“Training Standardized Patients to Give Feedback to Medical Trainees: The State of the Art"

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This submission is a result of an exhaustive literature search in which we read an amount of articles and attempted to organize them in a way that would give the reader some sense of what is out there on the topic of standardized patient driven feedback. The search was broad and there is a good deal that does not relate directly to the SP world but to the feedback world in general. It is included because of the reference and translation factors. This in no way boasts to be a complete edition of what exists in the literature. Nor does it come close to representing the rich pool of experts and items we have in our own association as many items are not published and therefore did not show up on the search. We included what time allowed us to include as well as what we were able to access. We have categorized and synopsized the literature we did locate to include our interpretation of such and certainly do not claim to have only the 'right answers' stated within. The work is respectfully submitted is in five parts described below. **They are the logic model; the select bibliography (also known as the long list); the short list; the expert list and the feedback survey.**

The logic model consists of two peer reviewed items and the bulk non peer reviewed publications to which we had access dated from 1996 to the present (2006). It breaks each publication down to give the reader a snapshot of the setting, objective, checklist/evaluation used, recipient level, provider's level of expertise, feedback driver, focus, method, desired outcome, feedback trainer, trainers' methods, research study, references used, other thoughts. There are a total of 22 publications in the logic model. They are listed chronologically in descending order with the standardized patient specific items first. Several are outside the SP arena but the feedback techniques translate well for our purposes. They are included because they came up on the key word search and were thought to be important references.

The select bibliography or the long list is the crux of the search and rather than just toss the information, the list is here for you, the reader. This is divided into six sections. They are benchmark publications in training standardized patients; validation studies; evaluation studies; quantitative and/or qualitative studies; historic learning models; issues/questions and future directions. The articles date from 1970 to the present and are a result of the exhaustive literature search using key words such as standardized patient + medical students + feedback, standardized patient + feedback, feedback skills, feedback, techniques, training for feedback, methods of feedback, training standardized patients, training standardized patients + feedback, instructing standardized patients + feedback, feedback innovations, feedback origins, feedback + medical students, feedback + faculty + professor + instructors, communication

skills, teaching communication skills, communication skills training methods, instructing for communication skills, reflective feedback, coaching for feedback, feedback + correction/corrective, feedback + behavior, feedback + feelings. They are listed alphabetically by first author within their sections. This is obviously the most comprehensive of the lists.

The short list may well be the most practical of the search. It is items focused on specific methods of training, evaluation and/or feedback since 1999 and is divided into the following sections, feedback directed at standardized patients; checklist issues; development of case scenarios; standards for performance; sample evaluation forms; future items for consideration; food for thought; forerunners in feedback and teaching programs; faculty directed. They are listed alphabetically by first author within their sections.

The expert list is a list of authors found most often in the literature as we conducted the search. They are listed alphabetically by name and followed by a brief history, publications, and contact information.

The feedback survey is a result of the many questions we had as we searched the literature and came up without the answers. We submit this as a starting point, a framework to get some practical data on what is truly out there in our medical schools and institutions right now as it was our conclusion that it is not as of yet adequately reflected in the literature.

This proposal came about as a result of a deep interest in the feedback process and a keen awareness that though it is gaining popularity in the SP arena, it is not necessarily trained or monitored in a standardized approach. My curiosity was piqued as I began to speak with my colleagues and realized how many of us were asking the same questions about feedback – most of them in the survey; does your faculty ask your SPs to provide it? What is your feedback model? Who trains it? How do the SPs do with presenting it? How do the students respond? Is the faculty happy? Do you have a way of measuring the success of the feedback given? Is it enriching the experience your students have? The opportunity to search the literature and see what was out there at this point seemed a logical place to start. There are feedback models in existence and many of them have been modified for our usage.

What our efforts showed:

1. Though some publications do appear, there is a lack or paucity of SP-specific training data available in the literature search. The bulk has started to appear in the past few years.
2. No bulk of literature is available on the actual reproducible methodologies as to how SPs are trained. What is out there is young and we are under developed in organizing it to make the resources available to the community at large.
3. No continuity or standardization of portrayal network wide.

Some thoughts:

4. Are we giving a consistently standardized experience to our learners? How do we know what standards are in place network-wide to ensure the above?
5. Are there network-wide standards or criterion in place regarding selection of trainers? How might this ultimately affect the learner?
6. Peer-reviewed articles often refer to trained SPs, but, no real indication or references lead to how this training was imparted to the SPs. Is there a need to define levels of training network-wide? Can any of this even apply to feedback?

The next step, I believe is continuing to explore these points as well as organizing our efforts on a more unified front. If not for the purposes of everyone utilizing the exact same approach, which might be viewed as rigid and unrealistic given the vastness of each institution's objectives, then for the purposes of pooling our resources and creating a synergistic approach to the methodologies and training of SP driven feedback. Much like the case bank, this invaluable tool would benefit all. As our desire to be taken seriously as a profession continues to grow, so does our need to back our processes with concrete and practical applications for our formerly loose approaches. As stated in the introduction, there is a rich pool of expertise as well as practical information within the individual halls of ASPE. Implementing the survey and analyzing the data may be a start to getting that information out to members in a more organized fashion. Making training procedures available to members as well as validation results would also allow for a sharing of resources.

The challenges being made by this research to the SP community at large are, how do we harness and tap into the resources now being utilized by individuals within our association so that they can better be made available to serve us as a whole? And how do we address the immediacy of a standardized approach to SP driven feedback across the SP community and still honor the individual needs of each program?

LOGIC MODEL

Association of Standardized Patient Educators (ASPE) Project Award "Training Standardized Patients to Give Feedback to Medical Trainees: The State of the Art"

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AUTHOR/REFERENCE CITATION	DESCRIPTIONS/QUESTIONS
Hardee James and Kasper, Ilene: **From Standardized Patient to Care Actor: Evolution of a Teaching Methodology.** The Permanente Journal. Vol 9, No.3, Spring, 2005.	**Setting:** Standardized patient training center. **Objective:** Improve standardization among standardized patients and eventually across the program. **Checklist/evaluation used:** Possibly in the future. **Recipient level**: Medical students, years 1, 2, 3, and 4. **Providers' level of expertise:** Specifically standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patients and standardized patient instructors. **Focus:** Across-the-board standard performances allowing more equitable evaluations by faculty, standardized patients and medical students. **Method of feedback:** Verbal, written, video review. **Desired outcome:** A more standardized presentation thus equitable evaluations and/or feedback from faculty and standardized patients. **Trained by:** Standardized patient educators, faculty, clinicians, and

	standardized patient instructors. **Methods used to train:** Stage setting, skill practice, feedback exercises. Use of improvisation skills. **Research study:** No.
Howley LD, Simons DF, Murray JA. **Focusing feedback on interpersonal skills: A workshop for Standardized Patients,** 3rd edition, unpublished training manual, 2005. (Directed workshop on feedback to standardized patients).	**Setting:** Workshop **Objective:** Reflect, refine, further develop and practice interviewing skills. **Checklist/evaluation used:** Pre-test and follow-up feedback. **Recipient level:** Medical students. Can be easily adapted for any level. **Providers' level of expertise:** New or established standardized patient as well as training medical students to provide feedback. **Feedback driven by**: Standardized patients. **Focus:** Interpersonal communication skills. **Method of feedback:** Verbal and written feedback. **Desired outcome:** Reflect, refine, further develop and practice interviewing skills. **Trained by:** Standardized patient educator, faculty. **Methods used to train:** Practice verbal interactions, explanation of why, small group activities with video and discussion. **Research study:** No.
Sinclair, Nancy RN MBA. University of New Mexico School of Medicine, 2004. **Reflective Verbal Feedback: A Substrate for Professionalism (Workshop)".** 3rd Annual Meeting of the Association of Standardized Patient Educators September 18-22, 2004, New Orleans, LA U.S.A., Hosted by Tulane University School of Medicine. www.aspeducators.org/2004. (Directed at standardized patient educators to teach verbal	**Setting:** Standardized patient workshop. **Objective:** Effective communication between standardized patients and medical students. **Checklist/evaluation used:** No. **Recipient level:** Trained standardized patients. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patients and standardized patient instructors. **Focus:** To better grasp the concept of reflecting one's experience as verbal feedback. **Method of feedback:** Verbal.

feedback, reflective in particular)	**Desired outcome:** Improved skills by standardized patients to provide reflection with medical students as well as feedback empowering medical students to more effectively communicate with patients. **Trained by:** Standardized patient educator, faculty or instructor. **Methods used to train:** Small group discussions, demonstrations by actor or well-trained standardized patient, reflection, sharing, role playing, handouts and opportunity to practice new skills. **Research study:** No. **Reference(s) Used:** None listed.
Nelles, Laura Jane; Knickle, Kerry; McNaughton, Nancy; Tabak, Diana; University of Toronto **"Beyond the Sandwich-Advanced Feedback Skills (Workshop).** 3rd Annual Meeting of the Association of Standardized Patient Educators September 18-22, 2004, New Orleans, LA U.S.A., Hosted by Tulane University School of Medicine. (Directed at standardized patient educators to teach verbal feedback, reflective in particular) www.aspeducators.org/2004	**Setting:** Workshop **Objective:** Share as well as enhance expertise in providing assistive/useful feedback to medical students. **Checklist/evaluation used:** No. **Recipient level:** Standardized patients and standardized patient instructors. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patients and standardized patient instructors. **Focus:** Verbal communication. **Method of feedback:** Verbal feedback. **Desired outcome:** Improved communication skills. **Trained by:** Standardized patient educator. **Methods used to train:** Communication skills awareness, awareness of impact of feedback and a more improved skill through self-evaluation, group-evaluation, awareness of receiver interpretation of verbal feedback and more effective construction of feedback. **Research study:** No **Reference(s) Used:** None listed.
Adamo G., Brownfield E., Durning S., et al. **Objective, structured clinical examinations and**	**Setting:** Workshop. **Objective:** Checklist, standardized patients verbal feedback skills. **Checklist/evaluation used:** Yes.

standardized patients in medical education: Getting started and expanding roles. Presentation at 2003 CDIM National Meeting, Savannah, GA. (Directed at standardized patient trainers as well as testing planners, faculty, etc.)	**Recipient level:** Medical student, standardized patients, faculty, instructor. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patients. **Focus:** Verbal feedback and checklist development. **Method of feedback:** Checklist and verbal feedback. **Desired outcome:** Effective communication skills. **Trained by:** Standardized patient educator, instructor, and faculty. **Methods used to train:** Interactive role playing and small group discussions. **Research study:** No.
Sinclair, Nancy RN MBA. University of New Mexico School of Medicine, 2003. Conference: **Giving Verbal Feedback, training for standardized patients.** Presented at Annual Meeting ASPE 2003.	**Setting:** Formative, one-on-one. **Objective:** Introduce, practice and evaluate skills (interview, examination, communication techniques). **Checklist/evaluation used:** Non-case specific, communication, patient satisfaction/global. **Recipient level:** Medical students, 1st, 2nd, 3rd and 4th yr., allied health professionals, nursing. **Feedback driven by:** Standardized patients and standardized patient instructors but applicable to medical students providing feedback. **Providers' level of expertise:** New or established standardized patient as well as training medical students to provide feedback. **Focus:** Reflective/descriptive (report how you felt about the experience while citing specific examples that link to the experience.) **Method of feedback:** Verbal, immediate with and without interaction as well as written (both immediate and delayed). **Desired outcome:** Improved formative, summative and incited behavioral changes. **Trained by:** Standardized patient educators, physicians, and faculty. **Methods used to train:** Workshop. **Research study: N/A.** **Reference(s) used:** Ende J. Feedback in clinical medical education. JAMA

	250:777-781, 1983.
Owens, B.S., Xie, Z., Gregg, P., Phelps, C.L., Johnson, C.W. (2002) **Focusing Feedback on Interpersonal Skills: Practice Makes Perfect A Web-Based Tutorial For Standardized Patients.** Proceeding AMIA Symp 2002, 1121 and Owens, B.S., Xie, Z., Gregg, P., Phelps, C.L., Johnson, C.W. (2002) Focusing Feedback on Practice makes perfect: A Web-Based Tutorial For Standardized Patients. Proceeding of the 3rd annual Advances in Teaching and Learning symposium, February 2002, UT-Houston, Houston. This is a web-based study with exercises in feedback in the program.	**Setting:** Formative exercise, one-on-one. **Objective:** Introduce and practice skills (interview, communication techniques). **Checklist/evaluation used:** Global. **Recipient level:** Medical students (1st, 2nd, 3rd and 4th yr), nursing, allied health professionals. Standardized patient and standardized patient instructors. **Feedback driven by:** Standardized patient and standardized patient instructors. **Providers' level of expertise:** New and/or established standardized patients and feedback trained medical students. **Focus:** Communication and interpersonal skills. **Methods of feedback:** Written and verbal, with and without interaction (immediate and/or delayed written). **Desired outcome:** Formative feedback. **Trained by:** Standardized patient trainers, faculty or physicians. **Methods used to train:** Web-based tutorial. **Research study: N/A.** **Reference(s) Used:** None listed.
Health Sciences Academic Services and Facilities. Clinical Skills and Laboratory Services. **Training Your Standardized Patients; Training Your Standardized Patient to Give Feedback.** Standardized Patient Trainer Information and Workshop. http://depts.washington.edu	**Setting:** Individual, group or workshop setting. **Objective:** Improving communication and performance skills. **Checklist/evaluation used:** Yes **Providers' level of expertise:** New or established standardized patient as well as training medical students to provide feedback. **Recipient level:** Standardized patients, standardized patient instructors. **Feedback driven by:** Standardized patients, standardized patient instructors. **Focus:** Effective training and/or preparation for case, roles and feedback. **Method of feedback:** Verbal and written. **Desired outcome:** Case-related responses appropriate to faculty preferences as well as effective communication (reflective, summative, feedback). **Trained by:** Standardized patient educators, faculty, and clinicians. **Methods used to train:** Groups, workshops, individual, practice exercises,

	explanations and review by others. **Research study:** No. **Reference(s) Used:** None listed.
ACGME "Toolbox of Assessment Methods. 2000. 360-Degree Feedback Evaluation Instrument. **ACGME, "Toolbox of Assessment Methods, 2000. Center for Creative Leadership, Greensboro, NC.** http://www.ccl.org (Method of feedback for evaluation, directed at standardized patients.)	**Setting:** Evaluation paper presented by ACGME. **Objective:** Evaluate the 360-dgree evaluation method. **Checklist/evaluation used:** N/A **Recipient level:** Medical students, faculty and/or instructors. **Providers' level of expertise:** New or established standardized patient as well as training medical students to provide feedback, faculty and clinicians. **Feedback driven by**: Faculty/instructor. **Focus:** Effective feedback skills. **Method of feedback:** Verbal and to a lesser degree written. **Desired outcome:** Improved ability by professionals, standardized patients to provide helpful and constructive, summative, formative feedback to medical students. **Trained by:** ACGME **Methods used to train:** N/A **Research study:** No.
Anderson W, Malacrea R. **Giving constructive feedback.** Office of Medical Education Research and Development, Michigan State University. ACP-ASIM Community Based Teaching Educational Clearinghouse #326. Excellent faculty development package containing instructor manuals, videotapes, overheads and handouts.	**Setting:** Workshop **Objective:** Prepare for feedback and provide feedback to medical students. **Checklist/evaluation used:** Yes. **Recipient level:** Medical students. **Providers' level of expertise:** Standardized patient, standardized patient instructor, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patients and/or faculty/instructors. **Focus:** Improved feedback skills at summative, formative, reflective, etc., levels to provide medical students with definable assistance. **Method of feedback:** Verbal (and written) feedback. **Desired outcome:** Improved communication skills by standardized patients and faculty in turn leading to improved communications, interviewing skills by the medical students.

