

Marshall University Joan C. Edwards School of Medicine
Annual Assessment
2007-2008

The purpose of this annual report is to document your program's progress in assessing its student learning outcomes based upon your program's assessment plan. The objective is to determine program effectiveness, not evaluation of individual students or individual faculty. The primary focus of this report is to help you improve your program. The report for each program is due to your Dean by December 1 of each year. After reviewing the report, the Dean will submit the report to the Office of Assessment and Program Review by December 15. The University Assessment Committee (UAC) will review the report, provide feedback to each program and prepare the annual assessment report of the University. This assessment information also will be essential when you prepare your 5-year program review required by the Board of Governors.

I. Program's Student Learning Outcomes: List several specific, measurable student learning outcomes. These should be statements describing what competencies students must have, i.e. what students will be able to do, as they progress through and complete your program. We encourage an in-depth assessment of one-third of your outcomes each year, with all outcomes being assessed in a three-year cycle.

The faculty of Marshall University School of Medicine believes that graduates should possess the knowledge, skills, attitudes and behaviors necessary to enter postgraduate education, continue lifelong learning, and enjoy a fulfilling career in medicine. The objectives listed are purposefully broad to accommodate an ever-changing health care environment. Specific examples of tasks addressing some of the objectives are provided in an appendix. The goal of this document is to establish objectives not only for students to assess their progress through medical school but also for faculty to assure that their educational activities are designed to help the students achieve the objectives. Thus, this document can be viewed as an educational agreement between the students and faculty that each group will do their part to facilitate student learning.

The curriculum is designed to incorporate the fundamental principles of medicine and scientific concepts. Basic Science courses offered in the first two years prepare the student with the scientific foundation that they apply and build upon in the third and fourth years seeing patients in clinical settings under the supervision of precepting faculty. The Liaison Committee for Medical Education (LCME), the accreditation agency for medical schools, dictates that the faculty (Curriculum Committee) must design and review the curriculum content.

The Curriculum Committee (CC) has approved a list of required procedures and patient encounters for each student to experience during their third and fourth year. Each third-year clerkship is responsible for requiring each student to perform, observe and/or interpret 100% of the required respective procedures and 85% of the required respective patient encounters to be seen while on rotation, regardless of the site to

which they are assigned.

Students must have all patient encounters supervised and certified by a resident or attending. By certifying the patient encounter, the physician is indicating that the student participated in taking the patient's history, performed a relevant physical examination and participated in discussing the diagnosis and management plan for the patient. Patients that are simply seen on rounds do not count.

Required patient encounters considered seasonal and/or are unavailable during the rotation in which they are normally seen can be substituted by either a scheduled standardized patient encounter and, during the pediatric rotation, use of CLIPP (Computerized Assisted Learning in Pediatrics Program) cases can be arranged.

In addition, students are responsible for logging the procedures onto New Innovations. Each clerkship will assist in confirming and monitoring completion of the required patient encounters prior to passing that rotation.

New Innovations Residency Suite is an on-line tool that allows a student to unify data into a centralized data warehouse and to complete tasks, historically performed using multiple, incompatible methods, through one common interface. It is used to assist with tasks such as scheduling, patient encounter and procedure logging, evaluations, and general personnel tracking.

Clerkship Directors and Coordinators have been given the responsibility to ensure that prior to students leaving their rotation, the requirement of all patient encounters relative to that rotation be logged and approved by an authorized individual. The student will not receive a grade until this requirement has been met.

II. Assessment Activities:

- A. **Assessment Measures (Tools)** – Indicate the assessment measures used for each outcome evaluated during the reporting period. Assessment rubrics should be included as appropriate. **See Attached Table**

Through the process of Curriculum Management and Evaluation, the CC has assessed the content of the curriculum as well as linking course and clerkship content to the institutional learning objectives. The second year curriculum has been restructured for 2008. The second year curriculum is now totally integrated (incorporating more clinically relevant material into the teaching of basic science concepts) and taught in blocks e.g., nervous system, cardiovascular system, etc. The Curriculum Committee reviews all aspects of the educational process from student advancement, grades, tests, student evaluations of the program, the educational content, etc. This information is shared with all course directors and the administration.

Course grades are important in a “fixed” curriculum because school policy requires all students to obtain a grade of “C” or better in order to advance. Any student receiving a grade of “D” or “F” is either required to remediate or repeat the coursework. No student can advance to the next level of training unless they maintain at least a 2.0 grade average. Each course director reviews their test results to assess for trends and identify any questions that may need to be clarified or re-written.

The Office of Medical Education has developed a test question writing basic checklist to assist faculty with the development of test questions.

Engaging students in active learning and emphasizing the importance of life-long learning is considered an essential part of the curriculum. Examples of active learning that are offered throughout all four years of the medical school's curriculum include: Gross Anatomy labs, small & discussion groups, IPC Basic Skills class, mentoring, OSCE, communication workshop, Approach to Patient Care clinical skills center, clerkship preceptors. Examples of independent learning opportunities include: Gross Anatomy scheduled self study time, Immunology practice questions, Pathology autopsy observation. Most courses have time scheduled for independent study.

Feedback is given through formative and summative evaluations in the third year and fourth year. Feedback during the first two years is more summative in nature. All student evaluations are collected by the Office of Medical Education and reviewed to ensure students are meeting the goals and objectives and to intervene if the student is experiencing academic difficulty.

- B. **Benchmarks** – indicate benchmarks your program has set for each outcome assessed during the reporting period.

See attached Learning Objectives.

- C. **Results/Analysis** – indicate detailed results for the reporting period, i.e. what were mean scores on each component of assessment rubrics, mean scores on exam questions related to outcomes, etc.

