

FORT WAYNE CENTER FOR MEDICAL EDUCATION

COMPETENCY HANDBOOK 2003

Evaluation of Nine Competencies

in Medical Students

During Years One and Two at FWCME

Competency:

I - Effective Communication

II - Basic Clinical Skills

III - Science to Guide Diagnosis, Management, Therapeutics, & Prevention

IV - Lifelong Learning

V - Self-Awareness, Self-Care, and Personal Growth

VI - The Social and Community Context of Health Care

VII - Moral Reasoning and Ethical Judgement

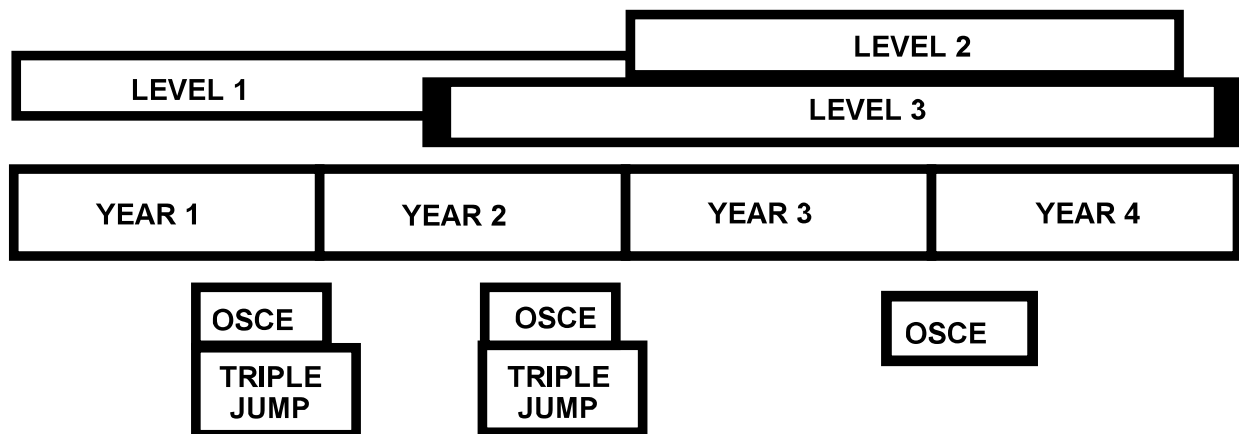
VIII - Problem Solving

IX - Professionalism and Role Recognition

INTRODUCTION

The following Competency Plan for the Fort Wayne Center for Medical Education is the result of an initiative that is associated with curriculum reform at the main campus of Indiana University School of Medicine in Indianapolis. Most of the activities that are used to meet the competency requirements reported in this document have been practiced at the Fort Wayne Center for years. It is intended that the competency program will produce a physician who not only has the knowledge base to practice medicine, but has developed clinical skills, capabilities and attitudes that will better prepare him / her for the medical practice of the 21st Century.

The overall competency plan for Indiana University School of Medicine consists of three levels. The first level includes activities during the first two years and is most relevant to the mission of the Fort Wayne Center for Medical Education. The second level of competency will be achieved during the last two years of medical school. A medical student must pass all nine competencies for level one and level two. In addition, a student must pass three competencies at the third level to graduate from Indiana University School of Medicine. Competencies will be evaluated through various activities scheduled during the course of the medical student's education.

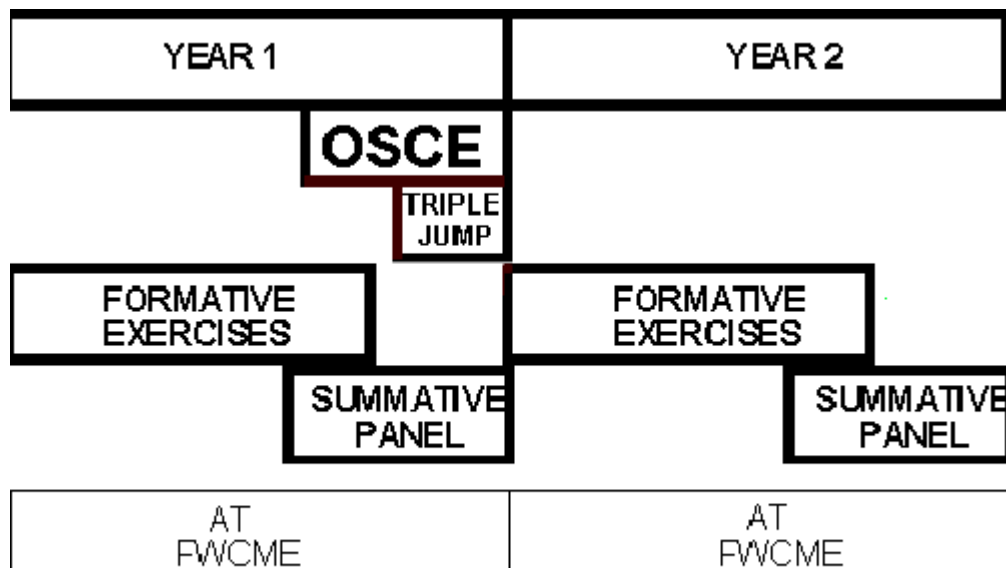


Formative exercises will be scheduled to expose the student to a particular competency and the student will then be evaluated on numerous occasions to demonstrate his / her achievement of that ability or skill. At various points during each level, summative evaluations will be undertaken to determine whether the student has achieved the ability by conducting a standardized activity with multiple evaluators. Thus, these evaluators can consider the previous progress on formative exercises and give a summation of these. On the other hand, an examination of clinical skills would be appropriate. These take the form of an optimized-standardized clinical evaluation (OSCE) or a triple-jump exercise. During a triple-jump activity, which is the term applied to a sequential problem solving exercise, the student is introduced to a brief case history, given time to write up the case and evaluate it. The student is then given instructions for the study phase during which they explore identified learning issues associated with the case. Using skills in information retrieval, the student independently analyzes the information, develops new or modifies previous hypotheses and completes a written report.