	Trained by: Faculty/instructor or standardized patient educator. **Methods used to train:** Small groups, overheads, interactive role playing, handouts and manual. **Research study:** No.
Hatchett, Patti. **"Effective SP Feedback, a new definition".** Training materials used at the University of Cincinnati College of Medicine Center for Competency Development and Assessment (CCDA)	**Setting:** Workshop. **Objective:** Development of a more effective, honest communication style with feedback. **Checklist/evaluation used:** No. **Recipient level:** Medical students, allied health and residents. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized Patients, Standardized Patient Instructors, Standardized Patient Educators. (Applicable to faculty, clinicians). **Focus:** Develop a more refined, usable, measurable communication between standardized patients and medical students. **Method of feedback:** Verbal and written. **Desired outcome:** Provision of honest, reflective, descriptive information with recipients. **Trained by:** Standardized Patient Instructor. **Methods used to train:** Lecture, examples, definitions, small groups, exercises, and practice with group feedback. **Research study:** No. **Reference(s) Used:** None listed.
Heathfield SM. **360-degree feedback: The good, the bad and the ugly.** Internet Source. Human Resources #60. 2002. (directed at a general population but very specifically usable by standardized patient trainers, faculty and	**Setting:** Written for business community but applicable to standardized patient and medical education. **Objective:** Enhancing understanding of impact of words and, in particular, feedback to communicate in such as way as to provide receiver with information to enhance performance. **Checklist/evaluation used:** No. **Recipient level:** Standardized patient, standardized patient instructors, faculty, instructors and standardized patient educators.

standardized patients).	**Providers' level of expertise:** Directed to the commercial environment but easily converted to the academic medical environment. **Feedback driven by:** Reader, presenter. **Focus:** Verbal feedback. **Method of feedback:** Verbal. **Desired outcome:** Communication to improve performance. **Trained by:** Reader, manager, instructor, etc. **Methods used to train:** Reading materials. **Research study:** No
William Hoffman **– Tips to give and receive feedback.** American College of Physicians – ASIM Observer © 2001 by the American College of Physicians – American Society of Internal Medicine;	**Setting:** Classroom environment/individual. **Objective:** Development of more effective communication skills in providing feedback empowering and motivating student. **Checklist/evaluation used:** No. **Recipient level:** All levels but in our case medical student. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Reader, leader, standardized patients or faculty/instructor. **Focus:** Verbal feedback, giving and receiving. **Method of feedback:** Verbal and/or written feedback. **Desired outcome:** More effective communication skills, improved skills, more awareness of words and impact. **Trained by:** Teacher, reader, standardized patient, faculty/instructor, standardized patient educator. **Methods used to train:** Reading material and practice, some activities. **Research study:** No.
Online Newsletter. **Improving Verbal Skills.** http://www.its time.com/aug97/htm	**Setting:** Reader oriented. **Objective:** Improve communication skills especially regarding feedback. Well presented article presenting communication methods, elements of communication, distortion factors, sending and receiving messages, learning skills, improving presentation skills, leadership communication skills, examples of leadership credo exercise.

	Checklist/evaluation used: No. **Recipient level:** All levels, medical students, standardized patients, standardized patient educators, faculty, clinicians. **Providers' level of expertise:** Not given. Can be used in the commercial or academic environment. **Feedback driven by:** Standardized patients, supervisors, educators, etc. **Focus:** Verbal and written feedback skills with explanations. **Method of feedback:** Verbal and written feedback. **Desired outcome:** More effective communication reflecting behavior not attitude. **Trained by:** Standardized patient educators, medical faculty, clinicians, standardized patients, and standardized patient instructors. **Methods used to train:** Article for educating the reader, can be applicable to any situation and interactive environment. **Research study:** No. **Other thoughts:** Written as a general article but easily converted to standardized patient situations.
Standard ABIM Form. **Behavioral anchors at extremes of performance** USUHS "RIME" Form: Behavioral anchors at each level of performance.	**Setting:** Workshop. **Objective:** To better understand barriers to effective feedback, understanding differences between feedback, formative feedback, and summative feedback and identifying tools to enhance current evaluation methods. **Checklist/evaluation used:** Yes. **Recipient level:** Medical students. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patients. **Focus:** Formative, summative, verbal feedback. **Method of feedback:** Verbal feedback. **Desired outcome:** To better understand barriers to effective feedback, understanding differences between feedback, formative feedback, and summative feedback and identifying tools to enhance current evaluation

	methods. **Trained by:** Standardized patient educators, instructors, and faculty. **Methods used to train:** Workshop, interactive role playing, videotaping of standardized patient and evaluation of tape within a small group setting. **Research study:** No.
Ferrell, BG., Ph.D. **A Critical Elements Approach to Developing Checklists for a Clinical Performance Examination.** The University of Texas Medical Branch. MEO 1996;1:5 (original publication). Medical Education Online Editor@Med-Ed-Online.org	**Setting:** Paper providing approaches to development of checklists. **Objective:** Develop more effective and user-friendly checklists. Additionally providing medical students with useful performance improving information. **Checklist/evaluation used:** Yes. **Recipient level:** Standardized patient educator, faculty, instructors and standardized patients. **Providers' level of expertise:** Specifically directed to standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patients, faculty, and educators. **Focus:** Checklist completion. **Method of feedback:** Checklist. **Desired outcome:** Accurate, constructive feedback in the form of a checklist. **Trained by:** Standardized patient educator, instructor and faculty. **Method used to train:** Specific guidelines provided in the paper. **Research study:** No.
BBC Training and Development. **Giving and Receiving Feedback.** http://www.bbctraining.com/onlineCourse.asp?	**Setting:** Workshop. **Objective:** Improving skills in providing feedback. **Checklist/evaluation used:** No. **Recipient level:** Anyone. **Providers' level of expertise:** Not specified by article but a more general approach to improvement in communication skills for a broad population. **Feedback driven by:** Reader. **Focus:** Defining feedback, broken down by module, what is feedback, giving feedback, receiving feedback and tips for giving feedback. **Method of feedback:** Verbal.

	Desired outcome: Improve skills in giving or receiving feedback. **Trained by:** Educators, directors, supervisors, etc. **Methods used to train:** Exercises, small groups and individual reviews. **Research study:** No.
Giving Constructive Feedback Adapted From: Coaching & Mentoring For Dummies. www.dummies.com/WileyCDA/DummiesArticle/id-622.html	**Setting:** Business environment but applicable to educational environment. **Objective:** More effective communication through feedback. **Checklist/evaluation used:** No. **Recipient level:** Management level professionals. **Providers' level of expertise:** Directed towards directors, managers, and supervisors in a commercial environment but adaptable to standardized patients, standardized patient instructors, standardized patient educators, faculty, and clinicians. **Feedback driven by**: Management level professionals. **Focus:** Productivity. **Method of feedback:** Verbal feedback. **Desired outcome:** Motivational and constructive verbal feedback. **Trained by:** Manager. **Research study:** No.
FastCompany. **How to Give Good Feedback.** http://www.fastcompany.com/online17	**Setting:** Online review and exercises. **Objective:** Improve evaluation techniques. **Checklist/evaluation used:** No. **Recipient level:** Management, supervisor, directors. **Providers' level of expertise:** Managers, supervisors, directors, standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Manager, supervisor or directors, anyone providing review or evaluations. **Focus:** More effective performance reviews. **Method of feedback:** Written and/or verbal feedback. **Desired outcome:** Useful and reflective honesty feedback. **Trained by:** FastCompany.

	Method used to train: Online reading and definitions along with explanations of effective and motivational feedback. **Research study:** No.
NASA GSFC Code 111. **A Guide to Giving and Receiving Feedback.** Specifically directed at supervisors within NASA but easily applicable to standardized-patient/medical student relationships.	**Setting:** Article. **Objective:** To provide accurate information to evaluate persons without influence of perceptions and assist the receiver in deciding what he or she learned from the feedback as well as allowing the receiver to choose what to do with the gained knowledge. **Checklist/evaluation used:** No. **Recipient level:** Those providing information for evaluation. **Providers' level of expertise:** Document specifically directed at managers, supervisors, directors, evaluators at the NASA Center, easily adaptable to the academic medicine environment. **Feedback driven by:** Those directing and educating feedback givers. **Focus:** Giving constructive feedback. **Method of feedback:** Written and verbal. **Desired outcome:** Improving the givers and receivers skills when interacting. Perceptions are very important data but not necessarily reality. **Trained by:** Supervisors, managements, educators. **Methods used to train:** Direct feedback towards behavior one can do something about, not towards the person. **Research study:** No. **Other thoughts:** Based on the Goddard Supervisor Feedback Model.

PEER-REVIEWED ARTICLES

Wood, BP. **Feedback: A key feature of medical training.**	**Setting:** Critical paper. **Objective:** Instruct as to purpose of formative feedback and how to construct environment for more effective communication through feedback.

Radiology 2000;215:17-19. (Breakdown of steps of learning feedback and very direct methods for structuring it to needs).	**Checklist/evaluation used:** No. **Recipient level:** Medical students. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by**: Standardized patients, instructors, faculty. **Method of feedback:** Verbal (formative). **Desired outcome:** A safe, nurturing, effective environment for constructive and supportive feedback. **Trained by:** Faculty, standardized patients, instructor or standardized patient educators. **Methods used to train**: N/A **Research study:** No.
Hewson MG, Little ML. **Giving feedback in medical education. Verification of recommended techniques.** J Gen Intern Med. 1998;18:111-116. This article surmises that feedback that is specific, nonjudgmental and focused on behaviors rather than personalities is preferable.	**Setting:** Faculty development course. **Objective:** Improve teaching of the medical interview with opportunities for participants to receive feedback (Qualitative and quantitative approaches). **Checklist/evaluation used:** No. **Recipient level:** Instructors, faculty and possibly standardized patient educators. **Providers' level of expertise:** Standardized patients, standardized patient instructors, standardized patient educators, faculty and clinicians. **Feedback driven by:** Standardized patient and faculty/instructors. **Focus:** Semantic differences. **Method of feedback:** Verbal. **Desired outcome:** Improved teaching of the medical interview with opportunities for participants to receive feedback (Qualitative and quantitative approaches). **Trained by:** Reader. **Methods used to train:** None specifically noted. **Research study:** No.

SELECT BIBLIOGRAPHY

Association of Standardized Patient Educators (ASPE) Project Award "Training Standardized Patients to Give Feedback to Medical Trainees: The State of the Art"

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Benchmark publications in training standardized patients:

1. Barrows H.S. Simulated patients (programmed patients) (1971): The development and use of a new technique in Medical Education. Springfield, IL: Charles C. Thomas, 1971.

2. Barrows HS, and Bennett K (1972). Experimental studies on the diagnostic (problem-solving) skill of the neurologist, their implications for neurological training. Archives of Neurology 26(3): 273-277.

3. Barrows H.S., Tamblyn R.N (1980). Problem-based learning: An approach to medical education. New York. Springer Publishing Co.

4. Barrows HS, Norman GR, Neufeld VR, and Feightner JW (1982). The clinical reasoning of randomly selected physicians in general medical practice. Clinical Investigative Medicine. 5(1): 49-55.

5. Barrows H (1985). How to design a problem-based curriculum for pre-clinical years. New York. Springer Publishing Co.,

6. Barrows H.S (1993). An overview of the uses of standardized patients for teaching and evaluating clinical skills. Acad. Med. 6:443-53.

7. Barrows H (1994). Practice-based learning applied to medical education. Springfield IL: Southern Illinois University School of Medicine.

8. Barrows H (1996). Problem-based learning applied to applied to medical education. Springfield IL. SIU School of Medicine.

9. Ende, J (1983). Feedback in Clinical Medical Education.. JAMA 250:777-81.

10. Howley LD, Martindale J (2002). The efficacy of standardized patient feedback in clinical teaching: A mixed methods analysis. Med. Educ Online. 2004;9:18.

11. Kurtz SM, Silverman JD, Draper J (1998). Teaching and learning communication skills in medicine. Radcliffe Medical Press (Oxford).

