment are required as well as awareness of when such techniques are best applied and of the contraindications to utilizing the following types of treatment: Myofascial release (MFR, Muscle energy (ME), High velocity low amplitude (HVLA), and Still technique.

2. Diagnosis- and anatomy-specific competencies

    1). Sacrum/Pelvic
        - i. Perform the following treatment modalities:
            - 01. Sacral flexions via muscle energy and myofascial release
            - 02. Sacral torsions via muscle energy and myofascial release
            - 03. Innominate rotations via muscle energy and Still technique
            - 04. Innominate shears via muscle energy and Still technique
        - ii. Identify the following diagnoses:
            - 01. Unilateral sacral flexion
            - 02. Forwards and backwards sacral torsions
            - 03. Innominate rotation
            - 04. Innominate shears
        - iii. Identify the anatomical landmarks:
            - 01. Sacrum: inferior lateral angle, sacral base, sacral sulcus, sacrutuberous ligament
            - 02. Pelvis: PSIS, ASIS, pubic symphysis

    2). Lumbar Spine
        - i. Perform the following treatment modalities:
            - 01. Treatment of segmental rotations utilizing indirect action techniques: myofascial release, Still technique
            - 02. Treatment of segmental rotations utilizing direct action techniques: HVLA, muscle energy
        - ii. Identify the following diagnoses:
            - 01. Standing/seated flexion lesions
            - 02. Knowledge of Fryette's laws, including understanding of Type I and Type II lesions
        - iii. Identify the following anatomical landmarks:
            - 01. Transverse processes, facet joints, joint angles

    3). Thoracic Spine
        - i. Perform the following treatment modalities:

01. Treatment of segmental rotations utilizing indirect action techniques: myofascial release, Still technique.
02. Treatment of segmental rotations utilizing direct action techniques: HVLA, muscle energy

ii. Identify the following diagnoses:
01. Standing/seated flexion tests
02. FRS and ERS lesions
03. Knowledge of Fryette's laws, including understanding of Type I and Type II lesions

iii. Identify the following anatomical landmarks
01. Transverse processes, facet joints, joint angles

4). Cervical Spine

i. Perform the following modalities:
01. Treatment of segmental rotations utilizing indirect action techniques: myofascial release, Still technique
02. Treatment of segmental rotations utilizing direct action techniques: HVLA, muscle energy

ii. Identify the following diagnoses:
01. FRS and ERS lesions
02. Knowledge of Tryette's laws, including understanding of Type II lesions

iii. Identify the following anatomical landmarks
01. Transverse processes, facet joints, joint angles, articular pillars

5). COPD/asthma

i. Describe the patterns of lymphatic and autonomic nervous system restriction/dysfunction in patients with COPD/asthma

ii. Explain the anatomy of restriction/dysfunction in patients with COPD/asthma

iii. Summarize a) clinical conditions that relate to exacerbation of COPD/asthma and b) osteopathic philosophy applicable to postoperative ileus

iv. Demonstrate OMM techniques for treating patients with postoperative ileus

6). Pneumonia

i. State the lymphatic drainage patterns and autonomic control of the lungs and respiratory cage

ii. Describe the pathophysiology of lymphatics and autonomic control of the lungs and respiratory cage

iii. Explain a) clinical conditions that relate to pneumonia and b) osteopathic philosophy applicable to pneumonia

iv. Demonstrate OMM techniques for treating patients with pneumonia.

7). Musculoskeletal Headaches

i. Describe neuromuscular patterns and causes of musculoskeletal headaches in inpatient populations
ii. Explain a) clinical conditions that relate to musculoskeletal headaches b) osteopathic philosophy applicable to musculoskeletal headaches
iii. Demonstrate OMM techniques for treating musculoskeletal headaches

8). Chest Pain

i. Describe neuromuscular patterns and causes of chest pain in the inpatient population
ii. Explain a) clinical conditions that relate to chest pain and b) osteopathic philosophy applicable to chest pain
iii. Demonstrate OMM techniques for treating inpatients with chest pain

9). Upper GI Complaints

i. Identify neuromuscular patterns and causes of upper GI complaints in the inpatient population
ii. Explain a) clinical applicable to GI complaints
iii. Demonstrate OMM techniques for treating inpatients with upper GI complaints

10). Physical Therapy Prescription

i. Use the team approach in physical therapy in patient
ii. Explain the indications and contraindications of physical therapy modalities.
iii. Write a physical therapy prescription

11). Shoulder Pain

i. Demonstrate ability to diagnoses common shoulder pain syndrome
ii. Demonstrate ability to diagnose neurological problems of upper extremity
iii. Perform detailed examination of shoulder girdle

12). Knee Pain

i. Demonstrate ability to diagnose common knee pain syndromes
ii. Perform physical examination procedures of knee

13). Foot and Ankle Pain

i. Demonstrate ability to diagnose foot and ankle pain

syndromes

ii. Perform physical examination of foot and ankle

14). Functional Neurology

i. Perform neurological exam of upper and lower extremity

ii. Recognize normal and abnormal nerve function

a. Reflexes
b. Dermatomes
c. Muscle innervation

iii. Recognize normal and abnormal muscle firing patterns

a. Upper torso/upper extremity
b. Low back/lower extremity

3. Residents will utilize OPP to maintain excellent quality of care.

4. Residents will demonstrate the ability to document and bill for OMM services.