

The Role and Future of Standardized Patients in the MCW Curriculum

*Kenneth B. Simons, MD; Tisha J. Palmer; Joan M. Bedinghaus, MD;
Mary E. Cohan, MD; Dario Torre, MD*

INTRODUCTION

One of the most important goals of the Medical College of Wisconsin (MCW), as for any medical school, is to prepare medical students for their successful entry into residency training and the future practice of medicine. To be prepared, students need to develop not only a solid foundation in the basic sciences, paying particular attention to pathophysiologic mechanisms, but also must gain familiarity and competence in a variety of basic clinical skills that they will utilize throughout their careers. These clinical skills lay the foundation for becoming a physician who meets the competencies set forth by the Accreditation Council of Graduate Medical Education (ACGME) and the National Board of Medical Examiners (NBME). Many of these fundamental competencies require standardization and repetition for the student to master the skills. Standardized Patients (SPs) have proven quite valuable in this regard and are utilized extensively at MCW.

MEETING CURRICULUM GOALS THROUGH STANDARDIZED PATIENT ENCOUNTERS

Research has demonstrated that Standardized Patient encounters are an extremely useful tool in both the teaching and evaluation of clinical skills acquisition in medical students and residents. SPs are individuals who are carefully and thoroughly trained to present a "case profile" of an individual with a defined illness/ concern. The SP can then portray this case in a consistent, standardized, and realistic fashion. Many strengths can be attributed to the use of SPs: the illness presented to the learner will not change over time, each student is presented with the same opportunity to demonstrate the clinical skill being observed, the scenario can be tai-

lored to the learner level, the clinical encounter can be condensed or expanded, and potentially dangerous/difficult situations can be realistically simulated.

Though certainly not a panacea to medical school teaching and evaluation needs, most medical schools are employing this tool as its value is increasingly realized. As of 1997, 97% of US medical schools were using SPs in at least one area of their clinical skill instruction. In addition, 85% were using SPs in at least one area of assessment, and, not surprisingly, 72% were using SP clinical skills exams (Objective Structured Clinical Exams) as criterion for student advancement in their institution.¹

MCW is no exception to this growth in SP usage. Since 1999, we have implemented SP teaching and assessment encounters in each year of the curriculum. What is exceptional about our SP approach is the diligence with which we have sought to align our growth with our curriculum needs and objectives and uphold the highest standards of educational measurement. More specifically, MCW's SP program has simultaneously improved SP methodology and its use in instruction, assessment, and academic promotion. Improvement goals have been set in the following areas: meeting stringent quality assurance standards, ensuring that SP encounters address key content areas and core skill sets, seamless integration into the curriculum, and commitment of resources for program expansion in an effort to continue to meet the needs of future students and residents at MCW. This paper will briefly highlight our use of high-quality SP encounters in a systematic, integrated, longitudinal clinical teaching and evaluation system.

QUALITY ASSURANCE

High Stakes OSCE Pilot

In 1999, MCW's Curriculum and Evaluation Committee (CEC) appointed an ad-hoc committee composed of a broad-based representation from the faculty, students, and administrative educational leaders to evaluate the M3-4 curriculum and make recommendations as indicated. One of the most salient issues addressed was the need to implement a performance-based assessment sys-

Authors are with the Medical College of Wisconsin, Milwaukee, Wis. Doctor Simons is Senior Associate Dean for Academic Affairs. Ms Palmer is Standardized Patient Program Coordinator, Office of Educational Services. Doctor Bedinghaus is Associate Professor, Family and Community Medicine. Doctor Cohan is Assistant Professor, Geriatric Medicine. Doctor Torre is Assistant Professor, General Internal Medicine.

tem linked to benchmark performance standards. Subsequent to our endeavor, the NBME proposed its plans to include a clinical skills test utilizing SPs in its 2004 licensure requirements (Step 2B). In response to these local and national developments, MCW piloted a multi-station Benchmark Objective Structured Clinical Exam (B-OSCE). The pilot was administered to 60 M3 students in the 1999-2000 academic year. The overwhelming success of this pilot led MCW to implement and administer a seven-station B-OSCE to the entire M3 class during the past 2 years.