12. Kurtz SM, Silverman JD, Draper J (1998). Skills for communicating with patients. Radcliffe Medical Press (Oxford).

13. Kurtz and Silverman (1993). Calgary Cambridge Guides

14. Makoul G. (2001). The Framework for teaching and assessing clinical skills . (SEGUE, method - Give Information, Understand the patient perspective and end-encounter Communication). Patient Education and Counseling 45(1):23-24.

15. Moss F, McManus C (1992). Anxieties of new clinical students. J Med Educ., p17-20.

16. Stillman P, Swanson D, Regan MB, et al (1991). Assessment of clinical skills of residents utilizing standardized patients. A followup study and recommendations for application. Ann Intern Med 114(5):393-401.

17. Westberg J, Jason H (1993). Collaborative clinical education. Springer Publishing, New York.

Training Standardized patients:

1. ACGME "Toolbox of Assessment Methods (2000). 360-Degree Feedback Evaluation Instrument. ACGME, "Toolbox of Assessment Methods. Center for Creative Leadership, Greensboro, NC. http://www.ccl.org

2. Adamo G., Brownfield E., Durning S., et al (2003). Objective, structured clinical examinations and standardized patients in medical education: Getting started and expanding roles. Presentation at 2003 CDIM National Meeting, Savannah, GA.

3. Ainsworth MA, Rogers LP, et al (1991). Standardized patients encounters. A method for teaching and evaluation. JAMA 266(10):1390-1396.

4. Anderson W, Malacrea R (2001). Giving constructive feedback. Office of Medical Education Research and Development, Michigan State University. ACP-ASIM Community Based Teaching Education Clearing House #36.

5. Amano et al.(2004): J. Dent Educ. Strategies for training standardized patient instructors for a competency examination. 68:1104-1111.

6. Badger LW, deGuy F, Hartman J et al (1995). Stability of standardized patients' performance in a study of clinical decision making. Fam Med. 27:126-131.

7. Baker LH, Greco M, O'Brien ML, Squire S: Improving doctors communication skills: teaching what is measured. Oregon Health and Sciences University. (abstract).

8. Bayer Conference on physician-patient communication in medical education (2001). Essential elements communication in medical encounters: the Kalamazoo consensus stable. Acad. Med 76:38 (abstract).

9. Bertakis, K. (1997). "The communication of information from physician to patient: a method for increasing retention and satisfaction." J Fam Pract 5: 217-22.

10. Beverly P. Wood. Feedback (2000): A key feature of medical training. Radiology 215:17-19.

11. Branch WT, Paranjape A (2002). Feedback and Reflection: Teaching methods for clinical settings. Acad. Med. 77:1185-1188.

12. Bransford JD, Brown AL, Cocking RC (eds.) (2000). How people learn: Brain, mind, experience and school. Washington DC, National Acad Press. 51-78.

13. Brown JA, Abelson J, Woodward CA (1998). Fielding standardized patient in the primary care setting: Lessons from a study using unannounced standardized patients to assess preventative care practices. J Qual Health Care 10:199-206.

14. Chur-Hansen A, Vernon-Roberts J, Clark S (1997). Language background, English language proficiency and medical communication skills of medical students. Med Educ. Jul;31(4):259-263.

15. Clauser BE (2000). Further discussion of standardized patient checklists and videotaped performances (Letter). Acad Med.75:315-316.

16. Cohen DS, Colliver JA, Marcy MS, et al (1996). Psychometric properties of a standardized-patient checklist and rating-scale form used to assess interpersonal and communication skills. Acad Med. 71(1 Suppl):S87-89.

17. Cohen-Cole, S. (1991). The medical interview: The three function approach. Boston, MA, Mosby Year Book 1191.

18. Coletti LM (2000). Difficulty with negative feedback: Face to face evaluation of junior medical students clinical performance results in grade inflation. J of Surgical Research 90:82-87.

19. De Champlain (2000). Further discussion of standardized patient checklists and videotaped performances (Letter). Acad Med.75:316-317.

20. Dickson, D.A., Hargie, O. Morrow, N. C. (1989). Communication Skills Training for Health Professionals - An Instructor Handbook. Chapman and Hall.

21. Doyle LD, Haupt JB, Murray JA, Simmons DF (1998). Focusing feedback on interpersonal skills: What is the quality of oral feedback by standardized patients. IN: D.E. Melnick (ed.), the Eighth Annual International Ottawa Conference on Education and Assessment Proceedings, Evolving Assessment: Protecting the Human Dimension. Philadelphia, July, 12-15.

22. Elstein AS (1993). Beyond multiple choice questions and essays. The need for a new way to assess clinical competence. Academic Medicine 84:165-72.

23. Emanuel, E. and L. Emanuel (1992). “Four models of the physician-patient relationship.” JAMA 267: 2221-2226.

24. Feldman, M. D. and J. F. Christensen, Eds. (1997). Behavioral Medicine in Primary Care: A Practical Guide. Stamford, CT, Appelton & Lang

25. Ferrell B (1996). A critical elements approach to developing checklists for a clinical performance. Medical Education Online. 1-5

26. Fitzgerald JT, White CA, Davis WK (1995). The relationship of self-evaluation and actual performance cognitive and performance-based tasks. 34th Annual Conference on Research in Medication Education, Washington DC.

27. Frankel, R. M. and T. Stein (2001). "Getting the most out of the clinical encounter: The four habits model." J Medical Pract Management 16(4): 184-191

28. Giles H, Street RJ Jr (1995). Communicator characteristics and behavior. In: Knapp M, Miler GR, eds. Handbook of Interpersonal Communication, 2nd Ed. Thousand Oaks, CA: Sage, 103-62.

29. Gordon J (2003). ABC of learning and teaching in medicine: One-to-one teaching and feedback. BMJ 326;543-545.

30. Greco M, Brownlea A, McGovern J, et al (2000). Consumers as educators: Implementation of patient feedback in general practice teaching. Health Communication, Vo1 12, No.2: pp173-193.

31. Greenberg LW, Goldberg RM, Jewett LS (1984). Teaching in the clinical setting: factors influencing residents perception, confidence and behavior. Med Educ. 18-360-5.

32. Hauenstein NMA (1992). An information-processing approach to leniency in performance judgments. J of Applied Psychology 77:485-493.

33. Heathfield SM (2002). 360-degree feedback: The good, the bad and the ugly. Internet Source. Human Resources #60.

34. Hewson MG, Little ML (1998). Giving feedback in medical education: Verification of recommended Techniques. J. Gen Int Med 1998. 13:111-116.

35. Hoffman W (2001). Tips to give – and receive – feedback. ACP-ASIM. Copyright © 2001 by the American College of Physicians – American Society of Internal Medicine.

36. Hollingsworth MA, Richards BF, Frye AW (1994). A description of observer feedback in an OSCE and the effects on examinees. Teaching and learning in Med. 6(1):49-53.

37. Holmboe ES (2004). Faculty and the observation of trainees' clinical skills: Problems and Opportunities. Acad. Med. 79:16-22.

38. Holmboe ES, Hawkins RE (1998). Methods for evaluating the clinical competence of residents in Internal Medicine: A review. Ann Intern Med.129:42-48.

39. Howley LD, Simons DF, Murray JA (2005). Focusing feedback on interpersonal skills: A workshop for Standardized Patients, 3rd edition, unpublished training manual.

40. Hubal R, Kizakevich P, Guinn C (1998). The virtual standardized patient. Simulated patient-practitioner dialogue for patient interview. Research Triangle Institute.

41. Hubal RC, Helms RF (1998). Advanced Learning Environments. Modern simulation and Training, 5, 40-45.

42. James D, Nastasic S, Horne R, Davies G (2001). The design and evaluation of a simulated patient teaching programme to develop the consultation skills of undergraduate pharmacy students. Pharm World Sci 23(6)212-216.

43. Jansen JJH, Grol RPT, Crebolder HFJ, et al (1999). Failure of feedback to enhance self-assessment skills of general practitioners. Teaching and Learning in Medicine, Vol.10, No. 3: page 53-82.

44. Jelly RB and Goffin RD (2001). Can performance-feedback accuracy be improved? Effects of rater priming and rating scale format on rating accuracy. J of Appl Psychology 86:134-144.

45. King AM, Sanger JM, Scott CL (2003). National Board of Medical Examiners, Philadelphia, PA. An innovative, multimedia approach to training standardized patients for clinical skills examinations at multiple sites.

46. King AM, Perkowski-Rogers LC, Pohl H.S (1994). Planning standardized patient programs: case development, patient training and costs. Teaching and Learning in Medicine. 6(1): 6-14.

47. Klamen DL, Yudkowsky R (2002). Using standardized patients for formative feedback in an introduction to psychotherapy course. Acad. Psychiatry 26:168-72.

48. Klass D, De Champlain A, Fletcher E, King A, et al (1998). Development of performance-based clinical skills for the United States Medical Licensing Examination. Bull. 85:177-181.

49. Krahn, et al (2002). The challenge of empathy: A pilot study of the use of standardized patients to teach introductory psychopathology to medical students. Acad. Psychiatry 26:26-30.

50. Kurtz SM, Silverman JD, Draper J (2005). Teaching and learning communication skills in medicine. Oxon: Radcliff Publishing, 2nd edition.

51. Kurtz SM, Silverman JD, Benson J and Draper J (2001). Marrying content and process in clinical method teaching. Enhancing the Calgary Cambridge Guides. Acad Med; 78(8):802-809.

52. Lane JL, Ziv A, Boulet JR (1999). A pediatric clinical skills assessment using children as Standardized Patients. Arch Pediatr Adolesc Med.153(6):637-644.

53. Levenkron JC, Greenland P, Bowley N (1987). Using patient instructors to teach behavioral counseling. J Med Educ. 62(8):665-72.

54. Levenstein JH, McCracken EC, McWhinney IR, et al (1986). The patient centered clinical method: 1. A model of the doctor-patient interaction in family medicine. Fam Prac 3:24-30.

55. Lloyd JS, Williams RG, Simonton DK, et al (1990). Order effects in standardized patient examinations. Acad Med. 65(9 Suppl)S51-52.

56. Mack and Grier (2004). The day one talk. J. Clin Oncol 22:563-566.

57. MacMillan MK, De Champlain AF, Klass DJ (1999). Using tagged items to detect threats to security in a nationally administered Standardized Patient examination. Acad Med. 74(10 Suppl):S55-57.

58. Makoul G (2003). Communication skills education in medical schools and beyond. MSJAMA 289-93.

59. Makoul G (2001). The SEGUE framework for teaching and assessing communication skills. Patient Educ and Counseling 45:23-7.

60. Mancall EL, Bashook PG. (eds.) (1995). Assessing clinical reasoning: the oral examination and alternative methods. Evanston, Illinois: American Board of Medical Specialties.

61. Markus JF, Mast TA, Soler NG (1979). Written versus oral feedback: their effect on learning in an Internal Medicine Clerkship. Annual Conference of Research Medical Education, 18:239-44.

62. Mateau TM, Humphrey C, Matoon G, et al (1991). Factors influencing the communication skills of the first-year clinical medical students. Med. Educ 25:127-34.

63. Matthews DA, Feinstein AR (1989). A new instrument for patients' rating of physician performance in the hospital setting. J Med Intern Med. 4:14-22.

64. Munger BS. "Oral examinations" in Recertification: New evaluation methods and strategies (1994). American Bd of Medical Specialists. Mancall and Bashook eds. Evanston. Ill.

65. Nardone DA. Johnson GK, Faryna A, et al (1992). A model for the diagnostic interview: nonverbal, verbal and cognitive assessment. J Gen Intern Med. 7:437-42.

66. Neher JO, Corgon KC, Meyer B, Stevens N (1992). "A five-step "microskills" model of clinical teaching. J Am Board of Fam Pract 5:419-24.

67. Norman Geoffrey. Evaluation Methods (1995): A resource handbook Hamilton, Ontario, Canada: Program for Educational Development, McMaster University 71-75.

68. Novak DH, Volk G, Drossman DA, et al (1993). Medical interviewing and interpersonal skills teaching in U.S. Medical schools, progress, problems and promise. JAMA. 269:2101-5.

69. Participants in the Bayer-Fetzer Conference on Physician-Patient Communication in Medical Education (2001). "Essential Elements of Communication in Medical Encounters: The Kalamazoo Consensus Statement." Acad Med 76(4): 390-393.

70. Paul S, Dawson KP, Lamphear JH, Cheema MY (1998). Video recording feedback: A feasible and effect approach to teaching history-taking and physical examination skills in undergraduate pediatric medicine. Med Educ 32(3) 332-336.

71. Pfeiffer C, Kosowicz , Holmboe E, et al (2005). Face to face clinical skills feedback Lessons from the analysis of standardized patient' work. Teaching and Learning in Medicine. Vol. 17, No.3: pp 254-256.

72. Platt, FW et al Tell me about yourself. Ann Intern Med 2001;34:1079-1085.

73. Pololi LH (1995). Standardised patients. As we evaluate, so shall we reap. Lancet. Vol 345, Issue 8995, p 966-968.

74. Prystowsky JB (2003). A learning perspective permits feedback on feedback. Am J of Surg. 18:264-267.

75. Quattlebaum TG (Dec, 1996). "Techniques for Evaluating Residents and Residency Programs," Pediatrics, Vol 98(6), pp. 1277-83.

76. Quirk, M. & Letendre, A. (1986). Teaching communication skills to first-year medical students. Journal of Medical Education, 61, 603-605. Sanson-Fisher, R. & Poole, A. (1980). Simulated patients and the assessment of medical students' interpersonal skills. Medical Education, 14, 249-253.

77. Rakel RE (1998). The Medical Interview: Mastering skills for clinical practice. Ann Intern Med. 128(6):512.

78. Rater DL, Larson S, Schinitzky H, et al (2004): Use of an of innovative feedback technique to enhance communication training skills. Med Educ. 38; 12:1317.

79. Rose M (2001). Widening the lens on standardized patient assessment: what the encounter can reveal about the development of clinical competence. Academic Medicine, 76(8):856-9.