Following this second step, students receive the final pages of information and respond in a written analysis of the questions that are asked. The ideal would be an OSCE combined with the triple jump exercise, allowing a standardized patient to be the subject of the triple jump exercise. The current plan includes an OSCE and a triple-jump evaluation conducted toward the end of the first year and a summative evaluation of progress at the end of the first and at the end of the second year at Fort Wayne. Another OSCE, which could be considered summative of the first level, is conducted at the Indianapolis campus at the start of third year. Thus, the triple-jump examination serves as a summative evaluation for: Competency I, Effective Communication; Competency IV, Lifelong Learning; Competency VII, Moral Reasoning and Ethical Judgement; Competency VIII, Problem Solving; and Competency IX, Professionalism and Role Recognition. With creative case design, the other competencies could be involved as well: Competency II Basic Clinical Skills; Competency III, Science to Guide Diagnosis, Management, Therapeutics and Prevention; Competency V, Self-Awareness, Self Care and Personal Growth; and Competency VI, The Social and Community Context of Health Care.

Faculty development activities must be undertaken if these standardized activities are to be developed and activated to their full potential. Triple jump cases are currently developed at the state-wide level and shared among centers. Some of the faculty have responded to the challenge and have participated in both formative exercises and the assessment of triple jump activities. The challenge remains to involve all of the faculty so that the workload and responsibility is equitably distributed. To date, we have followed a two step plan to reach full compliance with summative evaluations. First, we will do summative evaluations by convening those course directors who have evaluated competencies at the end of the first and at the end of the second year. Second, we have incorporated summative evaluations by using the OSCE and triple-jump activities.

**COMPREHENSIVE COMPETENCY PLAN
FORT WAYNE CENTER FOR MEDICAL EDUCATION**



Competency I - Effective Communication

1. Description of a Competent Student at Level One:

- A. Listens effectively: attentively, non-judgmentally, patiently, maintaining eye contact.
- B. Respects the patient as a person: elicits and respects patient's values, exhibits cultural sensitivity, communicates empathy, maintains confidentiality, conforms with ethical guidelines.
- C. Uses verbal language effectively in a clear, comprehensible, and organized manner that is appropriate for the audience.
- D. Uses written language effectively: effectively reads medical literature, understands and appropriately uses medical jargon and abbreviations, produces written communications that are legible, sensitive, clear, comprehensible, organized, succinct and at a level appropriate for intended readers.
- E. Uses computer technology effectively: understands and uses word processing; uses bibliographic databases as a resource for research and problem solving.

Thus, a competent medical student should be able to listen attentively and communicate effectively with faculty, other students, patients and their families, and health care team members. By practicing and mastering these skills, the student learns that interpersonal rapport is required to form and maintain optimal and effective interactions with others.

2. Activities To Be Evaluated:

First and second year medical students will demonstrate basic oral and written communication skills involving both academic studies and interactions with colleagues. In addition, the student will demonstrate competence in oral communications in interactive settings, such as with an individual or simulated patient or faculty member. Effective communication will be demonstrated in written communications of informal nature, such as descriptive reports and hospital progress notes. The student will be expected to follow prescribed elementary processes for the interviews and write-ups, such as one would find in a medical / scientific publication or basic interviewing handbook.

3. Formative Exercises:

Students, by the didactic method used in instruction, learn to gather and process information. Although class notes or outlines are often provided at FWCME, the student must develop skills at note-taking and summarization. In addition, students must learn the art of speaking and discussing information which is acquired. Opportunities will be made available during the first two years of medical school both in lecture and in conference settings to

practice these skills. Methods of oral and written communication are important in a variety of health care situations. Critical skills to be acquired include learning helpful interviewing behaviors, conducting systematic and thorough interviews, and methods for identifying the patient's motivation in consulting a physician. Styles of communication and behaviors that annoy others will be discouraged, especially behaviors that devalue the patient.

Computer technology will be used as part of the instructional process by including the use of bibliographic databases to choose relevant journal articles for study and to maintain pertinent bibliographic databases. Students will be given ample opportunities to use word processing software to prepare written reports and case studies. These activities will be assessed by course directors during a variety of activities in their courses during the first and second year and in clinical settings. Each course director or facilitator evaluating the formative exercises for this competency will keep a pass-fail record for the student and keep the student informed about his progress by timely feed-back or discussion.

4. Summative Evaluation:

This competency will be evaluated summarily once during the first year and once during the second year at FWCME. Initially, a summative panel, consisting of all the course directors, will meet to discuss the comprehensive evaluation of each student in each competency. Only those course directors who have conducted a formative exercise will discuss performance in a particular competency.

During the first year, a summative panel will meet in the Spring to evaluate the performance on formative exercises. Optimized-Standardized Clinical Evaluations (OSCEs) for patient history-taking have been utilized to evaluate student performance in past years in the Introduction to Clinical Care (ICC). With faculty development and incorporation of basic science faculty into a group evaluation, this OSCE could be converted into a state-wide OSCE-triple jump exercise to more effectively evaluate both oral and verbal communication skills. However, as it now exists, this OSCE will be used as a formative exercise since the current evaluation is only by the ICC course director.

During the second year, a summative panel will meet during the Spring to evaluate the performance on formative exercises. The OSCE that is conducted in Indianapolis at the beginning of the third year also serves as a summative evaluation of clinical skills.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated in communication skills by both course directors and other instructors familiar with the student's interaction with faculty, other students and patients. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in detail and the deficient student will be notified concerning their short-coming promptly. It is suggested that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass-fail grade, with 3 or higher being a pass.

