General Description

Required Rotation
The rotation in Rural Medicine may be completed as a required experience for students in Year 4 of the College of Osteopathic Medicine. Rural Medicine may be done as part of the fourth year required Family Medicine requirements (see the Clinical Rules and Regulations) and must be four weeks in a structured, predominately ambulatory primary care setting intended to develop the student’s decision-making, cognitive skills and to apply didactic material in a clinical setting. In addition, as a general guideline the community should be less than 15,000 in population. The community also should be at least a 30 minute or more commute from a metropolitan area (which for this purpose is also defined as a town of 15,000 population or more).

Elective Rotation
An elective rotation in Rural Medicine is a four (4) week rotation during which time the student will be given opportunities to further develop clinical skills as described for the required rotation. Most students electing this rotation will be in the fourth year of osteopathic medical school.

Purpose
Clinical experiences are intended to assist the students’ transition from didactics to integrated clinical evaluation, decision-making, and management of patients. In addition to gaining specific skills during this rotation, the student should also continue to develop skills in systematic clinical problem solving and patient management abilities, establish or reinforce patterns of independent learning and self-evaluation, and improve skills in communication and medical record keeping.

At the completion of this rotation, the student should have reached certain broad goals, including:
- enhancement of their skills in systematic medical problem solving and patient management abilities;
- expanded knowledge of disease processes;
- improved clinical skills, including both diagnostic and therapeutic procedures

Students are expected to assist in the management of patients, under supervision of a licensed health care professional. The student should also develop fundamental psychomotor skills by performing routine basic procedures under direct supervision.

Objectives

We recognize that four weeks is insufficient time to cover a comprehensive list of objectives. Clearly, subjects addressed in any clinical rotation are dependent on the numbers of patients and kinds of disease entities presenting to a particular clinic or service. Nevertheless, certain minimum content must be addressed, either by clinical exposure or by didactic materials so that students are prepared for Board examinations and other assessments. Therefore, each of the following sections contains relatively broad, basic objectives which students are responsible for learning.

Affective Objectives
At the completion of the Rural Medicine rotation, the student should:
1. Understand the multiple and varied responsibilities of rural primary care physicians
2. Recognize the value of continuity in the physician-patient relationship
3. Be able to deal with patients as individuals
4. Understand the value of a team-oriented approach in current osteopathic medical practice
Psychomotor Objectives
At the completion of the Rural Medicine rotation, the student should demonstrate development and expansion of competence in the following:
1. Perform and record a complete, appropriate history through the comprehensive collection of basic, relevant facts, by systems, in logical order, legibly and systematically recording this data, using accepted terminology.
2. Perform and record a complete, appropriate physical examination of all systems at a sufficient level of complexity, using all methods (inspection, palpation, percussion, auscultation) including attention to the structural examination. The data will be recorded systematically, legibly, and in acceptable terminology.
3. Formulate, record and use a problem list.
4. Make rational use of information, including the ability to:
   a. integrate material from the history and physical
   b. sequence findings
   c. prioritize
   d. synthesize
   e. revise
5. Development of realistic diagnostic and management plans.
6. Use of laboratory testing to include:
   a. Familiarity with:
      i. diagnostic x-ray indications and techniques, to include ultrasound, CT, MRI and nuclear studies
      ii. methods and indications for endoscopic evaluation (upper and lower GI, bronchoscopy, etc.)
      iii. cardiovascular diagnostic methods, including ECG and ambulatory monitoring
      iv. blood chemistries and their use in diagnosis
   b. Ordering and interpreting:
      i. blood glucose
      ii. complete blood count
      iii. electrocardiogram
      iv. throat culture/rapid strep screen
      v. tuberculosis skin test
      vi. stool guaiac
      vii. urinalysis, dipstick
      viii. urinary sediment
   c. Correct use of:
      i. ophthalmoscope
      ii. otoscope
      iii. reflex hammer
      iv. sphygmomanometer
      v. stethoscope
      vi. tuning fork
      vii. Monofilament
7. Perform with supervision:
   a. osteopathic manipulative therapy
   b. pelvic examination and Pap smear
   c. breast examination
   d. rectal and prostate examination
8. Initiate treatment with an appropriate level of supervision.
9. Request consultation as needed.
10. Reassess and adjust treatment plans
11. Anticipate possible treatment actions, reactions and interactions.