Students are passing the required United States Medical Licensure Exam (USMLE) at or above the national average based on data provided to the school by the USMLE. The report from the USMLE on student performance also provides a graph with information regarding the score distribution of first takers from our school relative to the distribution for all US first takers in each score category. The information is broken down into topics; Preventive Medicine, Understanding Mechanisms of Disease, Normal growth and development, etc. A copy of the report for USMLE Step 2 Clinical Knowledge exam results is included with this report.

D. **Planned Action** – Indicate what your program plans to do to improve student learning based on the outcome of assessment. Be very specific in this section.

Block teaching and the continued emphasis on integrating the clinical science component into the basic science component has resulted in better scores on subject examinations and better passage of the required Clinical Competency Exam each student must pass before graduation.

III. Assistance Needed with Assessment: What assistance can the Office of Assessment give you to help improve your assessment program?

None

Marshall University
Assessment of Program's Student Learning Outcomes for the School of Medicine
[2007-2008 Academic Year]

Not every student learning outcome must be assessed every year. However, it is expected that at least one-third of the outcomes will be assessed each year, allowing for assessment of all outcomes within a three-year cycle. It also is important to use more than one assessment measure for each outcome.

Program's Student Learning Outcomes	Assessment Measures (Tools)	Benchmarks	Results/Analysis	Actions Taken
Knowledge	Written Exams, Oral Exams, Oral Presentations, Observation, Evaluations, USMLE Exams, Clinical Competency Exam	"C" or better in all classes, passage of USMLE Exams, passage of Clinical Competency Exam	Students are performing at national norm on USMLE Exams.	
Skills	Observation, Oral Presentations, Oral Exams, Evaluations, USMLE Exams, Clinical Competency Exam, Employer Surveys	Passage of USMLE Step II Clinical Skills section, passage of Clinical Competency Exam, satisfactory evaluations	Students are performing at national norm on USMLE Exams.	
Attitudes & Behaviors (Professionalism)	Oral Presentations, Evaluations, Mentoring Evaluation, Employer Surveys	Satisfactory evaluations, passage of USMLE exams, Employer satisfaction	Students are performing at national norm on USMLE Exams	

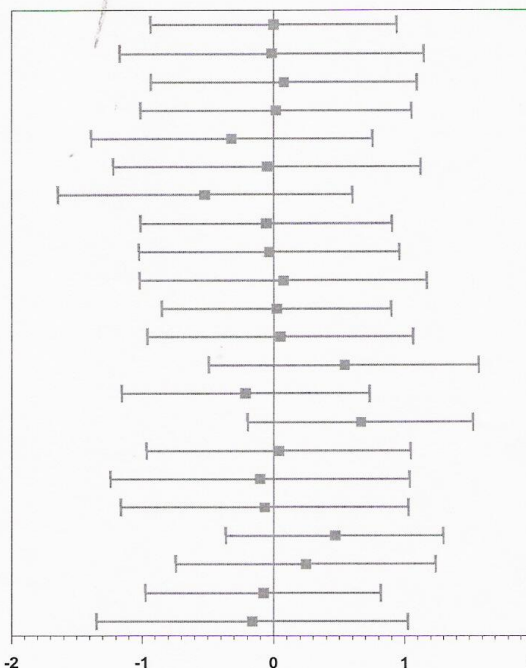
NATIONAL BOARD OF MEDICAL EXAMINERS®

Performance of Examinees Taking USMLE™ Step 2 Clinical Knowledge (CK) for the First Time in the Academic Year

July 2007 to June 2008

Medical School: 049-010 Joan C Edwards Sch Med at Marshall Univ

Preventive Medicine & Health Maintenance
Understanding Mechanisms of Disease
Diagnosis
Principles of Management
Normal Growth & Development; Principles of Care
Immunologic Disorders
Diseases of Blood & Blood Forming Organs
Mental Disorders
Diseases of the Nervous System & Special Senses
Cardiovascular Disorders
Diseases of the Respiratory System
Nutritional & Digestive Disorders
Gynecologic Disorders
Renal, Urinary & Male Reproductive Systems
Disorders of Pregnancy, Childbirth & Puerperium
Musculoskeletal, Skin & Connective Tissue Diseases
Endocrine & Metabolic Disorders
Medicine
Obstetrics & Gynecology
Pediatrics
Psychiatry
Surgery



The above graph provides information regarding the score distribution of first takers from your medical school relative to the distribution for all U.S./Canadian first takers in each score category. All scores are scaled in standard score units based on the performance of U.S./Canadian first takers: the mean and standard deviation (SD) for this group are 0 and 1, respectively, for each score category. To facilitate interpretation, the reliability of each score category has been used in adjusting the standard scores. This adjustment helps to make the differences in standard scores a better reflection of true differences in student performance. The mean performance of U.S./Canadian first takers is represented by the vertical solid green line at 0.0. Roughly 68% of U.S./Canadian first takers scored within one SD of the mean, between -1.0 and 1.0. The distribution of performance for first takers from your school is represented by the red boxes and horizontal lines. The red box depicts the mean performance of first takers from your school. The distance from the red box to one end of the red line indicates one SD for your school. The interval spanned by each red line represents your school mean plus/minus one SD; approximately 68% of your students scored in this interval.

By comparing the locations of the red boxes, you can determine the score category in which the performance of your students was relatively strong and weak. Because many of the scores are based on a relatively small number of items, differences smaller than a few tenths of an SD are not likely to be meaningful. In addition, because Step 2 CK test material is deliberately designed to be integrative with many items contributing to calculation of more than one score category, caution should be used in attributing mean differences in student performance to individual clerkships at your school.