

Assessment of Student Learning Plan

A. College, Department and Date

1. College: **School of Medicine**
2. Department: **MD Program**
3. Date: **8/20/2008**

B. Academic Program of Study

Medicine (MD)

C. Contact Persons for the Assessment Plan

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D. MD Program Goals & Measurable Student Learning Outcomes related to UNM Learning Outcomes

SOM Competencies (Program Goals) and Student Learning Objectives	UNM Student Learning Outcomes		
	Knowledge	Skills	Responsibility
A. Medical knowledge, integration & critical reasoning			
1. Identify, define, and apply the scientific principles and knowledge necessary for the practice of medicine	X	X	
2. Apply the scientific method and demonstrate scholarly inquiry using research fundamentals	X	X	
B. Patient care			
1. Gather data from patient history, physical examination and technical investigations and apply clinical problem-solving skills to make accurate diagnostic judgments	X	X	X
2. Make informed decisions, recommendations, and interventions to further patient evaluation, treatment planning and health maintenance	X	X	X
C. Practice-based learning & improvement			
1. Reflect on and evaluate one's own knowledge, skills, attitudes, and outcomes and work toward ongoing improvement	X	X	X
2. Locate, appraise, and apply evidence from clinical studies of diagnostic and treatment effectiveness	X	X	X
D. Interpersonal & communication skills			
1. Demonstrate effective communication behaviors/skills and interpersonal relationships with patients and colleagues		X	X
2. Work effectively with others through liaison, or as a member or leader of a cooperative group or team		X	X
E. Professionalism, ethics & self-assessment			
1. Identify, define, and apply ethical principles in the diverse and complex context of patient care	X	X	X
2. Identify, demonstrate, and practice ethical virtues (altruism, compassion, accountability, etc.) with fellow students, teachers, patients, society, and the profession	X	X	X
F. Systems and community-based practice			
1. Describe the impact of the social determinates of health in order to assist patients in dealing with complex systems and to advocate for integrated, quality care	X	X	X

E. Assessment of Student Learning Plan

	<i>i & ii - Measures of Assessment, Direct</i>	<i>iii - Criteria for Success</i>
Medical knowledge		
A-1. Identify, define, and apply the scientific principles and knowledge necessary for the practice of medicine	<ul style="list-style-type: none"> • Written (MCQ, supply answer) and performance exams • Tutor narratives • Block/course grades (Phase 1 GPA) • US Medical Licensing Exams (USMLE) - Step 1 and Step 2 CK 	Mastery Goals: <ul style="list-style-type: none"> • 85% student success, first attempt Step 1 and 2 CK
A-2. Apply the scientific method and demonstrate scholarly inquiry using research fundamentals	Faculty committee review and successful: <ul style="list-style-type: none"> ▪ Research proposal ▪ HRRC (IRB) application ▪ Project final report ▪ Formal presentation 	<ul style="list-style-type: none"> • A successful capstone research project is a graduation requirement for 100% students
Patient care		
B-1. Gather data from patient history, physical examination and technical investigations and apply clinical problem-solving skills to make accurate diagnostic judgments	<ul style="list-style-type: none"> • Clinical performance - PRIME rubric • Phase I & II objective structured clinical examinations (OSCE) • Nationally standardized clinical subject examinations 	<ul style="list-style-type: none"> • 85% student success, first attempt Step 2 CK • 94% student success, first attempt Step 2 CS
B-2. Make informed decisions, recommendations, and interventions to further patient evaluation, treatment planning and health maintenance	<ul style="list-style-type: none"> • Course/Clerkship grades • USMLE - Step 2 CK and CS 	
Practice-based learning & improvement		
C-1. Reflect on and evaluate one's own knowledge, skills, attitudes, and outcomes and work toward ongoing improvement	<ul style="list-style-type: none"> • Tutor and preceptor narratives • Nationally standardized clinical subject examinations • Clinical performance - PRIME rubric • Course/Block/Clerkship grades • Phase I & II objective structured clinical examinations (OSCE) • US Medical Licensing Exams - Step 1, 2 CK, 2 CS 	<ul style="list-style-type: none"> • 85% student success, first attempt Step 1 and 2 CK • 94% student success, first attempt Step 2 CS
C-2. Locate, appraise, and apply evidence from clinical studies of diagnostic and treatment effectiveness	<ul style="list-style-type: none"> • Tutor narratives • Nationally standardized preparatory and clinical subject examinations • Phase II objective structured clinical examinations (OSCE) • US Medical Licensing Exam - Step 2 CK 	<ul style="list-style-type: none"> • All students must meet minimum tutorial and OSCE performance standards • 85% student success, first attempt Step 2 CK
Interpersonal & communication skills		
D-1. Demonstrate effective communication behaviors/skills and interpersonal relationships with patients and colleagues	<ul style="list-style-type: none"> • Tutor and preceptor narratives • Clinical performance - PRIME rubric • Phase I & II objective structured clinical examinations (OSCE) • US Medical Licensing Exam - Step 2 CS 	<ul style="list-style-type: none"> • 94% student success, first attempt Step 2 CS • 85% meet criterion-referenced standard-communications skills
D-2. Work effectively with others through liaison, or as a member or leader of a cooperative group or team	<ul style="list-style-type: none"> • Tutor and preceptor narratives • Clinical performance - PRIME rubric 	All students must meet minimum standards
Professionalism, ethics & self-assessment		
E-1. Identify, define, and apply ethical principles in the diverse and complex context of patient care	<ul style="list-style-type: none"> • Tutor and preceptor narratives • Clinical performance - PRIME rubric • Phase I & II objective structured clinical examinations (OSCE) 	<ul style="list-style-type: none"> • Absence from the Promotion Committee "Watch List" for professionalism concerns 85% of students
E-2. Identify, demonstrate, and practice ethical virtues (altruism, compassion, accountability, etc.) with fellow	<ul style="list-style-type: none"> • US Medical Licensing Exam - Step 2 CS 	<ul style="list-style-type: none"> • 94% student success, first attempt Step 2 CS

