

University of Wisconsin School of Medicine and Public Health

Assessment Report for 2008

Medical Education Office, UW School of Medicine and Public Health

I. Evaluation System of the University of Wisconsin School of Medicine and Public Health (UW SMPH)

Our comprehensive evaluation system has the following features:

Testing and Evaluation Services

Formative evaluation support services are available to course directors and faculty to help them develop effective student, instructor and course evaluation mechanisms as well as interpret the results. Our testing administrator provides consultation on test development and interpreting test analysis statistics. She provides course directors with test support assistance which includes providing computer-based testing, proctoring of exams, scoring of written exams and producing exam score reports for course directors. She also administers examinations in compliance with the Americans with Disability Act. For instructor and course evaluation, we have developed a team to oversee the instructor and course evaluations. The testing administrator provides the forms for students at a time and in the method preferred by course directors, and the evaluation team analyzes the results and provides a summary report.

Course and clerkship evaluation

Formative evaluation data are collected and reported back to teaching faculty for the purposes of continuous quality improvement. The School of Medicine and Public Health has improved, standardized, and automated the student evaluation forms used across the curriculum. There are different, standard forms for use in each year of the curriculum as well as a form specifically used to evaluate examinations. The standard evaluations are processed by the testing administrator so they are independent of course directors. End-of-semester student focus groups are also conducted to determine the extent to which courses were effectively integrated and to obtain details that could help improve courses. Evaluation information is provided to the course directors and departments. There are also monthly course director meetings to discuss larger curriculum issues.

Longitudinal database

We maintain a longitudinal database that profiles student performance by class and tracks performance over time. The database extends back to 1986, which provides a sufficiently long perspective to interpret any changes that may be noted. This database includes pre-medical GPAs and MCAT scores, licensure examination performance data, clinical exam results, and post-graduate data.

Survey of graduates

Alumni are asked to evaluate their medical school education one year after graduation. The evaluation forms have been administered after graduates have completed their first year of residency. They are structured to give a self-assessment of graduates' medical school preparation in comparison to their colleagues from other medical schools. Information received from our graduates is used to improve instruction and curriculum.

The response rates and the percentage of graduates rating their medical education in the "Very Good" to "Outstanding" range are shown in Table 1. Note that, since the data are collected one year post-graduation, there is a delay before we are able to profile each class. This year (2008), we are collecting data on the class of 2007.

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Table 1

Response rates and percentages of graduates rating their undergraduate medical education “Very Good” to “Outstanding”

<u>Graduation Year</u>	<u>Response Rate</u>	<u>% Rated Very Good to Outstanding*</u>
2001	57%	90%
2002	48%	93%
2003	58%	89%
2004**	n/a	n/a
2005	37%	96%
2006	33%	95%

* Rating Scale: 1=poor, 2=fair, 3=good, 4=very good, 5=excellent, 6=outstanding

** Data are not available for the Class of 2004.

The response rate ranged from 33% to 58%. We are now distributing the survey and collecting the data electronically. This year we have also changed the time when we request that graduates complete the survey, from July after they have finished their first year of residency to May, while they are still in their first year. This will increase our ability to locate our graduates. We hope this will improve the response rate.

In past years, the percentage of graduates rating their undergraduate medical education “Very Good” to “Outstanding” ranged from 89% to 96%. Similarly, 95% of the class of 2006 rated their medical education “Very Good” to “Outstanding.”

Survey of graduates’ residency supervisors

Residency supervisor ratings of our graduates have been administered following their first year of residency. These surveys are structured to give an assessment of our graduates’ level of medical preparation in comparison to their colleagues from other medical schools. Information received from residency directors is used to improve instruction and curriculum.

Response rates and the percentage of supervisors who rated our graduates’ performance in the “Very Good” to “Outstanding” range are shown in Table 2. Note that, since the data are collected at the end of graduates’ first year of residency, there is a delay before we are able to profile each class. We were not able to collect data from residency directors on the class of 2006 due to technical difficulties. This year (2008), we are collecting data on the class of 2007.

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Table 2

Response rates and percentages of residency supervisors who rated UW SMPH graduates “Very Good” to “Outstanding”

<u>Graduation Year</u>	<u>Response Rate</u>	<u>% Rated Very Good to Outstanding*</u>
2001	79%	83%
2002	66%	81%
2003	51%	75%
2004**	n/a	n/a
2005	60%	81%
2006**	n/a	n/a

* Rating Scale: 1=poor, 2=fair, 3=good, 4=very good, 5=excellent, 6=outstanding

** Data are not available for the Classes of 2004 or 2006.

The response rate ranged from 51% to 79%. As with the graduate survey, we are now distributing the residency director survey and collecting the data electronically. We have also changed the time when we ask the directors to complete the survey, from July after students have finished their first year of residency to May, while the students are still currently in their first year. In prior years, the percentage of residency supervisors rating UW graduates “Very Good” to “Outstanding” ranged from 75% to 83%. These data suggest that our graduates are performing well in residency.

In addition to the graduate and residency director surveys, we are adding a new longitudinal survey to measure the impact of curricular reforms over time. The survey, administered annually to students in all years of training, assesses medical students’ learning approaches, attitudes toward social and behavioral issues in medicine, and the medical school learning environment.

Objective Structured Clinical Examinations (OSCEs)

Medical students learn applied clinical skills in addition to medical knowledge. This learning is confirmed through the use of special clinical exams. Information obtained about students’ performance is provided to students to inform them of their strengths and areas in which they need additional study; to course and clerkship instructors to improve teaching; and to the curriculum office to help with curriculum design.