Year 1: formative pass-fail evaluation, with summative panel decision

Year 2: formative pass-fail evaluation, with summative panel decision

6. Specific Course Participation at FWCME:

The following courses have committed to an evaluation of this competency:

Year One:

Gross Anatomy:

Setting: small groups

Activities: oral laboratory examination

Introduction to Clinical Care

Setting: small group, individual assessment

Activities: practice history taking in small groups, interview simulated patient

Medical Biochemistry:

Setting: small group, individual assignment

Activities: oral and written analysis of case studies, Internet information retrieval

Neurosciences:

Setting: small group and class presentation

Activities: written report, oral case presentations

Year Two:

Biostatistics:

Setting: individual assessment

Activities: oral critique of statistics use in journal article, written report

General & Systemic Pathology:

Setting: small group and individual interactions

Activities: verbal questioning in lab and classroom

Introduction to Medicine:

Setting: individual interactions with preceptor, small group

Activities: written & oral workups, patient interactions, clinical correlation cases

Medical Genetics:

Setting: individual classroom presentations

Activities: oral case presentation, classroom interactions, written reports

Pharmacology:

Setting: small group and classroom discussions

Activities: written report, oral case presentations

7. Remediation:

Students who have been identified as deficient in a particular formative exercise during a course can be given the opportunity to remediate during that course. There will be several other opportunities for the student to demonstrate their competency during the first or second year, but trends for an individual student demonstrating a pattern of deficiency in communication skills will be noted by the competency coordinator at FWCME. Thus, help will be found for those students who need additional help. This could be a tutor or recommendation for taking a Summer class on communication skills at an undergraduate campus.

Competency II - Basic Clinical Skills

1. Description of Competent Student at Level One:

A. Capable of eliciting and documenting a medical history appropriate in scope to the clinical encounter including 1) comprehensive history – adult, 2) comprehensive history – child, 3) appropriate focused history, and 4) use of appropriate non-patient information when necessary and appropriate.

B. Capable of performing and documenting a physical examination appropriate in scope to the clinical encounter including 1) a comprehensive physical exam, 2) mental status exam, 3) pediatric physical exam, 4) emergency-directed exam, and 5) choice of focused exam.

C. Capable of correctly performing the following routine clinical procedures and is knowledgeable about the indication, complications, and limitations of these procedures: Venipuncture, including blood cultures; starting a peripheral IV; CPR, basic; arterial puncture for blood gasses; emergent, temporary immobilization of cervical spine fractures; control of gross external hemorrhage; insertion of nasogastric tube; work with sterile technique; applying a temporary/emergency splint; universal precautions; throat swab; intradermal, sub-Q, IM, and IV injections; placement of Foley catheter in men and women; endotracheal tube placement; complete ACLS; fluorescein staining and examination of the eye; suturing of lacerations; obtain pap smear samples.

The competent medical student should be able to elicit and record a complete and accurate history and perform a skillful examination appropriate to a variety of patient encounters. This medical student should be able to correctly determine whether to perform a comprehensive or suitably focused history and physical examination. The medical student should be able to correctly select, proficiently perform, and accurately interpret selected clinical procedures and laboratory tests.

2. Activities To Be Evaluated:

At level one for this competency, students should be able to elicit a complete medical history and perform a complete physical examination using proper technique. They should have an understanding of how to organize and analyze the data collected, although the quality of the history of the present illness and differential diagnosis will be limited by their knowledge of the pertinent diseases. Level one students will have an introductory knowledge of routine clinical procedures and will have been taught proper techniques for performing these procedures. They will have had a chance to practice these techniques, though they will not be expected to perform these procedures without supervision. The level of competence expected is that students will be capable of entering their clinical clerkships with the appropriate clinical skills.

Year 1:

- evaluation of history taking skills
- basic CPR
- blood borne pathogen instruction

Year 2:

- evaluation of general history taking and physical exam skills in a clinical setting
- basic clinical techniques
- specialty exam training (Newborn, Pediatric, Female Genital, Male Genital, neurologic)

3. Formative Exercises:

Students will learn appropriate interview issues in the ICC course during the first year. Although feedback associated with performance will be provided to the student during the ICC course using a number of formative exercises, this competency also will be evaluated by the ICC course director during an OSCE exercise at the end of the first year. This will result in an overall performance of pass or fail for the course, which will be the competency decision as well.

Activities during the second year in this competency are primarily centered around activities in the Introduction to Medicine (IM) course. Medical students spend one afternoon each week with a physician preceptor. During the first semester they practice their history-taking skills. They learn to do physical examinations (including a Mental Status Exam) and diagnosis during the second semester. Throughout the first and second year, basic information on clinical correlations of basic science information and testing procedures are provided in the curriculum: diagnostic procedures and disease progression in the General and Systemic Pathology, Medical Genetics, and introduction to Medicine courses; therapeutic clinical correlations in Pharmacology, analytic methods in Biostatistics. However, this competency will be assessed primarily in the IM course by each preceptor that works with the student. The IM course director will gather evaluations conducted by the preceptors and provide timely feedback to the students. The records will culminate in a pass-fail record for each student.

4. Summative Evaluation:

This competency will be evaluated on multiple occasions during the first year and second year at FWCME. During the first year, multiple student-student interactions and an OSCE will be used to assess history-taking skills. The OSCE has been utilized to evaluate student performance during past years in the ICC course. The comprehensive course performance, which is currently reported as pass-fail, will be used as an indicator of success or failure at tier one of level one of Competency II.

During the second year, the summative evaluation will combine the individual evaluations from preceptors in history-taking and physical diagnosis.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated on the criteria noted above for Competency II by course directors and preceptors during the ICC course (first year) and during the IM course (second year) and other instructors familiar with the student's interaction with faculty, other students and patients. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in detail and the deficient student will be notified concerning their short-coming promptly. It has been suggested that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass fail grade.