The results of the pilot enabled the SP program to assess program protocol (case development, SP selection, SP training, Objective Structured Clinical Exam [OSCE] administration, OSCE data evaluation, OSCE reliability and performance results) and increase the rigor with which the protocol is administered. These efforts have demonstrated that the reliability of all seven cases utilized in the B-OSCE 2002 was .79 or higher. Student response to the integration of a "high stakes" clinical exam (B-OSCE) into the M3-4 curriculum has been positive, as many students view this examination as an opportunity to evaluate their clinical skills against those of their peers and to use the feedback as a tool to correct any deficiencies. Many students also have commented that they would like additional skills education using SP/OSCE methodology earlier in their studies.

Benchmark OSCE As Graduation Requirement

The positive student response to SP encounters and the high reliability of the individual SP OSCE stations enabled us to garner the support of the Academic Standing Committee (student promotions) to require that the B-OSCE be utilized as a graduation requirement beginning with the class of 2005, which coincides with the NBME's current timetable for Step 2B. This "high-stakes" exam will enable our faculty to identify students who do not meet a minimal competency of clinical skill performance and will allow for remediation so that when these students graduate, they will have met this requirement and will be well prepared for residency training.

INTEGRATION AND EXPANSION

The results of this Benchmark OSCE demonstrate that a strong, clinically based, standardized assessment approach to using SPs is valued by both learners and faculty. However, the B-OSCE is only one component of MCW's longitudinal plan to develop a comprehensive clinical skills assessment program throughout all four years of our curriculum. When viewed as a continuum,

these clinical skills assessments will allow us to monitor student performance over time while assuring that all students acquire and demonstrate proficiency in a set of core clinical skills prior to graduation, as noted previously.

M1 Medical Interviewing Course

In an effort to offer a structured, multi-method (e.g. reading, discussion, reflection, practice, feedback) approach to learning medical interviewing, as recommended by numerous authors,^{2,3} MCW successfully piloted and now administers a course that specifically focuses on the development of the M1 students' medical interviewing skills. This course also aligns itself with MCW's efforts to align the student experience in knowledge acquisition and clinical skill performance with the beginning of the basic science instruction.

In the Medical Interviewing course, the use of SPs allows us to plan a predictable sequence of experiences that addresses specific learning objectives. It also provides a uniform learning experience to all students and allows students to receive feedback and to learn from one another. Students work in groups of six with a faculty preceptor. During each session, two students have the opportunity to interview a SP. The preceptor, the student interviewers, the other students in the small group, and the SP then all have an opportunity to reflect on the interview and provide feedback.

At the end of the course, students have their first experience with an OSCE. The M1 Medical Interviewing OSCE employs a series of six clinical scenarios, each with a SP, who has a list of specific questions and behaviors that define a good interview. The student performs each clinical role-play in turn, and the SP rates each student on his or her performance. This OSCE thus allows assessment of specific clinical skills in a realistic but controlled and standardized fashion.

The students have commented positively with one noting, "I've learned to really listen to the patient." During this initial year of full implementation, we are continuing to evaluate the program's effectiveness in the development of good communication skills.

M2 Introduction to Clinical Skills Course—Teaching

MCW is also expanding the use of SPs in the second year of medical school. Currently, we are piloting an "advancement or mastery exam" at the completion of the Introduction to Clinical Examination (ICE) skills course. The objective is to develop a performance-based assessment that utilizes SPs to evaluate the clinical skills of M2 students. The test will provide formative and summative individual evaluation as well as formative program evaluation.

This evaluation will assess each student's proficiency in a set of core clinical skills, verify achievement of the ICE course goals, and provide information to improve course curriculum. This exam is the second component of our longitudinal system of clinical skills assessment that extends into the M3 clinical year and beyond (M3 Internal Medicine End-of-Clerkship OSCE, M3 Pediatric End-of-Clerkship OSCE and the M3 Benchmark OSCE and M4 Integrated Selective in Geriatrics).

M2 Introduction to Clinical Skills OSCE Pilot

During academic year 2002-2003, we are piloting a mini-OSCE that requires each M2 student to perform a limited physical examination that includes demonstration of all the pertinent elements of the cardiovascular, pulmonary, and gastrointestinal systems. This encounter with a SP will be supervised and scored using a predetermined checklist. At the end of each encounter, the supervisor and the SP will provide 5 minutes of immediate feedback to the M2 students about their performance. Subsequently, we anticipate that this mini-OSCE will be expanded to include additional elements of the history and physical examination.

This program will provide feedback to individual students in order to enhance their performance, summative individual evaluation providing certification of performance, verification that the ICE course goals have been achieved and formative program evaluation such that the program will have identified curricular areas in need of improvement.