80. Rosebraugh CJ, Speer AJ, Ainsworth MA, et al (1996). Developing a presentation and problem-solving station in a multistation standardized-patient examination. Acad Med. 71(1 Suppl):S102-104.

81. Ross LP, Clauser BE, Margolis MJ, Orr NA, Klass DJ (1996). An expert judgment approach to setting standards for a standardized-patient examination. Acad Med. 71(10 Suppl):S4-6.

82. Roter DL, Hall JA (1993). Doctors talking with patients/Patients talking with doctors. Westport, CT: Auburn House, 1993.

83. Schwenk TL, Sheers KJ, Marquez JT, Whiman A, Davis WE, McClure CL (1987). Where, how and from whom do family practice residents learn?. A multi-site analysis. Fam. Med.19: 265-8.

84. Shaffer DW, Gordon JA, Gilbert GSB, Gilbert K, et a (2002). Learning, testing and the evaluation of learning environments in medicine: global performance assessment in medical education. University of Wisconsin at Madison, Madison WI. dws@education.wisc.edu

85. Sheehan TJ (1984). Feedback: Giving and receiving. J Med Educ 59:913.

86. Sinclair, N., RN MBA (2003). University of New Mexico School of Medicine. Giving Verbal Feedback, training for standardized patients. Presented at Annual Meeting ASPE 2003.

87. Singer PA and Robb AK. The ETHICS Objective Structured Clinical Examinations (OCSE): Standardized patient scenarios for teaching and evaluating bioethics. Online resource with references. http://wings.buffalo.edu/faculty/research/bioethics.osce.html

88. Sloan DA, Donnelly MB, Schwartz RW, et al (1995). The Objective Structured Clinical Examination: The new gold standard for evaluating postgraduate clinical experience. Ann Surg. 222(6):735-742.

89. Stiles WB (1992). Describing talk: A taxonomy of verbal response modes. Newbury Park, CA: Sage.

90. Stillman PL, Egan MB, Philbin M, Haley HL (1990). Results of a survey on the use of standardized patients to teach and evaluate clinical skills. Academic Medicine 65:288-92.

91. Stillman PL, Sabers DL (1978). Using a competency-based program to assess interviewing skills of pedical house staff. J of Med Educ. 53:493-496.

92. Street RL Jr, Wiemann JM (1988). Differences in how physicians and patients perceive physicians' relational communication. Southern Speech Communication Journal. 53:420-40.

93. Stret RL Jr (1991). Accommodation in medical consultations. In: Giles H, Coupland J, Coupland N. eds. Contexts of accommodation. Cambridge, Cambridge University Press, 131-56.

94. Tamblyn R, Benaroya S, Snell L, et al (1994). The feasibility and value of using patient satisfaction ratings to evaluate internal medicine residents. J Gen Intern Med 9:146-152.

95. Tamblyn, R., Klass, D., Schnabl, G. & Kopelow, M. (1990). Factors associated with the accuracy of standardized patient presentation. Academic Medicine, 65, S55-56.

96. Washington University – from Internet – (1992) 'Giving Feedback". A five-step "Microskills" Model of clinical teaching. Journal American Board Family Practice 5:419-24.

97. Weaver MJ, Ow CL, Walker DJ, Degenhardt (1993). A questionnaire for patients' evaluation of their physicians' humanistic behaviors. J Gen Intern Med 8:135-139.

98. Woehr DJ (1994). Understanding frame-of-reference training. The impact of training on the recall of performance information. J of Appl Psychology 79:525-534.

99. Worth-Dickstein H, Pangaro L, MacMillan K (2005). et al. Use of "standardized examinees" to screen for standardized patient scoring bias in a clinical skills examination. Teach and Learn Med. 17(1):9-13.

Validation Studies:

1. Bardes CL, Colliver JA, Alonso DR, Swartz MH (1996). Validity of standardized-patient examination scores as an indication of faculty observed ratings. Acad Med. 71(1 Suppl) SS82-83.

2. Black FB, Church M (1998). Assessing medical student performance from the psychiatric patients' perspective: The medical student interviewing performance questionnaire. Med. Educ 32:472-478.

3. Boulet JR, Ben-David MF, Ziv A, et al (1998). Using standardized patients to assess the interpersonal skills of physicians. Acad Med. Oct. 1998;73(10 Suppl) S94-96.

4. Butterfield PA, Mazzaferri EL (1991). "A New Rating Form for Use by Nurses in Assessing Residents' Humanistic Behavior," J Gen Intern Med, Vol 6, pp. 155-61.

5. Chalabian J, Dunnington G (1997). Standardized patients: A new method to assess the clinical skills of physicians. Best Pract and Benchmarking in Healthc. 2(4):174-7.

6. Colliver JA, Swartz MH (1997). Assessing clinical performance with standardized patients. JAMA 278(9):790-791.

7. Colliver JA, Robbs RS, Vu NV (1991). Effects of using two or more standardized patients to simulate the same case on case means and case failure rates. Acad Med. 66(10):616-618.

8. Dickson, D.A. & Maxwell, M. (1985) The interpersonal dimension of physiotherapy: Implications for training. Physiotherapy, 71,306-310.

9. Duffy DF, Gordon DH, Whelan G, et al (2004). Assessing competence and interpersonal skills. The Kalamazoo II Report. Acad Med. 79:495-507.

10. Gary J (1996). Global rating scales in residency education. Acad Med. 71:S56-63.

11. Errichetti AM, Gimpel JR, Bolulet JR (2002). State of the art in standardized patient programs. A survey of osteopathic medical schools. JAOA 102; 11:627-631.

12. Heaton, C., Watson, S. & Alger, E. (1994). Using a standardized patient to teach health appraisal in a problem-based format. Academic Medicine, 69, 415-416.

13. Howard, P. The Belize Scenario. USNS Comfort – Full speed ahead to innovative medical training. Navy League of the United States.

14. Howley LD (2004). Assessment of clinical competence in medical education: Where we've been and where we are going. Evaluation and the Health Prof. 27(3):285-303.

15. Kaiser S, Bauer JJ (1995). Checklist self-evaluation in a standardized-patient exercise. Am J Surg. 169(4):418-420.

16. Koen FM, Vivan AS (1980). Learning the skills of clinical pharmacy teaching. Am J Pharm Educ. 44:61-65.

17. Ladyshewsky, R. and Gotjamanos, E. (1996). Communication skill development in health professional education: The use of standardized patients in combination with a peer assessment strategy. In Abbott, J. and Willcoxson, L. (Eds), Teaching and Learning Within and Across Disciplines, p93-97. Proceedings of the 5th Annual Teaching Learning Forum, Murdoch University, February 1996.

18. Luck J, Glassman PA, O'Gara EM (2000). Using standardized patients to measure quality: Evidence from the literature and a prospective study J Comm J Qual Improv. 26:644-653.

19. Ong, L. M. L., J. C. J. M. DeHaes, et al. (1995). "Doctor-patient communication: A review of the literature." Social Science & Medicine 40(7): 903-918.

20. Rosenblatt MA, Schartel SA (1999). Evaluation, feedback and remediation in anesthesiology residency program: A survey of 124 United States programs. J Clin Anesthes. 11(6):502-3.6.

21. Roter DL, Hall JA (1989). Studies of doctor-patient interaction. Annu Rev Pubic Health 10:163-180.

22. Sachdeva AK (1996). Use of effective feedback to facilitate adult learning. J. Cancer Educ. 11(2):106-118.

23. Schnabl GK, Hassard TH, Kopelow ML (1991). The assessment of interpersonal skills using standardized patients. Acad Med. 66:S34-6.

24. Smith, R. C. (1996). The Patient's Story: Integrated patient-doctor interviewing. Boston, Little Brown and Company.

25. Tekian A, McGuire CH (ed.) (1999). Innovative simulations for assessing clinical competence. Chicago, Illinois: University of Chicago, Dept of Med. Educ.

26. van der Vleuten, C (1996). Making the best of the "long case". Commentary. Lancet Vol. 347, Issue 9003. 704-705.

27. van der Vleuten CPM, Swanson DB (1990). Assessment of clinical skills with standardized patients: State of the art. Teaching and Learning in Medicine. 2(2):58-76.

28. Vu N, Barrows H.S. (1994) Use of standardized patients in clinical assessments and measurement findings. Educational Researcher 23, 23-30.

29. Vu N, Steward D, Marcy M. (1987) An assessment of the consistency and accuracy of standardized patients' simulations. J of Med Educ 62, 1000-1002.

30. Wallace J, Rao R, Haslam R (2002). Simulated patients and objective structured clinical examination: review of their use in medical education. Advances in Psychiatric Treatment 8: 342-348 © 2002 The Royal College of Physicians.

31. Wass D, van der Vleuten, Shatzer J. et al (2001). Assessment of clinical competence. Lancet. Issue 357, Vol 9260, p. 949-949.

32. Watts J, Feldman WB (1985). Assessment of clinical skills In: Neufeld B and Norman G (ed.) Assessing Clinical Competence. New York: Springer Publishing Company, 259-74.

Evaluation studies:

1. Adamo G (2003). Simulated and standardized patients in OSCEs: achievements and challenges 1992-2003. Medical Teacher 25(3):262-270.

2. Badger LW, deGuy F, Hartman J, et al (1995). Stability of standardized patients' performance in a study of clinical decision making. Fam. Med. 27:126-31.

3. Batalden P, Leach D, Swing S, Dreyfus H, et al (2002). General competencies and accreditation in graduate medical education. Health Aff (Millwood). 21:103-111.

4. Beaulieu MD, Rivard M, Hudson E, Saucier D, et al (2003). Using standardized patients to measure professional performance of physicians. International Journal for Quality in Health Care 15:251-259.

5. Beck, R., R. Daughtridge, et al. (2002). "Physician-patient communication in the primary care office: a systemic review." J Am Board Fam Pract 15(1): 25-38.

6. Blake K, Vincent N, Wakefield S, Murphy J, et al (2005. Communication. A structured communication adolescent guide (SCAG): Assessment on reliability and validity. Med Educ. 39:482.

7. Boon H, Stewart M (1998). Patient-physician communication assessment instruments 1986 –1996 in review. Patient Education and Counseling 35:161-176.

8. Bruegel, R. (1998). "Patient empowerment: a trend that matters." J Am Health Information Manage Assoc.

9. Coliver JA, Verhulst SJ, William RG, Norcini JJ (1989). Reliability of performance on standardized patient cases: A comparison of consistency measures based on generalizability theory. Teaching and Learning in Medicine 1:31-7.

10. Colliver JA (2003). Status of standardized patient assessment series. Teaching and Learning in Medicine 15(4):226.
11. Colliver JA, Swartz MH, Robbs (1998). Review of systems, et al. The effect of using multiple standardized patients on the inter-case reliability of a large-scale standardized patient examination administered over an extended testing period. Acad Med.(10 Suppl) S81-83.
12. Colliver, J. A., Mast, T. A., Vu, N. V., Barrows, H. S. (1991). Sequential testing with a performance - based examination using standardized patients. Academic Medicine, 66, S64-S66.
13. Coulson CC, Kunselman AR, Cain J, Legro Review of systems (2000). The mentor effect in student evaluation. Obstetrics and Gynecology. 95:619-622.
14. Cox K. (1990) No Oscar for OSCE. Med Educ 24, 540-545. [Medline].
15. De Champlain AF, Margolis MJ, King A, et al (1997). Standardized patients' accuracy in recording examinees' behaviors using checklists. Acad Med. 72(10 Suppl 1):S85-87.
16. De Champlain AF, Macmillan MK, Margolis MJ, et al (1993). Do discrepancies in standardized patients' checklist recording affect case and examination mastery-level decisions? Acad Med. 73(10 Suppl)S75-77.
17. DesMarchais, J.E., and Vu, N.V (1996). Developing and Evaluating the Student Assessment System in the Preclinical Problem-based Curriculum at Sherbrooke. Academic Medicine, 71 (3), 274-283.
18. DesMarchais, J.E., Dumais, J.P., and Vu, N.V (1994). An Attempt at Measuring Student Ability to Analyze Problems in the Sherbrooke Problem-Based Curriculum: a Preliminary Study. In P.A.J. Bouhuijs, H.G. Schmidt, and H.J.M. Van Beckel (Eds.). Problem-Based Learning as an Educational Strategy. Maastricht, the Netherlands: Network Publications.
19. Elnicki DM, Layne RD, Ogen PE, et al (1998). Oral vs. written feedback in medical clinic. J Gen Intern Med. 13(3):155-8.
20. Fletcher K, Stern D, White C, et al (2004). The physical examination of patients with abdominal pain: The long-term effect of adding standardized patients and small-group feedback to a lecture presentation. Teaching and Learning in Medicine Vol 16. No 2, pp 171-174.
21. Forsch, D., R. Kaplan, et al. (2001). "Evaluation of two methods to facilitate shared decision making for men considering Prostate-Specific Antigen test." J Gen Intern Med 16: 391-8.
22. Fry, S. (1990). Implementation and evaluation of peer marking in higher education. Assessment and Evaluation in Higher Education, 15, 177-189.
23. Gimpel JR, Boulet DO, Errichetti AM (2003). Evaluating the clinical skills of osteopathic medical students. JAOA Vol 3, No. 6, p 267-279.
24. Gordon MJ (1997). Cutting the Gordian Knot. A two-part approach to the evaluation and professional developments of residents. Acad. Med. 72(10):876-880.

