

Sondra Zabar, Angela Burgess, Kathleen Hanley,
and Elizabeth Krajic Kachur

Beyond the OSCE: Evaluation Clinical Skills Using Unannounced Standardized Patients

Although the use of standardized patients (SPs) is widely used in assessment, the vast majority of SP exercises/exams involve announced encounters in which the learners know that they are interacting with a simulated patient. Objective structured clinical examinations (OSCEs) are considered a gold standard for assessing clinical skills, but their overtly contrived nature may limit their ability to capture the true behavior of medical professionals (Ozuah and Reznik 2007). The use of unannounced standardized patients (USPs) is a relatively new but increasingly used method for evaluating the competence of medical professionals (Glassman et al. 2000; Rethans et al. 2007). USP encounters do not have the artificial time constraints of OSCEs, and USPs can evaluate subjects in a real clinic setting.

USPs have been used to assess trainees as well as practitioners across the health professions, including nursing (Carney and Ward 1998), optometry (Shah et al. 2007), and a range of medical specialties, from primary care (Culver

et al. 2009) to emergency medicine (Zabar et al. 2009). The published literature describes using USPs to assess clinical skills (e.g., [in residents], Ozuah and Reznik 2008a, b) or the efficacy of educational interventions. The performance of clinicians visited by USPs may be compared with that of a group who did not receive an intervention (control group) or to their own performance in announced standardized patient encounters. Intervention studies (e.g., Casebeer et al. 1999) determine the success of an educational initiative, generally by comparing performance with USPs before and after the intervention. Other studies explore the feasibility and validity of USPs compared to chart reviews and clinical vignettes (Peabody et al. 2000).

USPs can also be used to evaluate the clinical microsystem. A clinic's commitment to becoming a patient-centered medical home is as important to health outcomes as the skills of its physicians. USPs can rate the performance of medical assistants, the ease of navigating the clinic, and the functioning of the clinic care team (Peabody et al. 2004; Zabar et al. 2009). USPs easily documents adherence to national patient safety standards, such as hand washing and patient identification. USPs can also observe a clinic's level of patient centeredness (Epstein et al. 2005). Because they undergo every level of the patient experience, USPs are versatile judges of health centers.

Health professional schools that conduct OSCEs are poised to incorporate a USP program into their curriculum, as much of the infrastructure required to perform the two assessments is similar, such as SP/rater training and case development. Since USPs are integrated into an already established clinic setting, costs are limited to compensation for the actors. Hourly rates for standardized patients range from \$15 to \$25 per hour, and most USP visits last 2–4 h. Additional USP requirements include close collaboration with administrators in the clinical setting.

USP programs are not without potential difficulties. There is a risk that USPs will be detected, which can undermine the effectiveness of the program. If a medical professional realizes (s)he is interacting with a USP, he or she may

S. Zabar, M.D. (✉)

Department of Medicine, Division of General Internal Medicine,
Section of Primary Care, New York University School of Medicine,
550 First Avenue, BCD D401, New York, NY 10016, USA
e-mail: sondra.zabar@nyumc.org

A. Burgess

Program for Medical Education Innovations and Research,
New York University School of Medicine,
New York, NY, USA

K. Hanley, M.D.

Department of Medicine, Division of General Internal Medicine,
Section of Primary Care, New York University School of Medicine,
New York, NY, USA

E.K. Kachur, Ph.D.

Medical Education Development, National and International
Consulting, New York, NY, USA

not behave in natural manner. Consequently, the data collected still may not reflect a clinician's true skills. Matching USPs with the intended clinician can be complicated in some health centers, particularly those that do not assign patients to specific providers. Constant communication with scheduling coordinators is necessary to ensure that USPs interact with the correct clinicians. There is also the concern that USP visits hinder productivity by taking up trainee patient time. However the few number of visits needed to evaluate the clinical system and provider performance is usually seen as worth the investment by hospital and educational leadership.

USP Staffing Needs

USP projects can be a major undertaking, and as with most other educational projects, collaboration within and across specialties, even across disciplines can only enrich the process. While it is necessary to have strong leaders who

believe in the benefits of such comprehensive assessment programs, many other individuals are needed for adequate planning, preparation, and implementation. Table 4.1 details the additional roles that USP projects typically require beyond those detailed in for OSCE administration Table 2.1.

Implementing a USP Project

Specific tasks involved in planning to integrate USP visits in a clinical setting are detailed in Table 4.2, a modification of the worksheet for assigning OSCE responsibilities and creating timelines (Fig. 2.3, Appendix C).