students, teachers, patients, society, and the profession		
Systems & community-based practice		
F-1. Describe the impact of the social determinates of health in order to assist patients in dealing with complex systems and to advocate for integrated, quality care	<ul style="list-style-type: none"> • PIE Community Project • Continuity Clinic narratives • Phase III NM Preceptorship paper and presentation 	<ul style="list-style-type: none"> • All students must meet minimum performance standards

Direct measures are of all students. Most of the indirect measures include all students but some indirect measures are from random subsets (focus groups) or subsets of students who elect to participate in evaluation surveys.

Assessment of Learning Outcomes Measures

ii Additional Information about Direct Measures

See Attachment A-Curricular map of 4-year plan for formal written and performance assessments.

- First Two Years of Medical School
 - Competency Exams (first two years of medical school)
 - Each summative, competency exam consists of: knowledge assessment (multiple choice, essay, and laboratory tests); standardized, structured, observed, performance testing of patient care skills (history taking and physical examination) and communication skills; and application of ethics knowledge (multiple choice and essay tests).
 - Formative assessment opportunities for both knowledge and performance skills are available to students on a regular basis. Formative MCQ quizzes are presented weekly (on average) during the first 7 blocks (first year and ½). Formative performance assessments vary in formality and frequency from weekly in the first 3 blocks to about monthly thereafter.
 - Small group activities occur twice a week and are assessed by faculty tutors or preceptors. Students must receive credit in order to obtain a grade for the course or block.
- Assessment Standards
 - All exams are criterion referenced to faculty-established standards (eg. 70% on written exams, numeric scores on performance exam rubrics).
 - Communication skill global rating scale (scoring rubric) is used across three years of the curriculum (Attachment B-EEC GRC)
 - PRIME scoring rubric is used across the seven courses in the third year of the curriculum (Attachment C- PRIME Rubric)
 - The Patient Note global rating scale is used across three years of the curriculum (Attachment D-Patient Note Global Rating Scale)
 - Faculty established standards are uniform across courses.
- Overall
 - Grades:
 - Phase I and Phase II grades and associated descriptive statistics are tabulated annually; the distribution of grades and the relationship of grades and nationally standardized subject test scores are reported annually to the admissions, promotions and curriculum committees.
 - National Exams:
 - Required medical licensure examinations taken during medical school (US Medical Licensing Exam Step 1, Step 2 Clinical Knowledge, and Step 2 Clinical Skills) are tracked. First time percent passing, overall mean and standard deviation on each examination are reported to the admissions, promotions and curriculum committees.