25. Gruppen LD, Carcia J, Grum CM, et al (1997). Medical students' self-assessment accuracy in communication skills. Acad. Med. 72:S57-9.
26. Hargie O, Dickson D, Boohan M, Hughes K (1998). A survey of communication skills training in UK Schools of Medicine presents practices and prospective proposals. Med. Educ. 32"25-34.
27. Hodges B, Turnbull J. Cohen R, et al (1996). Evaluating communication skills OSCE format: reliability and generalizability. Med. Education 30-38-43.
28. Holmes-Rovner, M., D. Valade, et al. (2000). "Implementing shared decision making in routine practice barriers and opportunities." Health Expect 2: 182-91.
29. Howley LD, Wilson WG (2004). Direct observation of students during clerkship rotations: A multi-year study. Acad. Med. 79(30276280.
30. Humphries GM, Kaney S. (2001). Assessing the development of communication skills in undergraduate medical students. Med. Educ. 35L225-331.
31. Jones TV, Gerrity MS, Earp J (1990) written case simulations: do they predict physician behaviors? J Clin Epidemiol. 43:805-815.
32. Kaiser, S. & Bauer, J. (1995). Checklist self-evaluation in a standardized patient exercise. The American Journal of Surgery, 169, 418-420.
33. Kalet A, Earp J, Jowlowitz V (1992). How well do faculty evaluate the interpersonal skills of medical students? J Gen Int Med. 7:499-505.
34. King PE, Young MJ (2002). An information processing perspective on the efficacy of instructional feedback. American Communication Journal Vol. 5, #2.
35. Klass RM, DJ, Schnabl GK, et al (1991). The accuracy of standardized patient presentation. Med Educ. 25(2):100-109.
36. Koop KC, Johnson JA (1995). Checklist agreement between standardized patients and faculty. J. Dent. Educ. 59(8):824-9.
37. Lazare A (1987). Shame and humiliation in the medical encounter. Arch Intern Med. 147:1653-1658.
38. Leepers-Majors K, Veal JR, Westbrook TS, Reed K (2003). The effect of standardized patient feedback on teaching surgical residents informed consent: Results of a pilot study. Current Surgery 60(6):615-622.
39. Long DM (2000). Competency-based Residency Training: The next advance in graduate medical education. Acad. Med. (2000) 75:1178-1183.
40. Mass S, Shah SS, Daly SX, Sultana CJ (2001). Effect of feedback on obstetrics and gynecology resident performance and attitudes. J of Reproductive 47(7):669-74.

41. Mavis BE, Cole BL, Hopp RB (2001). A survey of student assessment in U.S. Medical Schools: The balance of Breadth versus fidelity. Teach and Learn Med. 13(2):74-79.
42. McGuire CH (1983). Studies of the oral examination: experiences with orthopedic surgery. In Lloyd JS, Langley DG, eds. Evaluating the skills of medical specialists. Chicago: American Board of Medical Specialists. pp. 105-109.
43. Miller G (1990). The assessment of clinical skills/competence/performance. Acad. Med. 65(9); S63-S67.
44. Nendaz, MR., Tekian, A (1999). Assessment in problem-based learning undergraduate medical curricula: an analysis based on a literature review.
Teaching and Learning in Medicine, 11, 232-243.
45. Newble DI, Baxter A, Elmslie RG (1979). A comparison of multiple choice and free response tests in examination of clinical competence. Medical Education 13:263-8.
46. Noel G, Herbers JE, Caplow M et al (1992). How well do Internal Medicine faculty members evaluate the skills of residents? Ann Int Med. 117:757-65.
47. Petrusa E (2004). Taking standardized patient-based physical examinations to the next level. Teach and Learn Med. 16(1), 98-110.
48. Proceedings of the Association of American Medical College's Consensus Conference on the Use of Standardized Patients in the Teaching and Evaluation of Clinical Skills. Washington D.C., (December 3-4, 1992). Academic Medicine 1993;68:437-483.
49. Reznick RK, Blackmore D, Dauphinee WD, et al. (1996) Large scale high stakes testing with an OSCE: report from the medical council of Canada. Acad Med. 71,S19-S21.
50. Rutter D, Maguire P (1976). History-taking for medical students – Validation of a training programme. Lancet 2-558-560.
51. Satterfield, Mitteness LS, Tervalon M, Adler N (2004). Integrating the social and behavioral sciences in an undergraduate medical curriculum: THE UCSF essential core. Acad Med 79:6-15.
52. Scheidt, P. C., Lazoritz, S., Ebbeling, W. et. al. (1986). Evaluation of system providing feedback to students on videotaped patient encounters. Journal of Medical Education, 61, 585-589.
53. Schubert A, Tetzlaff JE, Tan M, Ryckman J, et al (1999). Consistency, inter-rater reliability, and validation of 441 consecutive mock oral examinations in Anesthesiology: Implications for use as a tool for assessment of residents. Anesthesiology 91(1):288-298.
54. Schubert A, Smith MP. Workshop (October, 1995). Oral practice examination in anesthesiology residences. Society for Anesthesia.

55. Schubert A, Hull A, Tetzlaff J, Mauer W., Barnes A (1992). Reliability and validity of anesthesiology "mock orals" during a three-year period. Anesthesiology 77:A1118.
56. Schuwirth L, van der Vleuten C (2004). Merging views on assessment. (Editorial) AACOM, 38:12, 1208-1210.
57. Simpson M, Buckman R, Stewart M, et al (1991). Doctor-patient communication: the Toronto consensus statement. BMJ. 303:1385-7.
58. Singer PA, Robb A. The ETHICS Objective Structured Clinical Examinations (OSCE): Standardized Patient Scenarios for Teaching and Evaluation Bioethics. Online resource with references. http://wings.buffalo.edu/faculty/research/bioethics/osce.html
59. Smith MP, Ryckman J, Schubert A (Spring, 1993): Level of subjective anxiety did not correlate to performance on oral examination (OPE). Society for Education in Anesthesia, Spring.
60. Smith M, Schubert A, Ryckman JV (1992). The effects of anxiety on oral practice examination. Society for Education in Anesthesia.
61. Stillman P, Regans M, Swanson D. et al (1990). An assessment of the clinical skills of fourth year medical students at four New England schools. Acad Med. 65:320-326.
62. Stillman PL, Burpeau-Di Gregorio MY, Nicholson GI, et al (1983). Six years of experience using patient instruction to teach interviewing skills. J Med Educ. 58:941-5.
63. Street RL Jr, Buller D (1987). Nonverbal response patterns in physician-patient interactions: A functional analysis. J Nonverbal Behav. 11:234-53.
64. Swartz MH, Colliver JA, Robbs RS, Cohen DS (1999). Effect of multiple Standardized Patients on case and examination means and passing rates. Acad Med. 74(10 Suppl): S131-134.
65. Tamblyn R, Abrahamowicz M, Berkson L et al (1992). First-visit bias in the measurement of clinical competence with standardized patients. Acad Med. 67(10 Suppl): S22-S24.
66. Theaker ED, Kay EJ, Gills S (2000). Development and preliminary evaluation of an instrument designed to assess dental students' communication skills. Br. Dent J.188:40-4.
67. Turnbull J, Gray J, McFadden J (1998). Improving in-training evaluation programs. J Gen Intern Med. 13:317-323.
68. Vannatta JB, Smith KR, Smith R, et al (2006). Comparison of standardized patients and faculty in teaching medical interviewing. Acad Med. 71:1360-1362.
69. Vu NV (1992). Six years of comprehensive, clinical performance-based assessment using standardized patients at the Southern Illinois. University School of Medicine. Academic Medicine 67:42-50.

70. Wallace P, Heine N, Garman K, et. al (1999). Effects of varying amounts of feedback on standardized patient Checklist Accuracy in clinical practice examinations. Teaching and Learning in Medicine. Vol 11, No. 3, 148-152.
71. Watts JH, Brollier C, Schmidt W (1988). Why use standardized patient evaluations? Commentary and suggestions. Occupational Therapy in Mental Health 8(4):89-07.
72. Whitcomb ME (2004). From the Editor. More on Medical Education Reform. Acad. Med. 79:1-2.
73. Weinstein R (2001). In - Rethinking pathology residency training and education. Gorstein F (ed.). Human Pathology 32:1-3.
74. Wilkinson L, Engel JD, Pethtel L, et al (1996). Rating the clinical interview: It depends on where you're sitting. IME, AAMC, San Francisco.
75. Williams R (2004). Have standardized patient examinations stood the test of time and experience? Teaching and Learning in Medicine. Vol. 16, #2, 215-222.
76. Williams RG, McLaughlin MA, Eulenberg D, Hurm M, et al (1999). The patient findings questionnaire: one solution to an important standardized patient examination problem. Acad. Med. 74:1118-24.
77. Wolverton SE, Bosworth MF (1985). A survey of residency perceptions of effective teaching behaviors. Fam. Med. 17:106-8.
78. Ziv A, Ben-David MF, Sutnick AI, et al (1998). Lessons learned from six years of international administration of the ECFMGs Standardized patient-based clinical skills assessment. Acad Med. 73(1):84-91.

Quantitative and/or qualitative studies:

1. Badger LW, deGuy F, Hartman J et al (1995). Stability of standardized patients' performance in a study of clinical decision making. Fam Med. 27:126-131.

2. Colliver JA (1995). Validation of standardized-patient assessment: a meaning for clinical competence. Acad Med. 70(12):1062-1064.

3. Baerheim A, Malterud K (1995). Simulated patients for the practical examination of medical students: intentions, procedures and experiences. Med Educ. 29(6):410-413.

4. Battles JB, Carpenter JL, McIntire DD, Wagner JM (1994). Analyzing and adjusting for variables in a large-scale standardized-patient examination. Acad Med. 69(5):370-376.

5. Ben-David MF, Klass DJ, Boulet J, et al (1999). The performance of foreign medical graduates on the National Board of Medical Examiners (NBME) Standardized Patient examination prototype: a collaborative study of the NBME and the Educational Commission for Foreign Medical Graduates (ECFMG). Med Educ.33(6):439-446.

6. Bienstock JL, Tzou WS, Martin SA, Fox Home Environment: (2000). Effect of student ethnicity on interpersonal skills and objective standardized clinical examination scores. Obstet Gynecol. 96(6):1011-1013.

7. Blake KD, Mann KV, Kaufman DM (2001). Using standardized patients to identify students needs training in interviewing skills. Acad Med 76:537-8.

8. Blue AV, Chessman AW, Gilbert GE, Mainous AG, 3rd (2000). Responding to patients' emotions: important for Standardized Patient satisfaction. Fam Med.(5):326-330.

9. Braunack-Mayer AJ (2001). Should medical studies act as surrogate patients for each other? Med Educ. 35(7):681-686.

10. Bruce NC (1989). Evaluation of Procedural Skills of Internal Medicine Residents. Acad Med, Vol 64, pp. 213-6.
11. Bullock G, Kovacs G, Macdonald K, Story BA (1999). Evaluating procedural skills competence: inter-rater reliability of expert and non-expert observers. Acad Med. 74(1):76-78.

12. Carney PA, Dietrich AJ, Freeman DH, Jr., Mott LA (1993). The periodic health examination provided to asymptomatic older women: an assessment using Standardized Patients. Ann Intern Med. 119(2):129-135.

13. Carraccio C, Englander R (2000). The objective structured clinical examination: a step in the direction of competency-based evaluation. Arch Pediatr Adolesc Med. 154(7):736-741.

14. Chambers KA, Boulet JR, Furman GE (2001). Are interpersonal skills ratings influenced by gender in a clinical skills assessment using standardized patients? Adv Health Sci Educ Theory Pract. 6(3)231-241.

15. Chambers KA, Boulet JR, Gary NE (2000). The management of patient encounter time in a high-stakes assessment using Standardized Patients. Med Educ. 34(10):813-817.

16. Chur-Hansen A, Vernon-Roberts J (1999). Using Standardized Patients to evaluate undergraduate medical students' proficiency in speaking English. Acad Med. 74(7):829-834.

17. Clauser BE, Ross LP, Fletcher EA, et al (1994). Differential item functioning in checklist items from a standardized-patient-based examination. Acad Med. 69(10 Suppl):S72-74.

18. Clauser BE, Ripkey D, Fletcher B, et al (1993). A comparison of pass/fail classifications made with scores from the NBME standardized-patient examination and Part II examination. Acad Med. 68(10 Suppl):S7-9.

19. Colliver JA, Swartz MH, Robbs RS, Cohen DS (1999). Relationship between clinical competence and interpersonal and communication skills in standardized-patient assessment. Acad Med. 74(3):271-274.

20. Colliver JA, William RG (1993). Technical issues: test application. AAMC Acad Med. 68(6):454-460; discussion 461-453.

21. Colliver JA, Vu NV, Barrows H.S. (1992). Screening test length for sequential testing with a standardized-patient examination: a receiver operating characteristic (ROC) analysis. Acad Med. 67(9):592-595.
22. Colliver JA, Marcy ML, Travis TA, Robbs Review of systems (1991). The interaction of student gender and standardized-patient gender on a performance-based examination of clinical competence. Acad Med. 66(9 Suppl):S31-33.

23. Connell KJ, Sinacore JM, Schmid FR, Chang RW, Perlman SG (1993). Assessment of clinical competence of medical students by using Standardized Patients with musculoskeletal problems. Arthritis Rheum. 36(3):394-400.

24. Davidson R, Duerson M, Rathe R, et al (2001). Using standardized patients as teachers: a concurrent controlled trial. Acad Med. 76(8):840-843.

25. Day RP, Hewson MG, Kindy P, Jr., Van Kirk J (1993). Evaluation of resident performance in an outpatient internal medicine clinic using Standardized Patients. J Gen Intern Med. 8(4):193-198.

26. De Champlain AF, Margolis MJ, Macmillan MK, et al (2001). Predicting mastery level on a large scale standardized patient test: a comparison of case and instrumented-score based models using discriminant functional analysis. Adv Health Sci Educ Theory Pract. 6(2):151-158.

27. De Champlain AF, Macmillan MK, Margolis MJ, et al (2000). Modeling the effects of a test security breach on a large-scale Standardized Patient examination with a sample of international medical graduates. Acad Med. 75(10 Suppl):S109-111.

28. De Champlain AF, Clauser BE, Margolis MJ, Klass DJ, Nungester RJ (1998). Assessing decision consistency with a sequentially administered large-scale Standardized Patient examination: a Monte Carlo investigation. Acad Med. 73(10 Suppl):S78-80.

29. Doig CJ, Harasym PH, Fick GH, Baumber JS (2000). The effects of examiner background, station organization, and time of exam on OSCE scores assessing undergraduate medical students' physical examination skills. Acad Med. 75(10 Suppl):S96-98.