Cognitive Objectives
At the completion of this rotational experience, the student should be able to:
1. Understand the scope and limitations in the Rural Medicine Clinic.
2. Demonstrate strong interactive skills for communication with patients and other members of the health care team.
3. Integrate the osteopathic philosophy of wellness and holistic and structural care into the practice of Rural Medicine.
4. Recognize opportunities, methods, and limitations of primary prevention of disease in the practice of Rural Medicine.
5. Incorporate evidence-based medicine into Rural Medicine
6. Discuss the protocols for routine screening and preventive medical procedures (e.g. immunizations, serum lipid screening, Pap smears, etc.)
7. Discuss societal and environmental issues as they affect specific patient groups (e.g. elderly patients, indigent patients, etc.)
8. Discuss the implications of billing and coding, and third party payer issues in the practice of Rural Medicine.

For each of the following core disease/disorder areas, the student should be able to apply osteopathic principles and practices to:

- understand the clinical presentation.
- understand incidence, etiology, and pathophysiology.
- list available therapeutic methods and specific risks, costs, and side effects of each.
- understand the natural course of the disease and the prognosis

1. Cardiovascular
   - angina pectoris and its differential diagnosis
   - arrhythmias
   - coronary atherosclerosis
   - heart failure
   - syncope
   - systemic hypertension

2. Dermatology
   - acne
   - dermatitis (many etiologies)
   - melanoma
   - skin cancer
   - verruca

3. Emergencies (not otherwise listed)
   - burns
   - trauma

4. Endocrinology
   - diabetes mellitus
   - thyroid disease

5. Gastroenterology
   - functional disorders
   - GI bleeding
   - GI neoplasia
   - inflammatory bowel disease
   - peptic ulcer disease

6. Hematology/oncology
   - anemias
   - lymphadenopathy

7. Infectious disease
   - sexually transmitted diseases
   - strep screening
   - tuberculosis skin testing

8. Musculoskeletal disease
   - arthritides (rheumatoid, etc)
   - osteopathic structural examination and treatment

9. Nephrology
   - cancer screening
   - hematuria, proteinuria
   - renal stone diseases
   - sexual dysfunction
   - urinary tract infection

10. Neurology
central nervous system disorders (e.g. stroke, TIA)
cephalagias
peripheral neuropathy
seizure disorder

11. Obstetrics and Gynecology
amennorhea
cancer screening (cervix, endometrium, breast)
contraception
pelvic pain
prenatal care
vaginal bleeding

12. Orthopedics
casting and immobilization methods
simple orthopedic diagnosis and management (e.g. minor fractures, etc)
sports injuries

13. Otorhinolaryngology
audiology screening
otitis
pharyngitis
rhinitis
sinusitis

14. Pediatrics
childhood diseases
growth and development
immunizations
nutrition
well child examinations

15. Preventive Medicine (Adult)
immunizations
nutrition and exercise recommendations
risk factor analysis and screening for specific diseases (e.g. cardiac risk factors, prostate specific antigen, etc.)

16. Psychiatry
anxiety and depression
sexual dysfunction
suicide risk assessment

17. Pulmonary medicine
asthma
acute bronchitis and pneumonia
chronic obstructive lung disease

18. Substance abuse
alcohol
chemical dependency
drug-seeking behavior
tobacco

Implementation
Course objectives are to be accomplished in a College affiliated hospital or clinical facility, under supervision of a licensed health care professional. Rotation objectives must be covered during the rotation to assure adequate student preparation for Board examinations and preparation for residency training. The use of diverse methods appropriate to the individual and the clinical site are encouraged, but patient-centered teaching is optimal.

Didactic methods to achieve the required objectives include:
- reading assignments
- lectures
- computer-assisted programs (if available)
 Clinically oriented teaching methods may include:

- supervised and critiqued clinical workups of patients admitted to the service
- assignment of limited co-management responsibilities under supervision
- assigned, case-oriented reading

Three levels of achievement are identified:

- awareness of the availability of various medical procedures and their use.
- familiarity with a variety of medical procedures through observation and assisting
- proficiency in clinical procedures through actual supervised performance

Evaluation of the student must be completed and submitted to the Office of Clinical Affairs by the attending physician within one week of the completion of the rotation. On the last day of service, the supervising physician should review the student’s performance with the student. A student’s signature on the evaluation form simply indicates that the student has received the evaluation directly from the attending; it does not indicate agreement with the evaluation and is not required.

**Texts and Resources**

**Required Assignments Text:**

**Additional helpful reference texts:**
For specific questions in:

**Assignments**

The student is expected to read each evening to address diseases and disorders of the patients seen during clinic hours daily and to address diseases and disorders noted in the Cognitive Objectives section above. During this rotation, the student will follow the attendance guidelines in the Clinical Affairs Rules and Regulations.