Year 1: multiple formative pass-fail evaluations, with summative OSCE

Year 2: multiple formative pass-fail evaluations, with summative panel decision

6. Specific Course Participation at FWCME:

The following courses have committed to an evaluation of basic clinical skills:

Year One:

Introduction to Clinical Care:

Setting: small group, individual assessment

Activities: small group interactions, interview simulated patient

Year Two:

Medical Genetics:

Setting: individual assessment

Activities: impromptu genetic case study, oral discussion / written analysis

General & Systemic Pathology:

Setting: small group and individual interactions

Activities: verbal questioning in lab and classroom

Introduction to Medicine:

Setting: individual assessment by preceptor

Activities: history taking, physical diagnosis; preceptor evaluation of clinical skills; specialty physical diagnosis session for male / female genital tract, musculoskeletal system, ophthalmology, pediatrics

7. Remediation:

Students who have been identified as deficient in a particular formative exercise during a course will given the opportunity to remediate during that course. It is imperative that deficient students are identified early in the first year so that appropriate action can be taken. This could involve extra mentoring or tutoring along with specific help with deficiencies.

Competency III - Using Science to Guide Diagnosis, Management, Therapeutics, and Prevention

1. Description of Competent Student at Level One:

A. Knows and can explain the differences between good health and states of ill health, taking into account the anatomical, biochemical, microbiologic, and pathophysiologic bases for these states at the molecular, cellular , organ, whole body, and environmental levels.

B. Based on data from basic examinations (history, physical examination, laboratory), formulates an appropriate problem list and differential diagnosis.

C. Can propose a general approach to further data gathering and specific diagnostic steps.

D. Can propose a general therapeutic approach to a given disease or problem.

E. Recognizes when particular patient care situations may require use of special diagnostic skills, attitudes, and goals.

F. Recognizes and can explain the limits of the scientific underpinnings guiding diagnosis, management, and prevention.

First and second year medical students should be able to explain the scientific underpinnings, at the molecular, cellular, organ, whole body, and environmental levels for states of health and disease based upon current understanding and cutting-edge advances in contemporary basic science. The competent level one medical student will be able to use this information to diagnose, manage, and prevent the common health problems of individuals, families, and communities. The competent medical student can develop a problem list and differential diagnosis, carry out additional investigations, choose and implement interventions with consultation and referral as needed, and determine outcome goals. The competent student can recognize and utilize opportunities for prevention, monitor progress, share information, educate, and adjust therapy and diagnosis according to results.

2. Activities To Be Evaluated:

The knowledge base for this competency is the core content of the entire basic medical science curriculum during the first two years. In addition, integration of this information with regard to diagnosis, management, therapeutics, and prevention will be addressed in the Introduction to Medicine course. Thus, the medical students at FWCME will be asked to demonstrate their scientific knowledge of the relevant basic sciences by meeting criteria for a passing grade on the USMLE step 1 and basic science course written examinations designed to test that knowledge. They will be required to understand criteria for diagnosis, management, and prevention in situations that require more general knowledge rather than specific medical expertise (e.g., discussing the hazards of smoking). They will be expected to understand problems and issues associated with the most prominent and common conditions. They will be expected to recognize general, rather than specific approaches to management, but not be expected to actually carry them out in real settings.

3. Formative Exercises:

Each student must demonstrate proficiency in the core curriculum by obtaining a passing grade in all required courses prior to taking the USMLE step 1 exam. Passing the statewide medicine exam and the statewide pathology exam would also be a demonstration of competence. These are formative exercises with exam scores and course performance as built-in evaluation tools. In addition, the medical students will be evaluated on their ability to use scientific information in analyzing clinically relevant problems presented in case discussions during the various courses. Each course director evaluating the formative exercises for this competency will make sure the student is aware of his / her standing by timely feed-back or discussion of his / her performance.

4. Summative Evaluation:

It will be necessary for the student to pass all courses during the first year to pass the first tier of level one of Competency III. During the second year, the student must pass all courses and receive a passing grade on the USMLE step 1 exam. A summative panel, consisting of all the course directors, will meet at the end of the first year to discuss the comprehensive evaluation of each student in this competency. During the second year, it is possible that the summative panel will meet prior to the time results from the USMLE step 1 scores are known. In that case, the final pass-fail approval can be added to the overall assessment when it is available based on passage or failure on the USMLE step 1 qualifying examination.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated in formative exercises utilizing course-specific examinations. The students will receive unofficial and official notification of their grades using a standard reporting form designed by the Office of Student and Curricular Affairs. A comprehensive assessment of their performance during each year will be conducted by a summative panel who will assign a pass-fail assessment.

Year 1: formative course performance, with summative panel decision

Year 2: formative course performance, summative state-wide and USMLE examinations

6. Specific Course Participation at FWCME:

The following courses have committed to an evaluation of this competency:

Year One:

Gross Anatomy:

Setting: classroom

Activities: unit and final examinations

Histology/Embryology

Setting: classroom

Activities: unit and final examinations

Human Physiology

Setting: classroom

Activities: unit and final examinations

Introduction to Clinical Care

Setting: classroom

Activities: unit and final examinations

Medical Biochemistry:

Setting: classroom

Activities: unit and final examinations

Neurosciences:

Setting: classroom

Activities: unit and final examinations

Year Two:

Biostatistics:

Setting: classroom

Activities: unit and final examinations

General & Systemic Pathology:

Setting: classroom

Activities: unit and final examinations

Introduction to Medicine:

Setting: classroom

Activities: unit and final examinations

Medical Genetics:

Setting: classroom

Activities: unit and final examinations

Pharmacology:

Setting: classroom

Activities: unit and final examinations

7. Remediation:

Students who fail one particular course will make up the deficiency at FWCME. If the student fails more than one course, that student will be expected to repeat the year. Failure of a course constitutes a failure in Competency III as well. Accordingly, once a student receives remediation and passes the appropriate shelf examination for the course, the student passes the competency. In addition, successful completion of level one of Competency III requires a passing score on the USMLE step 1 examination. If the student fails the first time, but then retakes that exam and passes it, the student will then pass level one of Competency III.