Students take eight clinical examinations during medical school. The first four occur during years one and two, and are associated with the four-semester clinical skills course called Patient, Doctor, and Society. The next three OSCE exams occur during clinical rotations. These exams test students’ mastery of skills learned in the Medicine, Primary Care, and Neurological Sciences clerkships. Finally, before graduation all students must take and pass a comprehensive, 11- to 13-station clinical exam known as the Year-End Professional Skills Assessment (YEPSA). It is administered to ensure that students have acquired the basic clinical skills they need to proceed with their medical training. This comprehensive exam also helps prepare students for the required clinical skills portion of the national boards exam. In addition, YEPSA is a vital part of the feedback loop informing departments about students’ learning. YEPSA results are presented annually to the Educational Policy Council.

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Table 3 summarizes the YEPSA results over the last nine years.

Table 3

End-of-third-year YEPSA results for 2001-2009 graduates

<u>Graduation Year</u>	<u>Percent Pass</u>	<u>Number Taking YEPSA</u>
2001	96%	143
2002	97%	125
2003	96%	139
2004	97%	122
2005	99%	142
2006	87%	140
2007	91%	143
2008	89%	133
2009	94%	160

Licensure Examination Results

The National Board of Medical Examiners (NBME) administers the United States Medical Licensure Examination (USMLE). Passing these board exams is required for all physicians who wish to practice medicine in the United States.

The USMLE consists of three sets of exams. Step 1, a computer-based basic sciences knowledge exam, is usually taken by students at the end of their second year of medical school. Step 2, which consists of two parts—a computer-based clinical knowledge exam and an objective clinical skills exam—is usually taken in the fourth year of medical school. Step 3 is taken after graduation, usually during the second year of residency. We monitor the mean scores and pass rates of our students in comparison to the national mean scores and pass rates for Steps 1 and 2.

Table 4 shows pass rates for the graduating classes of 2000 through 2009 (Step 1), 2000 through 2007 (Step 2, Clinical Knowledge), and 2005 through 2007 (Step 2, Clinical Skills; this exam was first instituted in 2005), comparing the performance of UW SMPH students and that of all examinees in the US and Canada.

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Table 4

USMLE Step 1 and Step 2 pass rates for the graduating classes of 2000-2009, comparing UW SMPH students and all examinees in the US and Canada

<u>Step 1 (Basic Science Knowledge)</u>			
<u>Graduation Year</u>	<u>Year Step 1 Was Taken</u>	<u>UW SMPH</u>	<u>National</u>
2000	1997-98	95%	95%
2001	1998-99	97%	93%
2002	1999-00	95%	92%
2003	2000-01	92%	90%
2004	2001-02	93%	91%
2005	2002-03	96%	92%
2006	2003-04	92%	92%
2007	2004-05	98%	93%
2008	2005-06	97%	94%
2009	2006-07	96%	94%

<u>Step 2 Clinical Knowledge (CK)</u>			
<u>Graduation Year</u>	<u>Year Step 2 CK Was Taken</u>	<u>UW SMPH</u>	<u>National</u>
2000	1999-00	95%	95%
2001	2000-01	96%	95%
2002	2001-02	93%	91%
2003	2002-03	98%	96%
2004	2003-04	95%	94%
2005	2004-05	97%	94%
2006	2005-06	95%	94%
2007	2006-07	98%	95%

<u>Step 2 Clinical Skills (CS)</u>			
<u>Graduation Year</u>	<u>Year Step 2 CS Was Taken*</u>	<u>UW SMPH</u>	<u>National</u>
2005	2004-05	97%	96%
2006	2005-06	100%	98%
2007	2006-07	98%	97%

* The Step 2 Clinical Skills exam was first implemented by NBME and required for licensure with the Class of 2005.

The USMLE data show our students are performing adequately on the national board exams. Our pass rates continue to equal or exceeded the national pass rates.

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II. Assessment Plans for 2008-09

We plan to maintain the activities described above, updating our records as new information becomes available. We are continuing our review of all student surveys we administer to determine if we can reduce the number of surveys and still meet our information needs. In addition, we are reviewing all data collection procedures to reduce redundancy and determine how we can process data more efficiently and quickly. We are also implementing electronic surveying and data collection methods where practicable.

We continue to work on ways to apply statistical methodology to the management of course assessment data as well as exploring its application to student academic performance. One of our goals is to obtain early warning about students who may be struggling so we can provide assistance as early as possible. The Medical Education and Student Services offices are working together to accomplish this goal.

Starting in Fall 2008, we will implement a satisfactory/unsatisfactory grading system for the first year of medical school. The motivation for moving to this system includes promoting student acquisition of knowledge as foundational to future courses and clerkships and to their profession, instead of acquisition of knowledge for purposes of test performance and grading. This system also allows students who come from diverse backgrounds to adjust to the rigors of medical school without focusing on grades. As students become accustomed to medical school and adjust their studying techniques, they can focus on increased collaboration and build a culture of teamwork. Statistical methods are being explored to provide credible standards, appropriate methods, and reasonable outcomes using the satisfactory/unsatisfactory grading system. The current grading scheme for the second through fourth years will remain the same.

Under the direction of our Associate Dean of Medical Education, the UW SMPH will continue to enhance our assessment methods and to use the data we obtain to inform and improve the medical school curriculum.