M4 Integrated Selective

MCW is also striving to provide its learners with a curriculum that integrates content area horizontally. One program that helps us meet that goal is an innovative geriatric course selective offered for M4 students. This selective utilizes SPs to teach geriatric principles to fourth-year medical students. The Mechanism of Disease in an Aging Population Course is centered around four geriatric-focused paper cases previously used during the M1-3 curriculum. The cases highlight common diseases in aging and are enacted by SPs to provide an effective learning scenario. Multiple methods including lectures, small group discussions, clinical experiences, and standardized patients linked to each case are used in the course. During the SP teaching sessions, students receive immediate feedback from the course director and the trained SP as well as opportunities to view videotapes of their encounters with their fellow students and a facilitator. At the elective's conclusion, the students are evaluated via a mini-OSCE in which they re-interview each of the SPs. The student rating of this course is extremely positive, and it

achieved perfect ratings on items related to obtaining an understanding of principles, feedback regarding diagnosis, history, and effectiveness of faculty as teachers.

SUMMARY AND FUTURE PLANS

Medical education must continue to produce competent and compassionate physicians who are able to demonstrate these skills in real life. SPs can provide a strong teaching and assessment strategy that closely simulates real life patient encounters for learners. At MCW we have embarked on an aggressive but systematic plan to implement an ongoing, longitudinal clinical evaluation system at each year of medical student training. This system will track the progress of our students in achieving core competencies in patient care and effective and ethical communication with patients, families, and health care providers consistent with accreditation standards.

With the addition of these teaching and assessment components utilizing SPs, students now have greater opportunities to gain clinical skills by participating in multiple SP encounters during each of their 4 years of undergraduate medical education. They will have additional opportunities to hone their clinical skills in this manner, as SPs are increasingly utilized in graduate medical education. In "effective" utilization, our SP program uses SPs to teach non-cognitive skills such as demonstrating cultural sensitivity/competency and in the future, in dealing effectively with spirituality and negotiating the medical system as a professional medical advocate on behalf of patients.

As with any new teaching modality, there are challenges involving the use of standardized patients. The most daunting obstacle is finding dedicated space that will allow us to continue to integrate and expand our SP program for both undergraduate and graduate medical education as well as the education of ancillary health care personnel. MCW and its hospital partners are embarking on the path of a cooperative venture that will enable us to have a single facility to house the expanded Standardized Patient programs as well as Patient Simulation programs. This cooperative venture will enable medical students, housestaff, nurses, respiratory therapists, and others to continually refine and enhance their skills. Indeed, as increasing emphasis is placed on recertification efforts for physicians in practice, facilities and SP programs such as ours will be utilized and required for maintenance of licensure. The practice of medicine is and will continue to be enhanced by the use of Standardized Patient programs and these benefits will enure to the health of the American public.

continued on page 50

THE ROLE AND FUTURE OF STANDARDIZED PATIENTS IN THE MCW CURRICULUM

continued from page 45

REFERENCES

1. Association of American Medical Colleges. Emerging Trends in the use of Standardized Patients. *Contemporary Issues in Medical Education*. 1998;1(7).
2. Kern DE, et al. Curriculum Development for Medical Education: A Six-Step Approach. Maryland:John Hopkins University Press; 1998.
3. Association of American Medical Colleges. Contemporary Issues in Medicine: Communication in Medicine. *Medical School Objectives Project*. 1999:3.



The mission of the *Wisconsin Medical Journal* is to provide a vehicle for professional communication and continuing education of Wisconsin physicians.

The *WMJ* (ISSN 1098-1861) is the official publication of the Wisconsin Medical Society and is devoted to the interests of the medical profession and health care in Wisconsin. The managing editor is responsible for overseeing the production, business operation and contents of *WMJ*. The editorial board, chaired by the medical editor, solicits and peer reviews all scientific articles; it does not screen public health, socioeconomic or organizational articles. Although letters to the editor are reviewed by the medical editor, all signed expressions of opinion belong to the author(s) for which neither the *WMJ* nor the Society take responsibility. The *WMJ* is indexed in Index Medicus, Hospital Literature Index and Cambridge Scientific Abstracts.

For reprints of this article contact the *WMJ* Managing Editor at 866.442.3800 or e-mail wmj@wismed.org.

© 2003 Wisconsin Medical Society