Competency IV - Lifelong Learning

1. Description of Competent Student at Level One:

A. Recognizes personal limits in knowledge and experience and energetically pursues information necessary to understand and solve diagnostic and therapeutic problems.

B. Applies acquired knowledge effectively.

C. Demonstrates the ability to identify and analyze relevant scientific and medical literature.

The competent medical student should be aware of the limits of his / her personal knowledge and experience. The competent medical student should be able to actively set and pursue clear learning goals, exploit new opportunities for intellectual growth and professional enlightenment, should be capable of critical, reliable and valid self-assessment, and be able to apply the knowledge gained to the practice of his / her profession.

2. Activities To Be Evaluated:

Medical students will meet the criteria for lifelong learning at level one by exhibiting proficiency in information retrieval and demonstrating the appropriate skills necessary for retrieving information. It will be important to master the ability to define learning issues and utilize modern information searching modalities, organize data, compile and use information that is retrieved. He / she should also be able to demonstrate basic skills in self-assessment. These skills include the ability to openly and critically evaluate verbally and in written form one's personal performance on a variety of clinical and academic tasks. The student should be able to recognize problems in his / her learning, and seek assistance as necessary.

3. Formative Exercises:

The knowledge to be acquired for this competency integrates and builds upon the knowledge bases of all of the different competencies, especially communication skills. A demonstration of skill in using library material and multimedia is critical. Exposure to other information, such as that gathered in biostatistics and its application to epidemiology are a necessary part of the curriculum. Thus, each course participating in evaluating this competency has devised exercises requiring the retrieval of information, interpretation and management of the data which is retrieved, and assessment skills to place the material in context with other information that may come from other sources, including classroom activities. Each of these formative exercises will utilize written and verbal communication to produce a performance that can be graded as pass-fail. As with other competencies, timely and appropriate feedback will be given to inform the student about his / her progress.

4. Summative Evaluation:

This competency will be evaluated summarily once during the first year and once during the second year at FWCME. Initially, a summative panel, consisting of all the course directors, will meet to discuss the comprehensive evaluation of each student in this competency. Only those course directors who have conducted a formative exercise will discuss performance in a particular competency.

During the first year, a summative panel will meet in the Spring to evaluate to evaluate the comprehensive performance on formative exercises. During the second year, a summative panel will meet during the Spring to evaluate the performance on formative exercises on lifelong learning.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated on the criteria noted above for Competency IV by those course directors familiar with their ability to utilize library and multimedia techniques. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in greater detail and the deficient student will be notified concerning his / her short-coming promptly. It has been suggested that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass fail grade, with 3 or higher being a pass.

Year 1: formative pass-fail evaluation, with summative panel decision

Year 2: formative pass-fail evaluation, with summative panel decision

6. Specific Course Participation:

The following courses have committed to an evaluation of this competency:

Year One:

Histology/Embryology

Setting: individual assignment

Activities: written report after searching PubMed and Internet

Introduction to Clinical Care

Setting: individual assignment

Activities: information retrieval from medical database and references

Medical Biochemistry

Setting: individual assignment

Activities: information retrieval from medical database

Neurosciences:

Setting: individual assignment

Activities: internet use, medical literature search, written report

Year Two:

Biostatistics:

Setting: individual assessment

Activities: review and critique of journal articles use of statistical methods

General & Systemic Pathology:

Setting: individual assignment

Activities: Internet use, medical literature search, oral interrogation

Introduction to Medicine:

Setting: individual assignment, preceptor interactions; small group

Activities: information retrieval relevant to cases under preceptor guidance; clinical correlation cases

Medical Genetics:

Setting: individual assignment

Activities: internet use, medical literature search, oral & written report

Pharmacology:

Setting: individual assignments, small group, classroom discussions

Activities: information retrieval, written reports, oral presentations

7. Remediation:

Students who have been identified as deficient in a particular formative exercise during a course can be given the opportunity to remediate during that course. There will be several other opportunities for the student to pass this competency during the first or second year, but trends for an individual student demonstrating a pattern of deficiency will be noted by the competency coordinator at FWCME. Thus, help will be found for those students who need additional help with the life-long learning skills necessary to successfully pass this competency. This could be a tutor or recommendation for taking a class at an undergraduate campus during the Summer after the first year.

Competency V - Self-Awareness, Self-Care, and Personal Growth

1. Description of Competent Student at Level One:

- A. Recognizes personal strengths and limitations relevant to his / her practice of medicine.
- B. Identifies and addresses problems – emotional, personal, and health-related – that might affect his / her health, well-being, or professional capabilities.
- C. Copes adaptively with stresses likely to occur during medical training and practice.
- D. Recognizes the role of interpersonal interactions in professional and personal settings.
- E. Manages performance feedback as a part of training and practice.
- F. Recognizes and states personal values and beliefs relevant to his / her practice of medicine.

The competent medical student should approach the practice of medicine with awareness of his / her limits, strengths, weaknesses, and personal vulnerabilities. The competent medical student assesses personal values and priorities in order to develop and maintain an appropriate balance of personal and professional commitments. He / she seeks help and advice when needed for his/her own difficulties and develops personally appropriate coping strategies. A medical student should be able to recognize his / her effect on others in professional contacts. He / she seeks, accurately receives, and appropriately responds to performance feedback.

2. Activities To Be Evaluated:

For level one of this competency, medical students will demonstrate a developed awareness of relevant issues as they are present in their experiences to this point. Through guided self-reflection, students will be required to explore their own beliefs, values, style, and priorities as they relate to the broad context of their lives, in preparation for professional activities. Medical students should be able to identify signs of, and respond to signs of stress in themselves and family. Medical students should be able to explore potential areas of weakness both in interpersonal interaction and self-development and conceive of potential options and solutions for addressing these deficiencies. They should be receptive to criticism from others.