Passing scores on each licensure examination are required for promotion and graduation. USMLE Step 3 is taken after graduation from the SOM. Not all former students consent to releasing their scores to UNM. The scores received are tracked; percent of graduates passing the examination are reported to the NM Commission on Higher Education annually.

ii Indirect Measures of Assessment

- Student Measures:
 - Student Perceptions:
 - Surveys
 - Locally developed opinion surveys are completed by 90-95% of students at the end of each block, clerkship and three Phases.
 - At the end of each Phase, students complete a locally developed “Curricular Skills Survey” providing their perspective on the support for educational development within a competency in a Phase.
 - AAMC Graduation Questionnaire Report: Graduating students annually complete a national survey which addresses knowledge, patient care, practice based learning, communication skills, ethics and professionalism, and aspects of systems-based practice. Student satisfaction with their education based on response to AAMC GQ items is reported to the NM Commission on Higher Education annually.
 - Learning Environment: Two surveys are collected from students about the learning environment during each phase of the curriculum.
 - Focus groups
 - Focus groups are held each year in each phase to elicit impressions on best practices in education, quality improvement in the curriculum, preparation for the next phase, integration of knowledge, skills and responsibilities, and the educational learning environment.
 - Exit focus groups are held with Phase III students in spring of the fourth year to obtain their overview about the curriculum and its strengths and areas in need of improvement.
 - Length of time from matriculation to graduation annual report:
 - Annually, the length of time students are in the program from matriculation to graduation is collected from the Student Services database and reported to the Admissions and Curriculum Committees.
 - Admission:
 - Student demographic data (gender, ethnicity) and MCAT entrance examination performance are correlated with Phase GPAs and scores on national preparatory examinations (CBSE and CCSE). The results are reported annually to the admissions and curriculum committees.
 - Graduate Follow-up:
 - Graduates’ career commitment and practice location are tracked annually for all graduates through a ‘short form’ update. A Location Report of student and resident graduates who practice in the State of New Mexico is prepared and submitted to the Executive Dean and VP annually.
 - The percent of students who report being matched with one of their top three residency programs is reported to the NM Commission on Higher Education annually.
 - Residency Program Directors annually rate our students one-year post graduation (Residency Director Survey) **iii - Criteria for Success** Majority of students ranked good or superior in competency areas.
 - Former students annually rate their preparation for residency by the School of Medicine through a survey conducted at the end of the first year of post graduation education.
 - Review of a 10-year cohort of former medical student publications is currently being conducted.

- Faculty Measures
 - Faculty Perceptions:
 - Faculty are periodically interviewed and/or surveyed about aspects of the curriculum and the learning environment.
 - Course directors in Phase I were recently surveyed about assessment across Phase I and interviewed about small group problem based learning.
 - Faculty residency program directors have been surveyed about the criteria and standards they use for selection of medical students into their residency programs.

3. When will learning outcomes be assessed? When and in what forum will the results of the assessment be discussed?

Time-frame	Learning Outcomes Assessed	Review/Decision Making Bodies
Annual - for ongoing, continuous, component improvement	Direct and indirect measures related to the charge of the specific group. To report to UNM Provost: Direct measures – four: <ul style="list-style-type: none"> • USMLE Step 1 • USMLE 2-CK • USMLE 2-CS • Phase 2 Communication skills Indirect measure - one: <ul style="list-style-type: none"> • Residency Director Survey 	SOM Committees: <ul style="list-style-type: none"> • Admissions • Block/Course committees • Curriculum • Phase I Block Chairs • Phase II Clerkship Directors • Student Continuous Quality Improvement (CQI)
Two–three years – for systematic, program level change and improvement	Specific assessment measures that have been reviewed by the SOM committees are synthesized, compared with national data and trends, and reviewed at the retreat in order to make strategic changes in the curriculum and its evaluation	Faculty/Student Retreat devoted to Medical Education. Expert consultant(s) participate
Seven years – for comprehensive internal and external review	All direct and indirect measures for all competencies (goals) and student learning objectives	Student and faculty self-study, site visit and review by Liaison Committee on Medical Education (LCME) accreditation body

4. What is the process to analyze/interpret assessment data and use results to improve student learning?

The offices of Assessment & Learning, Program Evaluation and Research (PEAR), and Student Services gather data from the direct and indirect measures. Student learning objectives, the associated curricular learning activities, and aggregated student assessment results are stored in the Medical Education Data System (MEDS) database. Student course records and grades are stored in the Office of Students Services database and program evaluation data is stored in several PEAR databases.

The student and faculty groups outlined in the table above review the assessment and program evaluation results and recommend and enact any necessary changes in the degree program.