Cases

USP and OSCE case development follow the same basic principles (see Chap. 2, Step 4, "Develop Cases and Stations"). Many OSCE cases can easily be adopted to be

Table 4.1 USP staffing needs (see also: Table 2.1)

Roles	Key characteristics	# Needed
Leader	<ul style="list-style-type: none"> ■ Strong motivation to develop and implement project ■ Well connected to procure resources ■ Can establish collaborative relationship with hospital/clinic leadership ■ Able to communicate well and create a team spirit 	One or more
Planner	<ul style="list-style-type: none"> ■ Understands logistics of implementing USP (case development, project location) ■ Can entertain multiple options for solving problems 	One or more
Coordinator	<ul style="list-style-type: none"> ■ Can implement USP-related tasks (e.g., scheduling, SP recruitment, data entry) ■ Able to communicate well ■ Good at troubleshooting and problem solving 	One or more (depending on scope)
Clinical Administrator	<ul style="list-style-type: none"> ■ Can obtain fake medical records ■ Able to assess workflow to incorporate USP with no detection 	Usually one
Trainer	<ul style="list-style-type: none"> ■ Understands USP roles and case requirements ■ Has teaching skills (e.g., provides constructive feedback) and can manage psychosocial impact of case portrayals ■ Able to communicate well and create a team spirit ■ Is sensitive to the special stresses inherent in USP work 	One or more (depending on scope)
SPs	<ul style="list-style-type: none"> ■ Committed to standardization of their case portrayal (i.e., not expressing their personal creativity) ■ Comfortable enacting their particular medical case (i.e., not getting too involved emotionally) ■ Interested in taking on "educational" responsibilities ■ Able to tolerate the open-ended nature of USP visits (can last from 30 min to 3 h or more) ■ Comfortable to be among individuals who have true medical conditions and may be in emotional or physical distress (e.g., heart attack in an emergency room) ■ Able to change appearance if using one clinical site ■ Clear about USP goals and performance standards ■ Committed to fair performance assessments (e.g., understands personal rater style and biases) ■ Effective provider of post-encounter feedback 	At least one per case, consider cross-trained alternates
Data Manager	<ul style="list-style-type: none"> ■ Can enter performance data ■ Understands USP process ■ Committed to accuracy 	At least one
Data Analyst	<ul style="list-style-type: none"> ■ Understands USP process ■ Has psychometric skills ■ Understands end-users of results (e.g., learners, program) 	At least one
Program Evaluator	<ul style="list-style-type: none"> ■ Understands USP process ■ Is familiar with evaluation models (e.g., pre-/posttesting) ■ Can develop and analyze program evaluations (e.g., surveys, focus groups) 	At least one

Table 4.2 Breakdown of USP responsibilities

	<i>Initial planning</i>
3–4 months before planned start of USP project	<ul style="list-style-type: none"> ■ Obtain permission from and initiate partnership with clinic administrators ■ Decide on format (e.g., number of cases, time frame) ■ Create a blueprint (identify competencies to be assessed) ■ Develop cases ■ Identify single or multiple locations of project ■ Recruit staff (for administrative tasks, scheduling) ■ Identify each step of USP visit (check in procedure, insurance, medical record) ■ Decide on USP recruitment and training schedule ■ Communicate with learners (explain nature of project, get consent for USP visits) ■ Clarify budget (e.g., USP costs, recording equipment)
	<i>Material, USP, and visit preparations</i>
3 months to 1 week before first USP visit	<ul style="list-style-type: none"> ■ Develop USP materials (e.g., USP instructions, rating forms) ■ Recruit USPs ■ Create medical records and unique case demographics ■ Prepare props (e.g., fake pill bottles, inhalers, charts, insurance cards) ■ Train USPs ■ Organize practice visits (“dress rehearsals”) ■ Consider videotaping USP training sessions ■ Consider audio-recording USP visits ■ Create schedule for practice/clinic visits ■ Send demographic info (name, address, DoB) to clinic director and to USP
	<i>USP Administration</i>
Day of USP visit	<ul style="list-style-type: none"> ■ Provide USP with audio recorder and transportation funds, if necessary ■ Direct USP to practice/clinic site ■ Provide rating form post-visit ■ Debrief USP post-visit with the help of the rating form ■ Consider audio- or videotaping debriefing session ■ Plan periodic group debriefing sessions with USPs to share experiences and control for desirable and undesirable case adjustments
	<i>Post-USP tasks</i>
Days to weeks after USP visit	<ul style="list-style-type: none"> ■ Organize rating forms and clinic materials by case ■ Arrange for USP payment ■ Enter data and evaluation results ■ Survey learners for detection ■ Report evaluation data (e.g., report cards) ■ Organize materials for future reference (e.g., forms, videos) ■ Report on experience internally and externally (e.g., presentations, articles)