3. Formative Exercises:

Instructions for this competency will be presented at student orientation and in the several courses that will evaluate this competency. Interpersonal interactions and response to feedback will be critical areas to be evaluated. The use of small groups will be critical in facilitating these evaluations and formative exercises which ask the medical students to evaluate themselves and other members of their group will be enlightening and will help facilitators gauge student awareness. Other formative exercises will be designed to help

monitor the student's ability to identify problems and develop appropriate coping strategies. First year students will be presented with an opportunity to take the Myers-Briggs personality inventory and discuss its interpretation as an insight into self-awareness.

The student will be expected to develop a plan for the management of time and stress early in the first year and should have the opportunity to assess and re-evaluate the success of his / her plan on a regular basis. As the medical student faces challenges during the year, they should be encouraged to record their progress and discuss their success and failures with other students and faculty. Each course director or preceptor evaluating the formative exercises for this competency will keep a pass-fail record for the student and keep the student informed about his / her progress by timely feed-back or discussion.

4. Summative Evaluation:

Progress on this competency will be evaluated summarily once during the first year and once during the second year at FWCME. A summative panel, consisting of all the course directors, will meet to discuss the comprehensive evaluation of each student in this competency. Only those course directors who have conducted a formative exercise will discuss performance in this competency. During the first year, a summative panel will meet in the Spring to evaluate the performance on formative exercises. A summative panel will meet during the Spring in the second year to evaluate the performance on formative exercises.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated on the criteria noted above for Competency V by small group facilitators, course directors and preceptors familiar with the student's interaction with faculty, other students and patients. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in detail and the deficient student will be notified promptly concerning their short-coming. It has been suggested that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass fail grade, with 3 or higher being a pass.

Year 1: formative pass-fail evaluation, with summative panel decision

Year 2: formative pass-fail evaluation, with summative panel decision

6. Specific Course Participation:

The following courses have committed to an evaluation of this competency:

Year One:

Introduction to Clinical Care

Setting: small group interaction, individual assessment

Activities: group feedback on performance,

Year Two:

General & Systemic Pathology:

Setting: small group and individual interactions
Activities: verbal questioning in lab and classroom

Introduction to Medicine:

Setting: individual assignment, proctor interactions
Activities: verbal interactions with patients, proctor; written case reports

Medical Genetics:

Setting: individual assessment
Activities: observed interactions with other students, faculty, patients, guests

7. Remediation:

Students who have been identified as deficient in self awareness, self care (coping skills), or personal growth (failure to correct behavioral defects) will be given ample opportunities to improve their skills during that course. Although there will be several other opportunities for the student to pass this competency during the first or second year, it is critical that trends in attitudinal difficulties, problematic behavior in interpersonal settings or coping skills be identified as soon as possible. Those students who need additional help will be counseled or recommended to a health care professional who can provide the appropriate counseling.

Competency VI - The Social and Community Contexts of Health Care

1. Description of Competent Student at Level One:

A. Appreciates the importance of the many non-biologic factors that influence health, disease, disability, and access to care.

B. Utilizes appropriate resources in the community to promote health, prevent disease, and manage illness.

C. Acts as an advocate for better health for patients and the community.

First and second year medical students should be able to recognize the diverse factors that influence the health of the individual and the community; identify the sociocultural, familial, psychological, economic, environmental, legal, political, and spiritual factors impacting health care and health care delivery; and respond to these factors by planning and advocating the appropriate course of action at both the individual and the community level.

2. Activities To Be Evaluated:

First and second year medical students will meet the criteria for this competency by reflecting on and acknowledging their own cultural and spiritual traditions, as well as gender, class, and sexual socialization experiences. Students should be able to articulate ways in which these factors influence their approach to medical practice. Students should be able to demonstrate nonjudgmental attitudes toward value systems and beliefs different from their own. In exploring the role of community services through informational presentations by providers, site visits, discussions with staff / patients, information gathering and observations on the provision of community services, students will gain an appreciation for the resources in

a community and the role that they play in health care. Students will be encouraged to act as health advocates by participation in community service activities which seek to improve the health and welfare of at-risk populations.

3. Formative Exercises:

The knowledge for this competency will be included in the social context of health and disease presented in association with the ICC and IM courses. Students receive information on community medicine and patient advocacy in these courses as well. In addition, students will be expected to complete public health surveys in other activities which will meet the assessment criteria for one or more other competencies. The student will receive an evaluation from their ICC course instructor (Year 1) and from IM preceptors (Year 2) based on the student's understanding of community health issues, community resources, and patient advocacy.

Each course director, preceptor or facilitator evaluating the formative exercises for this competency will keep a pass-fail record for the student and keep the student informed about his / her progress by timely feed-back or discussion.

4. Summative Evaluation:

This competency will be evaluated summarily once during the first year and once during the second year at FWCME. A summative panel, consisting of all the course directors, will meet to discuss the comprehensive evaluation of each student in this competency. Only those course directors who have conducted a formative exercise will discuss performance in a particular competency. During the first year, a summative panel will meet in the Spring to evaluate to evaluate the performance on formative exercises. A summative panel will meet in the Spring during the second year to evaluate the performance on formative exercises.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated on the criteria noted above for Competency VI by the ICC course director and 2nd year preceptors in IM. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in detail and the deficient student will be notified promptly concerning their short-coming. It has been suggested to evaluators that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass fail grade, with 3 or higher being a pass.

Year 1: formative pass-fail evaluation, with summative panel decision

Year 2: formative pass-fail evaluation, with summative panel decision

6. Specific Course Participation at FWCME:

The following courses have committed to an evaluation of this competency:

Year One:

Introduction to Clinical Care

Setting: classroom

Activities: presentations by community health care providers

Year Two:

Introduction to Medicine:

Setting: preceptor interactions

Activities: awareness of community resources assessed; verbal/written reporting

Medical Genetics:

Setting: classroom

Activities: discussion of community resources, evaluation of raised consciousness

7. Remediation:

Students who have been identified as deficient in a particular formative exercise associated with the community context of health care will be given the opportunity to remediate during that course. There will be several other opportunities for the student to pass this competency during the first or second year, but trends for an individual student demonstrating a pattern of deficiency will be noted by the competency coordinator at FWCME. Thus, help will be found for those students who need additional help with the skills necessary to successfully pass the competency. This could be counseling or tutoring depending on the deficiency.