30. Donnelly MB, Sloan D, Plymale M, Schwartz R (2000). Assessment of residents' interpersonal skills by faculty proctors and Standardized Patients: a psychometric analysis. Acad Med. 75(10 Suppl):S93-95.

31. Dresselhaus TR, Peabody JW, Lee M, Wang MM, Luck J (2000). Measuring compliance with preventive care guidelines: Standardized Patients, clinical vignettes, and the medical record. J Gen Intern Med. 15(11):782-788.

32. Dube C, Fuller B (2003). A qualitative study of communication skills for male cancer screening discussions. J Cancer Educ. 18:182-187.

33. Duke MB, Griffith CH, 3rd, Haist SA, et al (2001). A clinical performance exercise for medicine-pediatrics residents emphasing complex psychosocial skills. Acad Med. 76 (11):1153-1157.

34. Edelstein RA, Reid HM, Usatine R, Wilkes MS (2000). A comparative study of measures to evaluate medical students' performance. Acad Med. 75(8):825-833.

35. Epstein RM, Levenkron JC. Frarey EL, et al (2001). Improving physicians' HIV-risk assessment skills using announced and unannounced standardized patients. J Gen Intern Med. 16(3):176-180.

36. Ferrell BG (1995). Clinical performance assessment using Standardized Patients: A primer. Fam Med. 27(1):14-19.

37. Finlay IG, Stott NC, Kinnersley P (1995). The assessment of communication skills in palliative medicine: a comparison of the scores of examiners and simulated patients. Med Educ. 29(6):424-429.

38. Gispert R, Rue M, Roma J, Martinez-Carretero JM (1999). Gender, sequence of cases and day effects on clinical skills assessment with Standardized Patients. Med Educ. 33(7):499-503.

39. Gordon JJ, Saunders NA, Hennrikus D, Sanson-Fisher RW (1992). Interns' performances with simulated patients at the beginning and the end of the intern year. J Gen Intern Med. 7(1):57-62.

40. Gorter S, Rethans JJ, Scherpbier A, et al (2000). Developing case-specific checklists for standardized-patient-bade assessment in internal medicine: A review of the literature. Acad Med. 75(11):1130-1137.

41. Greenberg LW, Ochsenschlager D, O'Donnell R, Mastruserio J, Cohen GJ (1999). Communicating bad news: a pediatric department's evaluation of a simulated intervention. Pediatrics. 103(6 Pt 1):1210-1217.

42. Guagnano MT, Merlitti D, Manigrasso MR, et al. (2002). New medical licensing examination using computer-based case simulations and standardized patients. Acad Med. 77(1):87-90.

43. Hanson M, Tubarius R, Hodges B., et al (2002). Adolescent standardized patients: Method of selection and assessment of benefits and risks. Teach and Learn Med. 14(2):104-113.

44. Hines JF, Thomas AR, Call R, et al (1999). Development and use of military-unique standardized gynecology patients in military undergraduate medical education. Mil Med.164(4):280-282.

45. Kassebaum, D.G. and Eaglen, R.H (1999). Shortcomings in the evaluation of students' clinical skills and behaviors in medical school. Academic Medicine 74:842-849.

46. Kennedy G., Rigler G., Rosenfeld J., et al (2004). Exploring the gap between knowledge and behavior: A qualitative study of clinical action following an educational intervention. Acad Med. 79:386-393.

47. Kopp KC, Johnson JA (1995). Checklist agreement between Standardized Patients and faculty. J Dent Educ. 59(8):824-829.

48. LaMantia J, Rennie W, Risucci DA, et al (1999). Interobserver variability among faculty in evaluations of residents' clinical skills. Acad Emerg Med. 6(1):38-44.

49. Levinson, W (1999). In context: physician-patient communication and managed care. Journal of Medical Practice Management, 14(5):226.

50. Luck J, Peabody JW, Dresselhaus TR, Lee M, Glassman P (2000). How well does chart abstraction measure quality? A prospective comparison of Standardized Patients with the medical record. Am J Med.108(8):642-649.

51. MacRae HM, Cohen R, Regehr G, Reznick R, Burnstein M (1997). A new assessment tool: the patient assessment and management examination. Surgery. 122(2):335-343; discussion 343-334.

52. Margolis MJ, De Champlain AF, Klass DJ (1998). Setting examination-level standards for a performance-based assessment of physicians' clinical skills. Acad Med. 73(10 Suppl):S114-116.

53. Martin JA, Reznick RK, Rothman A, Tamblyn RM, Regehr G (1996). Who should rate candidates in an objective structured clinical examination? Acad Med. 71(2):170-175

54. Mavis BE, Ogle KS, Lovell KL, et al (2002). Medical students as standardized patients to assess interviewing skills for pain evaluation. Med Educ. 36(2):135-140.

55. McMillan MK, Fletcher EA, Champlain AF, Klass DJ (2000). Assessing post-encounter note documentation by examinees in a field test of a nationally administered Standardized Patient test. Acad Med. 75(10 Suppl):S112-114.

56. Moore PJ and Adler NE, and Robertson PA (2000). Medical malpractice: the effect of doctor-patient relations on medical patient perceptions and malpractice intentions. Western Medical Journal. 173(4):244.

57. Muijtjens AM, van Vollenhoven F H, van Luijk SJ, et al (2000). Sequential testing in the assessment of clinical skills. Acad Med. 75(4):369-373.

58. Nagoshi MH (2001). Role of standardized patients in medical education. Hawaii Med J. 60(12):323-324.

59. Ortiz Neu C, Walters CA, Tenenbaum J, Colliver JA, et al (2001). Error patterns of 3rd year medical students on the cardiovascular physical examination. Teach Learn Med. 13(3):161-166.

60. Pieters HM, Touw-Otten FW, De Melker RA (1994). Simulated patients in assessing consultation skills of trainees in general practice vocational training: a validity study. Med Educ. 28(3):226-233.

61. Proceedings of the AAMC's consensus conference on the use of standardized patients in the teaching and evaluation of clinical skills (1992). Washington D.C. Academic Medicine 68, 1993.

62. Peitzman SJ (2000). Clinical skills assessment using Standardized Patients: perspectives from the Educational Commission for Foreign Medical Graduates. Am J Phys Med Rehabil. 79(5):490-493.

63. Ram P, van der Vleuten C, Rethans JJ, Grol R, Aretz K (1999). Assessment of practicing family physicians: comparison of observation in a multiple-station examination using Standardized Patients with observation of consultations in daily practice. Acad Med 74(1):62.

64. Regehr G, Freeman R, Robb A, Missiha N, Heisey R (1999). OSCE performance evaluations made by Standardized Patients: comparing checklist and global rating scores. Acad Med. 74(10 Suppl):S135-137.

65. Richards BF, Rupp R, Zaccaro DJ, et al (1996). Use of a standardized-patient-based clinical performance examination as an outcome measure to evaluate medical school curricula. Acad Med. 71(1 Suppl):S49-51.

66. Robins LS, White CB, Alexander GL, et al (2001). Assessing medical students' awareness of and sensitivity to diverse health beliefs using a standardized patient station. Acad Med. 76(1):76-80.

67. Robins LS, Zweifler AJ, Alexander GL, et al (1997). Using Standardized Patients to ensure that clinical learning objectives for the breast examination are met. Acad Med. 72(10 Suppl 1):S91-93.

68. Rose M, Wilkerson L. (2001). Widening the lens on standardized patient assessment: what the encounter can about the development of clinical competence. Acad Med. 76(8):856-859.

69. Rubin NJ, Philp EB (1998). Health care perceptions of the Standardized Patient. Med Educ. 32(5):538-542.

70. Rutala PJ, Witzke DB, Leko EO, Fulginiti JV (1991). The influences of student and Standardized Patient genders on scoring in an objective structured clinical examination. Acad Med. 66(9 Suppl):S28-30.

71. Sasson VA, Blatt B, Kallenberg G, Delaney M, White FS (1999). "Teach 1, do 1 ... better": superior communication skills in senior medical students serving as Standardized Patient--examiners for their junior peers. Acad Med. 74(8):932-937.

72. Schueneman AL, Carley JP, Baker WH (1994). Residency Evaluations – Are They Worth the Effort? Arch Surg, Vol 129, pp. 1067-73.

73. Sherwin JR (2002). The use of standardized patients in pediatric residency training in palliative care: Anatomy of a standardized patient case scenario. J. Palliat Med. 5 (1) 146-153.

74. Singer PA and Robb AK. The ETHICS Objective Structured Clinical Examinations (OCSE): Standardized patient scenarios for teaching and evaluating bioethics. Online resource with references. http://wings.buffalo.edu/faculty/research/bioethics.osce.html

75. Solomon DJ, Speer AJ, Callaway MR, Ainsworth MA (1996). Dimensions of clinical competence as conceptualized by medical school faculty. Eval Health Prof. Mar 19(1):68-80.

76. Solomon DJ, Speer AJ, Perkowski LC, DiPette DJ (1994). Evaluating problem solving based on the use of history findings in a standardized-patient examination. Acad Med. 69(9):754-757.

77. Stillman, P., Swanson, D.B., Smee, S., Stillman, E. et al (1986). Assessing the clinical skills of residents. Annals of Internal Medicine 105: 762-771.

78. Stroud SD, Smith CA, Edlund BJ, Erkel EA (1999). Evaluating clinical decision-making skills of nurse practitioner students. Clin Excell Nurse Pract. 3(4):230-237.

79. Swartz MH, Colliver JA (1996). Using Standardized Patients for assessing clinical performance: an overview. Mt Sinai J Med. 63(3-4):241-249.

80. Swartz MH, Colliver JA, Cohen DS, Barrows H.S. (1993). The effect of deliberate, excessive violations of test security on performance on a standardized-patient examination. Acad Med. 68(10 Suppl):S76-78.

81. Thomas PA, Shatzer JH (2000). Standardized Patient assessment of ambulatory clerks: effect of timing and order of the clerkship. Teach Learn Med. 12(4):183-188.

82. Vu NV, Distlehorst LH, Verhulst SJ, Colliver JA (1993). Clinical performance-based test sensitivity and specificity in predicting first-year residency performance. Acad Med. 68(2 Suppl):S41-45.

83. Wallach PM, Elnick M, Bognar B, et al (2001). Standardized patients' perception about their own health. Teach Learn Med.13 (4):227-231.

84. Wolf FM, Sisson JC, Zweifler AJ (1995). A Standardized Patient program to evaluate summarization skills in patient interviews. Acad Med. 70(5):443.

85. Woodward CA, Gliva-McConvey G (1995). The effect of simulating on Standardized Patients. Acad Med. 70(5):418-420.

86. Yelland MJ (1998). Standardized Patients in the assessment of general practice consulting skills (694). Med Educ.32 (1):9-13.

Historic Learning Models:

1. Bateman, W. (1990). Open to Question: The Art of Teaching and Learning by Inquiry. San Francisco: Jossey-Bass.

2. Bergin, M., G. Rasmussen, and E. Skinner. (Summer/Fall 2001). A Comparison of Two Models for Integrating Curriculum: the Academic Evergreen Model and the Problem Based Learning Model. Peer Review, 3/4, No. 4/1, P. 14-18.

3. Boud, D. (1991). "Implementing Student Self Assessment," in HERDSA Green Guides Published, 2nd edition, vol. 5. Edited by R. Cannon, G. Mulins, M. Williamson, and P. Younger, pp. 1-31. Campbelltown: Higher Education Research and Development Society of Australia Inc.

4. Boud, D., R. Keogh, and D. Walker (1985). What is Reflection in Learning?, In: Reflection: Turning Experience into Learning. Edited by D. Boud, R. Keogh, and D. Walker, pp. 7-17. London: Kogan Page.

5. Bransford, J. D., Brown, A.L. and Cocking, R.R. (eds.) (1999). How People Learn: Brain, Mind, Experience and School. Washington DC: National Academy Press.

6. Brinko, K. (1993). The practice of giving feedback to improve teaching. Journal of Higher Education, 64, 574 - 593.

7. Brookfield, S. D. (1995). Becoming a Critically Reflective Teacher. San Francisco: Jossey-Bass.

8. Bruffee, K. A. (1994). Collaborative Learning: Higher Education, Interdependence and the Authority of Knowledge. Baltimore: Johns Hopkins Press.

9. Bruffee K. A. (1987). The Art of collaborative learning. Change, 19 (March/April) pp. 42-47.

10. Bruffee K. A. (1981). Collaborative learning', College English, 43(7) pp. 745-747.

11. Bruffee K. A. (1973). Collaborative learning: Some practical models'. College English, 34(5) pp. 634 643.

12. Cranton, P. (1998). Transformative learning: Individual growth and development through critical reflection. In S. M. Scott, B. Spencer, & A. M. Thomas (Eds.), Learning for life: Canadian readings in adult education (pp. 188 – 199). Toronto: Thompson Educational Publishing Inc.

13. Cross, K. P. (2000). Collaborative Learning 101. League for Innovation in the Community College.

14. Cross, K.P. (1981). Adults as Learners. San Francisco: Jossey-Bass.

15. Cross, K.P. (1976). Accent on Learning. San Francisco: Jossey-Bass.

16. Daly, Dennis. (1996). Attribution Theory and the Glass Ceiling: Career Development Among Federal Employees. Public Administration & Management: An interactive Journal http://www.hbg.psu.edu/faculty/jxr11/glass1sp.html

17. Eby, K. K. (Summer/Fall 2001). Teaching and Learning from an Interdisciplinary Perspective. Peer Review 3/4(4/1), p. 28-31.

18. Feldman, K.A., & Paulsen, M.B. (1994). Teaching and learning in the college classroom. ASHE Reader Series. Needham Heights, MA: Ginn Press.

19. Felder, R.M. (1993). Reaching the second tier - Learning and teaching styles in college science education. Journal of College Science Teaching, 23(5), 286-290.

20. Felder, R.M., & Silverman, L.K. (1988). Learning styles and teaching styles in engineering education. Engineering Education, 78(7), 674-681.