used in USP visits. To prevent detection, it is crucial to make sure that USP cases are representative of the patient population served by the providers one plans to evaluate. A sample USP case and corresponding checklist, designed for an urban community clinic, are included at the end of this book as Appendices N and O.

Recruitment

The number of USPs required depends on the number of cases in the program, the number of clinicians involved, and the duration of the program. Medical schools are the best places to recruit USPs, since they work with actors who already have experience as standardized patients. The most qualified standardized patients will possess acting talent, punctuality, communication skills, and the ability to adapt to unpredictable situations.

Training

USP training sessions are similar to OSCE training exercises. Trainings can be divided into three sessions. During the first session, the USP program coordinator explains the purpose and logistics of the program to USPs. USPs should then read the case instructions aloud with the USP coordinator. After it is clear that the USPs fully understand their role, they practice the case, taking on the patient role while the coordinator assumes the role of physician. The second training focuses on teaching USPs to complete the evaluation forms. The coordinator shows a presentation about the correct way to observe, categorize, and document clinicians’ behavior. To practice completing the evaluation, the USPs should watch OSCE encounters and evaluate learners’ skills. During the final training session, the USPs can role-play the case with an attending physician or chief resident to learn the pacing of a medical interview. The USP coordinator can discreetly bring the USPs to the clinic before their first visits to prepare USPs for navigating the area.

Clinic Location and Visits

Before any visits are planned, program leaders must get permission from clinic administrators to conduct the program. They should speak to members of the finance office to learn how to prevent USP visits from being billed as real visits and appearing in clinic audits.

The USP coordinator should visit the clinic during a busy day to observe its layout. He or she should note the location of the registration desk, exam rooms, and other relevant areas (finance desk, pharmacy, etc.) The coordinator must observe where patients must go to check in, pay, encounter doctors, and get prescriptions and referrals. The coordinator will be better prepared to train USPs to navigate the clinic if he or she is aware of the path real patients travel.

The program team then identifies the unique characteristics of the clinic that will receive USPs. In some clinics, it is possible to schedule appointments with a specific doctor; in others, patients are assigned doctors in a first

come, first serve basis. The USP coordinator needs to work with the clinic's patient coordinator to develop a system that will ensure USPs are sent to the correct physicians. The patient coordinator should also be responsible for entering USPs' demographic information into the clinic's computer system. The USP coordinator can develop a process and deadline for sending the demographic information for each visit.

The USP coordinator collaborates with the patient coordinator to develop the USP visit schedule. The USP coordinator chooses dates and times for USP visits and sends them to the patient coordinator for approval. The patient coordinator approves the requests if the appointments are available and can suggest edits to the USP coordinator's selections if there are scheduling conflicts.

After the schedule is finalized, the USP coordinator asks USPs to sign up for visits. On the day of a visit, the USP coordinator should meet with the USP before the visit begins to give him or her an audio recorder. USP visits should be recorded in order to validate the checklist data. After the USP gets the recorder, he or she enters the clinic.

The USP should invent an excuse to avoid getting labs ordered by a physician. For example, he or she can say they have to go back to work or just ate. The USP should hold onto any paperwork he or she is given (prescriptions, referrals, etc.) and return it to the USP coordinator after the visit.

Post-visit

After the visit is complete, the USP meets with the coordinator to complete the evaluation. The coordinator reviews the evaluation for missing data and inconsistencies, then performs a debriefing session, where qualitative data about the visit is discussed. Topics raised during the debriefing include the atmosphere of the clinic, the conduct of the resident and/or medical assistants, and the degree of difficulty in navigating the clinic. Debriefing sessions should also explore facilitators and barriers to patient care. When the visit is complete, the USP signs an invoice.

Budgeting

The USP coordinator can keep track of the program costs in an Excel spreadsheet. All training and visit costs for each USP should be documented and updated frequently to ensure the program stays within the budget. The spreadsheet should include the name and contact information of each USP, list every date each USP worked, and include the amount USPs were paid for each visit or training session. Excel can calculate the total program costs and the average costs per visit. For example, the NYU School of Medicine USP program costs about \$120 per visit.