Competency VII - Moral Reasoning and Ethical Judgement

1. Description of Competent Student at Level One:

A. Understands basic ethical concepts and applies them in moral reasoning in the medical and health care context.

B. Recognizes the ethical dimensions of medicine.

C. Identifies the conflict in ethical considerations in a particular ethical choice.

D. Determines, articulates, and analyzes the ethical issues in health policy.

The competent medical student will recognize the ethical issues of medical practice and health policy; be able to identify alternatives in difficult ethical choices; be able to analyze systematically the conflicting considerations supporting different alternatives; and formulate, defend, and effectively carry out a course of action that takes account of this ethical complexity. Medical students should have a willingness to recognize the nature of the value systems of patients and others with commitment to his / her own system and the ethical choices necessary to maintain his / her own ethical integrity.

2. Activities To Be Evaluated:

First and second year medical students should be able to employ ethical concepts and reasoning when presented with model ethical cases in medicine. The student should be able to recognize ethical issues in medical practice and identify the most relevant ethical considerations in them.

3. Formative Exercises:

The knowledge and exposure for ethics competency will be included during several formative exercises in ICC during the first year. During the second year, topics related to diagnosis and genetic counseling also will be covered in Medical Genetics. Issues pertaining to research will be covered in Biostatistics. In addition, a number of ethics seminars will be scheduled at which the students will be asked to complete an evaluation form to assess their retention of issues.

These activities will be conducted by the course directors during the mentioned courses during the first and second year and in any clinical/ seminar settings that pertain. Each course director or facilitator evaluating the formative exercises for this competency will keep a pass-fail record for the student and keep the student informed about his / her progress by timely feed-back or discussion.

4. Summative Evaluation:

Progress on this competency will be evaluated summarily once during the first year and once during the second year at FWCME. A summative panel, consisting of all the course directors, will meet to discuss the comprehensive evaluation of each student in this competency. Only those course directors who have conducted a formative exercise will discuss performance in this competency. During the first year, a summative panel will meet in the Spring to evaluate the performance on formative exercises. A summative panel will meet during the Spring in the second year to evaluate the performance on formative exercises.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated on the criteria noted above for Competency VII by course directors. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in detail and the deficient student will be notified promptly concerning their short-coming. It has been suggested that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass fail grade, with 3 or higher being a pass.

Year 1: formative pass-fail evaluation, with summative panel decision

Year 2: formative pass-fail evaluation, with summative panel decision

6. Specific Course Participation:

The following courses have committed to an evaluation of this competency:

Year One:

Histology/Embryology

Setting: classroom discussion, individual assessment

Activities: discussion of ethical dilemma, solution with written critique

Introduction to Clinical Care

Setting: classroom

Activities: discussion of clinical situations

Year Two:

General & Systemic Pathology:

Setting: small group and individual interactions

Activities: verbal questioning in lab and classroom

Introduction to Medicine:

Setting: individual assignment, preceptor interactions; small group, classroom

Activities: verbal interactions with patients, proctor; written case reports; lecture on physician - patient interactions

Medical Genetics:

Setting: classroom presentations

Activities: analysis of cases; written / oral assessment

7. Remediation:

Students who have been identified as deficient in ethical judgement will be given other opportunities to demonstrate during that course. Although there will be several other opportunities for the student to pass this competency during the first or second year, it is critical that trends indicating emotional instability or lack of ethical judgement be identified as soon as possible. Those students who need additional help will be counseled or recommended to a health care professional who can provide the appropriate counseling.

Competency VIII - Problem Solving

1. Description of Competent Student at Level One:

A. Recognizes that a problem exists and characterizes the problem clearly and objectively.

B. Examines the problem from different points of view.

C. Collects and integrates necessary information.

D. Generates and analyzes a set of potential solutions and formulates an informed plan of action to address the problem.

E. Implements a solution and assesses the results.

A medical student at level one of problem solving should be able to recognize and

thoroughly characterize a problem while considering all the scientific, social and economic implications. The student should be able to develop an informed plan of action after gathering relevant information from diverse resources. After considering all the data and possible resolutions to the problem, the student will then act to resolve the problem. A competent medical student will learn the importance of self-reflection and self-analysis and will subsequently assess the consequences of his / her actions.

2. Activities To Be Evaluated:

First and second year medical students should will be able to display competence in the basic problem solving skills necessary to solve medical problems. The student should be able to recognize a problem, examine it objectively, collect and integrate pertinent information, generate potential solutions, formulate a plan of action, implement a solution, and subsequently assess the results of his / her actions. The student should be familiar with the knowledge base required to frame, understand, and solve a unidimensional or straightforward problem.

3. Formative Exercises:

This competency integrates the knowledge base for competencies I, II, III, and IV. The skills required for this competency are an essential component of the course content of ICC during the first year and IM during the second year. In addition, there are opportunities in each year in other courses for additional demonstrations of mastery of both the skills and knowledge base for this competency. These activities will be conducted by the course directors during the mentioned courses during the first and second year and in any clinical settings that pertain. Each course director or facilitator evaluating the formative exercises for this competency will keep a pass-fail record for the student and keep the student informed about his / her progress by timely feed-back or discussion.

4. Summative Evaluation:

Progress on this competency will be evaluated summarily once during the first year and once during the second year at FWCME. A summative panel, consisting of all the course directors, will meet to discuss the comprehensive evaluation of each student in this competency. Only those course directors who have conducted a formative exercise will discuss performance in this competency. During the first year, a summative panel will meet in the Spring to evaluate the performance on formative exercises. A summative panel will meet during the Spring in the second year to evaluate the performance on formative exercises.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated on the criteria noted above for Competency VIII by participating course directors. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in detail and the deficient student will be notified promptly concerning their short-coming. It has been suggested that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass fail grade, with 3 or higher being

a pass.