21. Finkel, D. L. (2000). Teaching with Your Mouth Shut. Portsmouth: Heinemann Boynton Cook Publishers.

22. Goodsell, A., Maher, M. and Tinto, V. (1992). Collaborative Learning: A Sourcebook for Higher Education. National Center on Post-Secondary Teaching.

23. Harvey, J.H. & Weary, G. (1985). Attribution: Basic Issues and Applications, Academic Press, San Diego.

24. Heider, F. (1958). The Psychology of Interpersonal Relations. New York: Wiley.

25. Jones, E. E., D. E. Kannouse, H. H. Kelley, R. E. Nisbett, S. Valins, and B. Weiner, Eds. (1972). Attribution: Perceiving the Causes of Behavior. Morristown, NJ: General Learning Press.

26. Lewis, F. M. and Daltroy, L. H. (1990). How Causal Explanations Influence Health Behavior: Attribution Theory." In Glanz, K., Lewis, F.M. and Rimer, B.K. (eds.) Health Education and Health Behavior: Theory, Research. and Practice. San Francisco, CA: Jossey-Bass Publishers, Inc.

27. MacGregor, J., ed. (1993). Student Self-evaluation: Fostering Reflective Learning. New Directions in Teaching and Learning, 56. San Francisco: Jossey-Bass.

28. Mentkowski, M. (2000). Learning that Lasts: Integrated Learning, Development, and Performance in College and Beyond. San Francisco: Jossey-Bass.

29. Mezirow, J. (1978). Perspective transformation. Adult Education, 28 (2), 100 – 109.

30. Palmer, P. (1998). The Courage to Teach. San Francisco, CA: Jossey-Bass.

31. Perry, W. (1970). Forms of Ethical and Intellectual Development in the College Years. New York: Holt, Rinehart, and Winston.

32. Weiner, B. (1986). An attributional theory of motivation and emotion. New York: Springer-Verlag.

33. Weiner, B. (1980). Human Motivation. NY: Holt, Rinehart & Winston.

Issues/Questions and future directions:

1. Association of American Medical College (1999). Contemporary Issues in Medicine: Communication in Medicine (Report III of the Medical School Objectives Project). Washington, DC: Association of Am Med Colleges.

2. Camp MG, Hoban JD (1988). Teaching medicine residents to teach. In: Edwards JC, Marier RL, eds. Clinical Teaching for Medical Residents: Roles, Techniques, and Programs. New York: Springer, 201-213.

3. Carter HD (1962): How reliable are good oral examinations? Calif J. Educ Research, 13:147-53.

4. Colliver JA, William RG (1993). Technical issues: test application. AAMC Acad Med. 68(6):454-460; discussion 461-453.

5. Committee on Quality of Health Care in America (2001): Crossing the quality chasm: a new health system for the 21st century. Washington, DC, National Academy Press.

6. Cooper C, Mira M (1998). Who should assess medical students'' communication skills: their academic teachers or their patients? Med. Educ. 32:419-21.

7. Croen LG, Moroff SV (1994). Pilot-testing a holistic approach to scoring performances on standardized-patient examinations. Acad Med. 69(4):310-312.

8. Des Marchais, J.E., Vu, N.V., Black, R (1997). Problem-analysis Questions for Assessment in Problem-Based Learning: Development and Difficulties.
Education for Health, 10, 79-89.

9. Hall, M. A., E. Dugan, et al. (2001). "Trust in physicians and medical institutions: What is it, can it be measured and does it matter?" The Milbank Quarterly 79(4): 613-639.

10. Norcini J and J Boulet (2003). Status of standardized patient assessment: Methodological issues in the use of standardized patients for assessment. Teach and Learn Med. 15(4):293-297.

11. Norvack DH, Volk G, Drossman DA, et al (1993). Medical interviewing and interpersonal skills teaching in US medical schools. Progress, problems and promise. JAMA 269:2101-5.

12. Paukert JL, Richards ML, Olney C (2002). An encounter card system for increasing feedback to students. Surg. 183(3):300-304.

13. Tamblyn R, Abrahamowicz M, Scharch B, et al (1994). Can standardized patients predict real-patient satisfaction with the doctor-patient relationship? Teach Learn Med 6:36-44.

14. Tamblyn R. Schnabl G. Klass D. et al (1988). How standardized are standardized patients? Proc Annual Conf Res Med Educ. 27:168-153.

15. Wass V, Jones R, van der Vleuten C (2001): Standardized patients or real patients to test clinical competence? The long case revisited. Med Educ. 35:321-325.

SHORTLIST: Specific methods of training, evaluation and/or feedback

Association of Standardized Patient Educators (ASPE) Project Award "Training Standardized Patients to Give Feedback to Medical Trainees: The State of the Art"

Patti Hatchett, B.S. PI; Carolyn Haun, B.S.; Linda Goldenhar, Ph.D. Consultant
University of Cincinnati College of Medicine, Department of Education
Center for Clinical Development and Assessment

Feedback directed at standardized patients

1. ACGME "Toolbox of Assessment Methods (2000). 360-Degree Feedback Evaluation Instrument. ACGME, "Toolbox of Assessment Methods, 2000. Center for Creative Leadership, Greensboro, NC. http://www.ccl.org **Method of feedback for evaluation, directed at standardized patients.**

2. American College of Physicians – ASIM Observer (2001) by the American College of Physicians – American Society of Internal Medicine; William Hoffman – Tips to give and receive feedback. **Directed at standardized patient instructors, standardized patients and faculty.**

3. Anderson W, Malacrea R (1998). Giving constructive feedback. Office of Medical Education Research and Development, Michigan State University. ACP-ASIM Community Based Teaching Educational Clearinghouse #326**. Excellent faculty development package containing instructor manuals, videotapes, overheads and handouts.**

4. Baylor University, Texas. www.bcm.edu/familymed/spprogram/sp_training.htm.

5. Coaching & Mentoring For Dummies (2006): Giving Constructive Feedback, www.dummies.com/WileyCDA/DummiesArticle/id-622.html

6. Howley LD, Simons DF, Murray JA (2005). Focusing feedback on interpersonal skills: A workshop for Standardized Patients, 3rd edition, unpublished training manual. **Directed workshop on feedback to standardized patients.**

7. Doyle LL, Haupt JB, Murray JA, Simmons DF (1998). Focusing feedback on interpersonal skills: What is the quality of oral feedback by standardized patients? IN: D.E. Melnick (ed.), the Eighth Annual International Ottawa Conference on Education and Assessment Proceedings, Evolving Assessment: Protecting the Human Dimension. Philadelphia, July 12-15. **Directed at standardized patient trainers, test planners but could be employed by faculty to construct scenarios.**

8. Greenway R (2004). Reviewing Skills Training. The active reviewing cycle. Reviewing.co.uk/learning-cycle/feedback-methods.html. **Feedback, step-by-step instruction for any user.**

9. Hatchett, P., B.S. CCDA Director (2005). University of Cincinnati College of Medicine Center for Competency Development and Assessment "Effective SP Feedback: A new definition." **Workshop directed at standardized patients regarding reflective and descriptive feedback techniques.**

10. Health Sciences Academic Services and Facilities, Washington University School of Medicine "Giving feedback" A manual for trainers and patients. 206-543-8869, www.jcal@u.Washington.edu **Feedback preparation, standardized patient and faculty.**

11. Heathfield SM (2002). 360-degree feedback: The good, the bad and the ugly. Internet Source. Human Resources #60. **Directed at a general population but very specifically usable by standardized patient trainers, faculty and standardized patients.**

12. Hewson MG, Little ML (1998). Giving feedback in medical education. Verification of recommended techniques. J Gen Intern Med. 18:111-116. **This article verifies that feedback that is specific, nonjudgmental and courses on behaviors rather than personalities is preferable when they are in the learners' role.**

13. Holmboe, E., Yepes, M., Williams, F., Huot, S (2004). Feedback and the Mini Clinical Evaluation Exercise. Journal of General Internal Medicine, 19(5):558-561. **The mini Clinical Evaluation Exercise or mini-CEX is a method for simultaneously assessing the clinical skills of trainees and offering them feedback on their performance. It is a simple modification of the traditional bedside oral examination and because of that, it relies on the use of real patients and the judgments of skilled clinician educators. The mini Clinical Evaluation Exercise or mini-CEX is a method for simultaneously assessing the clinical skills of trainees and offering them feedback on their performance. It is a simple modification of the traditional bedside oral examination and because of that, it relies on the use of real patients and the judgments of skilled clinician educators.**

14. Jordan J (2004). The Use of Orally Recorded Exam Feedback as a Supplement to Written Comments. Lawrence University *Journal of Statistics Education* Volume 12. www.amstat.org/publications/jse/v12n1/jordan.html **Feedback preparation - particularly oral both standardized patient and faculty.**

15. Joshi, R., MS, MBBS, MBA, F. Ling, MD, J. Jaeger, MPH (2004). Assessment of a 360-Degree Instrument to Evaluate Resident's Competency in Interpersonal and Communication Skills. Academic Medicine, 79(5):458-463. **Evaluation of the uses of 360-degree feedback model.**

16. McEnerney, Kathleen, CSU, Allen, MJ, CSU, Harding, E. CSU, Desrochers, C., CSU (1975). "Reflective Feedback" (adapted by McEnerney & Webb from Bergquist and Phillips) taken from Building Community through Peer Observation American Association for Higher Education, Forum on Faculty Roles and Rewards San Diego, CA, January 18, 1999. **Directed at standardized patients, standardized patient instructors and faculty/clinicians.** www.provost.wisc.edu/archives

17. Nelles, Laura Jane; Knickle, Kerry; McNaughton, Nancy; Tabak, Diana; University of Toronto
3rd Annual Meeting of the Association of Standardized Patient Educators September 18-22, 2004, New Orleans, LA U.S.A., Hosted by Tulane University School of Medicine. "Beyond the Sandwich-Advanced Feedback Skills (Workshop). **Directed at standardized patient educators to teach verbal feedback, reflective in particular.** www.aspeducators.org/2004

18. Ogburn T, Espey E (2003). The R-I-M-E method for evaluation of medical students on an obstetrics and gynecology clerkship. Am J Obstet Gynecol. 189:666-9. **Originally directed at obstetrics and gynecology clerkships but widely used now in other subspecialties and teaching arenas. Easily adapted to standardized patient trainers to use in education of standardized patients.**

19. Owens, B.S., Xie, Z., Gregg, P., Phelps, C.L., Johnson, C.W. (2002) Focusing Feedback on Interpersonal Skills: Practice Makes Perfect A Web-Based Tutorial For Standardized Patients. Proceeding AMIA Symp 2002, 1121. **Very directed, very clear, directed at standardized patients and evaluating interpersonal skills.**

20. Owens, B.S., Xie, Z., Gregg, P., Phelps, C.L., Johnson, C.W. (2002) Focusing Feedback on Practice makes perfect: A Web-Based Tutorial For Standardized Patients. Proceeding of the 3rd annual Advances in Teaching and Learning symposium, February 2002, UT-Houston, Houston. **Very directed, very clear, directed at standardized patients actually employing the feedback techniques in previous article.**

21. Pfeiffer, Carol A.; Kosowicz, Lynn; University of Connecticut school of Medicine
3rd Annual Meeting of the Association of Standardized Patient Educators September 18-22, 2004, New Orleans, LA U.S.A., Hosted by Tulane University School of Medicine. Training Standardized Patients to Give Feedback: A Challenge to Our Professionalism (Workshop). **Directed at standardized patient educators to teach reflective verbal feedback in particular.** www.aspeducators.org/2004.

22. Prystowsky JB (2003). A learning perspective permits feedback on feedback. Am J of Surg. 18:264-267. **User friendly for standardized patient trainers, standardized patients, faculty, test planners, etc.**

23. Rodgers, K.G., MD and Manifold, C., DO (2002). 360-degree Feedback: Possibilities for Assessment of the ACGME Core Competencies for Emergency Medicine Residents, Academic Emergency Medicine 9(11):1300-1304. **Description of a 360-degree model of feedback.**

24. Sinclair, Nancy RN MBA. University of New Mexico School of Medicine, 2004.
3rd Annual Meeting of the Association of Standardized Patient Educators September 18-22, 2004, New Orleans, LA U.S.A., Hosted by Tulane University School of Medicine. www.aspeducators.org/2004 Reflective Verbal Feedback: A Substrate for Professionalism (Workshop). **Directed at standardized patient educators to teach reflective verbal feedback in particular.**

25. Sinclair, Nancy, RN MBA. Giving Verbal Feedback, training for standardized patients. University of New Mexico School of Medicine, 2003. Presented at Annual Meeting ASPE (2003). **Handbook, very directed to standardized patients and giving feedback, oral, written and summative.**

26. University of Illinois, College of Medicine – Urbana-Champaign Introduction to clinical medicine clinical tutorials notebook. tbarber@uiuc.edu **Standardized Patient training.**

27. Washington University – from Internet (2005) – 'Giving Feedback". A five-step "Microskills" Model of clinical teaching. Journal American Board Family Practice 5:419-24. **Direct application of the technique.**

28. Williams, J.G (2003). Providing feedback on ESL students written assignments. **General not specifically standardized patient but excellent, step by step instruction on feedback.**

29. Wood, Beverly P. (2000). Feedback: A key feature of medical training. Radiology 215:17-19. **Breakdown of steps of learning feedback and very direct methods for structuring it to needs.**

Checklist issues

1. Cohen DS, Colliver JA, Marcy MS, et al (1998). Psychometric properties of a standardized-patient checklist and rating-scale form used to assess interpersonal and communication skills. Acad Med.71(1 Suppl):S87-89. **Directed at faculty, standardized patient trainers.**

2. De Champlain AF and Clauser BE (2000). Further discussion of standardized patient checklists and videotaped performances (Letter). Acad Med. 75:315-316. **Directed at standardized patient instructors and faculty.**

3. Ferrell, B., Ph.D (1996). A Critical Elements Approach to Developing Checklists for a Clinical Performance Examination. The University of Texas Medical Branch. MEO 1:5 (original publication). Medical Education Online Editor@Med-Ed-Online.org **Very directed at creating useful and valid checklists, usable for medical student and standardized patients.**

4. Gorter S, Rethans JJ, Scherpbier A, et al (1996). Developing case-specific checklists for standardized-patient-based assessments in internal medicine: A review of the literature. Acad. Med. 75(11):1130-1137.