Learner, Microsystem, and Programmatic Evaluation

USP visits provide a wealth of information. The program leaders can disseminate a summary report for clinicians on their overall performance across all USP cases. The clinic administrators should receive a summary report of the health care team's performance for patient safety, patient centeredness, screening assessments, and team skills.

USP scores can also be compared to OSCE performance to see how an individual performs in a testing situation versus the "real world" of the clinical environment. The sample evaluation in Fig. 4.1 shows individual and mean cohort primary care resident communication skills as measured in a ten-station OSCE and across multiple USP visits (% checklist items "well done"). As can be seen in the sample report, this particular resident ("Dr. K") actually shows a trend of performing better in USP visits as compared with OSCE encounters.

In our program, USPs were asked to evaluate clinical microsystem as well as clinician performance in 50 visits to primary care providers at an urban community clinic. During each visit, USPs recorded whether the medical assistant greeted the patient within a reasonable time frame; introduced his or herself; wore a visible name tag; washed hands before touching me; measured my height; took my blood pressure; weighed me; and screened for depression. USPs also assessed their general experience with clinic: how easy it was to navigate the system; team functioning; and overall staff professionalism.

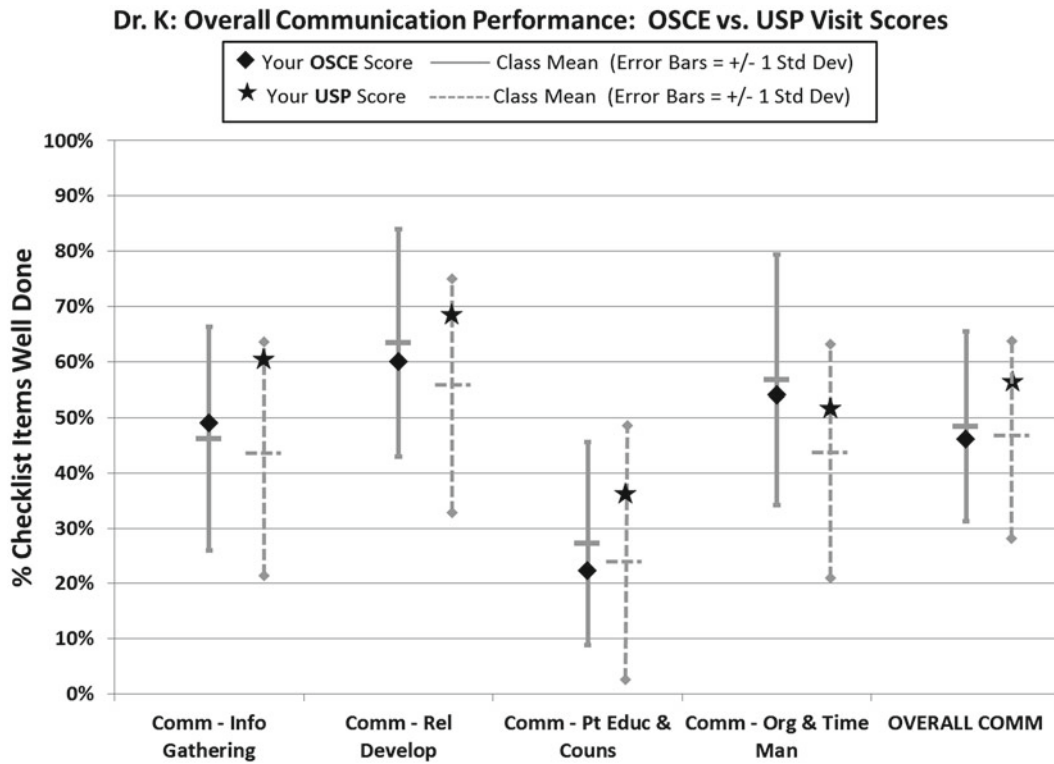


Fig. 4.1 Sample learner feedback report: OSCE versus USP communication performance. Communication sub-competency scores reported: information gathering, relationship development, patient education and counseling, and organization and time management

Clinic administrators then conducted an educational intervention with the medical assistants to improve performance. In preliminary subsequent USP visits post-intervention marked improvements were noted. Clinical microsystems data such as

these serve to inform medical directors of critical gaps in patient safety measures, patient satisfaction, and patient centeredness. With specific data on the patient experience, administrators can implement appropriate improvement measures.