Year 1: formative pass-fail evaluation, with summative panel decision

Year 2: formative pass-fail evaluation, with summative panel decision

6. Specific Course Participation:

The following courses have committed to an evaluation of this competency:

Year One:

Human Physiology

Setting: individual evaluation

Activities: questions on examinations

Introduction to Clinical Care

Setting: individual assessment

Activities: analysis of cases; OSCE activities

Neuroscience

Setting: small group and individual interactions

Activities: oral and written communication

Year Two:

Biostatistics:

Setting: classroom activities

Activities: oral critique of journal article, written report

General & Systemic Pathology:

Setting: individual assessment

Activities: diagnosis of cases by pathologic specimens, written / oral reporting?

Introduction to Medicine:

Setting: small group

Activities: clinical correlation cases

Medical Genetics:

Setting: classroom presentations

Activities: written report, oral case presentation

Pharmacology:

Setting: small group and classroom discussions

Activities: written report, oral case presentations

7. Remediation:

Students who have been identified as deficient in problem solving will be given other opportunities to demonstrate their competency during that course. Although there will be several other opportunities for the student to pass this competency during the first or second year, it is critical that trends indicating problem-solving deficiencies be identified as soon as possible. Those students who need additional help will be counseled by the course director, other FWCME faculty, or be given the opportunity to take a remedial course in logic or reasoning on an undergraduate campus during the Summer between the first and second

year.

Competency IX - Professionalism and Role Recognition

1. Description of Competent Student at Level One:

A. Behaves professionally.

B. Interacts effectively with the patient.

C. Interacts effectively with the entire health-care team, other health professionals, and community professionals.

D. Is able to demonstrate leadership and motivation.

The competent first or second year medical student should be able to recognize the powerful impact of his / her professional attitudes and behavior on others and consistently demonstrate the highest standards of excellence, duty, and accountability to other students, to faculty, to other health care workers, and to the patient. Medical students should value the humanity of all individuals and not exploit other students, faculty, or patients for personal gain. The competent medical student should recognize his / her role in working collaboratively with others to meet the health care needs of the individual and the community.

2. Activities To Be Evaluated:

First and second year medical students should will be responsible, reliable, dependable, and demonstrate integrity, honesty, courtesy, and self-discipline in the classroom and in the clinical setting. In clinical situations the student will project a professional image in manner, dress, and action. The student will begin to recognize personal limitations and biases and find ways to overcome or adapt to them. The student will demonstrate empathy for patients and respect their rights and privacy. The student will have a basic knowledge of what constitutes professional behavior and will understand the importance of rigorous adherence to an institution's policies and standard operating procedures. The student will recognize and identify for others the inherent ethical and legal issues in medical practice.

3. Formative Exercises:

This competency requires discussions of professional expectations, as well as ample opportunities to see these behaviors demonstrated by health care professionals. The behaviors should be assessed and reinforced throughout the curriculum from orientation to the end of the second year. Each student will be expected to conduct themselves professionally during all classes at FWCME and on clinical outings to area health care facilities. Assessments of this competency will be made in a number of courses in both the first and second year by course directors and other professionals associated with health care training. Each course director or facilitator evaluating the formative exercises for this competency will keep a pass-fail record for the student and keep the student informed about his / her progress

by timely feed-back or discussion.

4. Summative Evaluation:

Progress on this competency will be evaluated summarily once during the first year and once during the second year at FWCME. A summative panel, consisting of all the course directors, will meet to discuss the comprehensive evaluation of each student in this competency. Only those course directors who have conducted a formative exercise will discuss performance in this competency. During the first year, a summative panel will meet in the Spring to evaluate the performance on formative exercises. A summative panel will meet during the Spring in the second year to evaluate the performance on formative exercises.

5. Assessment Tools

During each of the first two years at FWCME, the student will be evaluated on the criteria noted above for Competency IX by participating course directors. Record keeping will consist of a written description of the exercise with a pass-fail grade recorded. Deficiencies will be documented in detail and the deficient student will be notified promptly concerning their short-coming. It has been suggested that the Likert scale prepared by the state-wide competency director be used as a tool to determine the pass fail grade, with 3 or higher being a pass.

Year 1: formative pass-fail evaluation, with summative panel decision

Year 2: formative pass-fail evaluation, with summative panel decision

6. Specific Course Participation:

The following courses have committed to an evaluation of this competency:

Year One:

Gross Anatomy:

Setting: small groups

Activities: oral laboratory examination

Histology/Embryology

Setting: classroom, discussion group

Activities: assessment of behavior in interpersonal interactions

Human Physiology

Setting: small group, classroom interactions

Activities: assessment of classroom behavior and interpersonal interactions

Introduction to Clinical Care

Setting: individual assessment

Activities: interaction with fellow students, course director & standardized patients

Medical Biochemistry:

Setting: classroom, individual assessment

Activities: observation of interpersonal interactions with other students, faculty

Year Two:

General & Systemic Pathology:

Setting: small group and individual interactions

Activities: verbal questioning in lab and classroom

Introduction to Medicine:

Setting: individual assessment by preceptor

Activities: patient encounters

Medical Genetics:

Setting: classroom presentations, individual interactions

Activities: classroom interactions, behavior in interpersonal interactions

Pharmacology:

Setting: classroom, discussion group

Activities: assessment of behavior in interpersonal interactions

7. Remediation:

Students who have been identified as deficient in professionalism will be given other opportunities to modify their behavior and attitudes during that course. Although there will be several other opportunities for the student to pass this competency during the first or second year, it is critical that trends indicating unprofessional behavior be identified as soon as possible. Those students who need additional help will be counseled by the course director, other FWCME faculty, or recommended to a health care professional who can provide the appropriate counseling.