Development of case scenarios

1. Adamo G., Brownfield E., Durning S., et a (2003). Objective, structured clinical examinations and standardized patients in medical education: Getting started and expanding roles. Presentation at 2003 CDIM National Meeting, Savannah, GA. **Directed at standardized patient trainers as well as testing planners, faculty, etc.**

2. Barrows, Howard S (1999). Excerpts from training standardized patients to have physical findings. Problem-based learning initiative. **Directed at standardized patients and physical findings.**

3. Hardee JT, Kasper IK (2005). From standardized patient to care actor: Evolution of a teaching methodology. Permanente Journal. Spring 2005; Vol 9. No 3. **Case scenario set-up in preparation for a particular skill.**

Standards for performance

1. Talente G, Haist SA, Wilson JF (2003). A model for setting performance standards for standardized patient examinations. Eval and the Health Professions 26(4):427-46.

Sample Evaluation Forms:

2. Standard ABIM Form (2000). Behavioral anchors at extremes of performance
   USUHS "RIME" Form: Behavioral anchors at each level of performance.

Future items to be considered

1. Benor, D (2000). Faculty Development, Teacher Training and Teacher Accreditation: Twenty Years From Now. Med Teacher, 22:503-512, 2000.

2. Dogra N, Stretch D (2001). Developing a questionnaire to assess student awareness of the need to be culturally aware in clinical practice. Med Teach 23:59-64. Abstract: **This study aimed to establish whether students had an awareness of the requirement to consider cultural issues in caring for patients and to identify those issues which are most difficult for students, in order to aid course development. (May be useful in future development of culture sensitivity both for standardized patients and medical students).**

3. Holmboe ES (2004). Faculty and the observation of trainees' clinical skills: Problems and Opportunities. Acad. Med. 79:16-22.

Food for thought

1. Litzelman DK, Stratos GA, Marriott DJ, Lazaridis EN, Skeff KM (1998). Beneficial and harmful effects of augmented feedback on physicians' clinical-teaching performance. *Acad Med*. 73:324-332.

Forerunners in Feedback and teaching programs:

1. Argyris, C. Teaching Smart People How to Learn (1974). Harvard Business Review, May/June, 1991 home.nycap.rr.com/klarsen/learnorg/argyr1.html **Very early, excellent tool to discern patterns of behavior in regards to failure and learning from failure, easily adaptable to residents, faculty, standardized patient trainers, standardized patients, very early forerunner in feedback as a learning tool for all users.**

2. Banchard K, Johnson S (1981). The one-minute manager. William Morrow and Company, Inc., New York, New York, **A quick read that emphasizes goal setting, observation, instant reinforcing and corrective feedback and the overriding philosophy that the manager views the employees as valuable.**

3. Barrows H.S (1993). An overview of the uses of standardized patients for teaching and evaluating clinical skills. Acad Med. 6:443-453. **The author traces the development of standardized patients and summarizes working group assessment of strengths, weaknesses and future research opportunities for this technique. He includes a helpful table of physical findings which can be simulated by standardized patients.**

4. Ende J (1983). Feedback in clinical medical education, JAMA. 3;250:777-781. **An often-quoted review of the importance of feedback. It describes the consequences of poor or no feedback and discusses guidelines on how to give feedback.**

5. Hemmer PA, Pangaro L (2001). Can a descriptive evaluation system detect student growth during a clerkship? Using descriptive evaluation to detect student growth. Proceedings from Annual 2000 Meeting of the Clerkship Directors of Internal Medicine, Teach Learn Med , 13:199-205, 2001. **For the 1993-96 classes at USU, 343 third year medical students did 12 weeks of inpatient medicine. We compared the mean final ratings given in the second six weeks to the first six weeks (t-test). Differences due to pre-clinical GPA, USMLE step one, and clerkship pretest scores were tested by ANOVA. There was no difference in students' academic characteristics. Instructors gave a higher percentage of available points in the second six weeks compared to the first six weeks. Overall growth rates did not differ by academic quarter. Accepting the construct that students do improve, these findings validate our criterion-based evaluation in which higher achievement represents progress beyond "reporting". For grading, weighing student performance in the second six weeks more heavily than the first appears justified.**

6. Hollingsworth MA, Richards BF, Frye AW (1994). A description of observer feedback in an OSCE and the effects on examinees. Teaching and learning in Med. 6(1):49-53. **This is another article directable to several users, standardized patient trainers, test planners, faculty, and residents as well standardized patients themselves.**

7. Luft J (1984). Group Process: An Introduction to Group Dynamics by Mayfield Publishing Co., Chapter 5: The Johari Window: A model for soliciting and giving feedback. www.au.af.mil/au/awc/awcgate/sgitc/read5.htm **Schematic of a structured feedback form directed at standardized patient and medical students**.

8. Pangaro LN (1998). Evaluating development of professional skills: Vocabulary and method for the descriptive evaluation of students in clinical clerkship. Uniformed Services of the Health Sciences, Bethesda MA. (202-782-4923). **Directed at standardized patient and faculty/professional staff. Describe performance goals for trainees using the following progression: Reporter, Interpreter, Manager/Educator (R.I M.E.). The framework emphasizes a developmental approach, and distinguishes between basic and advanced levels of performance. Each step represents a synthesis of skills, knowledge and attitude, a final, "common pathway" of professional competencies. A learner's progress to later steps is usually apparent in the basic stages. Trainees might function at a "reporter" level for a complex problem, and at a higher level for problems that are more frequently encountered; overall ratings of performance should reflect the level of consistent reliability.**

9. Olander JD, Bor DH, Strunin L (1994). A structured clinical feedback exercise as a learning-to-teach practicum for medical residents. *Acad Med*. 69:18-20. **Directed at clinical teaching but very adaptable to standardized patient training.**

Faculty Directed

1. Amano et al. (2004): . Strategies for training standardized patient instructors for a competency examination. J. Dent Educ. 68:1104-1111**. Directed at standardized patient instructors.**

2. Branch WT, Paranjape A (2002). Feedback and Reflection: Teaching methods for clinical settings. Acad. Med. 77:1185-1188. **Feedback and reflection are two basic teaching methods used in clinical settings. In this article, the authors explore the distinctions between, and the potential impact of, feedback and reflection in clinical teaching.**

3. Coletti LM (2000). Difficulty with negative feedback: Face to face evaluation of junior medical students clinical performance results in grade inflation. J of Surgical Research 90:82-87. **Abstract hypothesis - Direct, face-to-face feedback regarding a medical students' clinical performance will not increase critical, objective analysis of their performance.**

4. Cunningham AS, Blatt SD, Fuller PG, Weinberger HL (1990). The art of precepting: Socrates or aunt Minnie? Archives of Pediatric and Adolescent Medicine 153:114-116. A **commentary for teaching learners the art of pattern recognition in the busy outpatient clinic, Aunt Minnie Approach "If the lady across the street walks like your aunt Minnie and dresses like your aunt Minnie, she probably is your aunt Minnie, even if you cannot identify her face." Operationally, in their pediatric clinic, this method requires that the learners present only the chief complaint of the patient and their presumptive diagnosis. While the learner is completing the paper work, the preceptor evaluates the patient. Upon the preceptor's return, discussion and feedback is immediately provided back to the learner.**

5. Greco M, Brownlea A, McGovern J, et al (2000). Consumers as educators: Implementation of patient feedback in general practice teaching. Health Communication, Vo1 12, No.2: pp173-193. **Directed at faculty and standardized patients, patients as teachers.**

6. Grady-Weliky, T., Kettyle, C., Hundert, E (2000). New Light on Needs in the Mentor-Mentee Relationship. In Educating for Professionalism: Creating a Cultural of Humanism in Medical Education, edited by D. Wear and J. Bickel. Iowa City: U. of Iowa Press. **Directed a faculty.**

7. Jelly RB and Goffin RD (2001). Can performance-feedback accuracy be improved. Effects of rater priming and rating scale format on rating accuracy. J of Appl Psychology 86:134-144. **This article is directed at faculty but can be useful to standardized patient trainers.**

8. Kurtz SM, Silverman JD, Benson J and Draper J (2003). Marrying content and process in clinical method teaching. Enhancing the Calgary Cambridge Guides. Acad Med; 78(8):802-809. **Teaching communication skills, primarily in the professional staff of medical facilities).**

9. Kurtz SM, Silverman JD, Draper J (2005). Teaching and learning communication skills in medicine. Oxon: Radcliff Publishing, 2nd edition. **Directed at faculty.**

10. Lucey C (1999). Effective feedback and evaluation in clinical medicine: A faculty development workshop. General Internal Medicine Faculty Development Meeting, Washington Hospital Center, Washington, DC. (December, 1999, Tampa, FL). **More directed to faculty and physicians, written and verbal.**

11. Makoul G. The SEGUE framework for teaching and assessing communication skills. Patient Educ and Counseling. 2001;45:23-7**. Excellent and concise practice in communication for medical students, not necessarily feedback oriented.**

12. Pinsky L, Fryer-Edwards K (2004). Diving for PERLS: working and performance portfolios for evaluation and reflection on learning. J Gen Intern Med. 19:582-7. **Definitely directed at faculty but an excellent tool to assist teaching direction.**

13. Pinsky L. Advanced precepting: A learner centered approach. Washington University. Washington, DC. www.im.org/facdev/7meeting/cycle3/material/pinsky.htm **Physician education; effective, time efficient teaching.**

14. Platt, FW, Gaspar DL, Coulehan JL, et al (2001). Tell me about yourself. Ann Intern Med. 34:1079-1085. **Directed at standardized patient instructors, standardized patients and faculty.**

15. Prystowsky JB (2003). A learning prescription permits feedback on feedback. Am J of Surg.18:264-267. **Feedback prescription pads were a simple method to facilitate feedback. Although students appreciated feedback, most feedback was inadequate. Faculty development programs to enhance student feedback should be a priority of clinical medical education. Directed at faculty.**

16. Rose M (2001). Widening the lens on standardized patient assessment: what the encounter can reveal about the development of clinical competence. Academic Medicine, 76(8):856-9. **This article encourages faculty to explore students' development of clinical competence, which involves the purposive integration of basic science, technical skill, empathy, communication, professional role, and personal history.**

BRIEF SUMMARY OF SELECTED EXPERTS

Howard S. Barrows, M.D. Professor Emeritus, Department of Medical Education Southern Illinois University School of Medicine and author. Introduced simulated patients (programmed patients) into the medical field in 1971.

Brief History: Howard Barrows has carried out research into the problem-solving skills of physicians and students. He originated the technique of the simulated or standardized patient now used extensively for assessment and teaching of clinical and bedside skills. He is widely recognized for his work in problem-based learning and the assessment of clinical competence through performance based testing.

Publications:

1. Barrows H.S. Simulated patients (programmed patients): the development and use of a new technique in Medical Education. Springfield, IL: Charles C. Thomas, 1971.
2. Barrows HS and Bennett K. Experimental studies on the diagnostic (problem-solving) skill of the neurologist, their implications for neurological training. Archives of Neurology 1972; 26(3): 273-277.
3. Barrows HS, Norman GR, Neufeld VR, and Feightner JW. The clinical reasoning of randomly selected physicians in general medical practice. Clinical Investigative Medicine. 1982; 5(1): 49-55.

4. Barrows HS, Tamblyn RM. *Problem-based learning: An approach to medical education*. New York: Springer, 1980.

Contact Information: Professor Emeritus in the Department of Medical Education. Department of Medical Education, Southern Illinois University, 801 N. Rutledge, P.O. Box 19622, Springfield, IL 62794-9622.
http://edaff.siumed.edu/medicaleducation/html

Jerry A Colliver, M.D., Professor, Department of Medical Education, Southern Illinois University School of Medicine, Springfield, Illinois. Professor, Medical Education
Director, Statistics and Research Consulting.

Brief History: Dr. Colliver is professor of medical education at Southern Illinois University School of Medicine, where his major responsibility is as director of the Division of Statistics and Research Consulting, a school-wide consulting unit. He is the editor of Teaching and Learning in Medicine: He has been involved in research on standardized patient testing and has authored no less than 40 papers on this subject. For the past ten years, he has been a collaborator with Dr. Mark Swartz in the standardized patient testing program for The New York City Consortium for Clinical Competence at The Morchand Center.

Publications:

1. Colliver J. Constructivism: The View of Knowledge That Ended Philosophy or a Theory of Learning and Instruction? Teaching and Learning in Medicine 2002, Vol. 14, No. 1, Pages 49-51.
2. Cohen DS, Colliver JA, Marcy MS, et al. Psychometric properties of a standardized-patient checklist and rating-scale form used to assess interpersonal and Communication skills. Acad Med. Jan 1996; 71(1 Suppl):S87-89.
3. Colliver JA, Swartz MH. Assessing clinical performance with standardized patients. JAMA Sept 3 1997; 278(9):790-791.
4. Colliver JA, Robbs RS, Vu NV. Effects of using two or more standardized patients to simulate the same case on case means and case failure rates. Acad Med. Oct. 1991; 66(10):616-618.
5. Colliver JA, Verhulst SJ, William RG, Norcini JJ. Reliability of performance on standardized patient cases: A comparison of consistency measures based on generalizability theory. Teaching and Learning in Medicine 1989; 1:31.

6. Colliver, J. A., Mast, T. A., Vu, N. V., Barrows, H. S. (1991). Sequential testing with a performance - based examination using standardized patients. Academic Medicine, 66, S64-S66.
7. Colliver JA. Status of standardized patient assessment series. Teaching and Learning in Medicine 15(4):226, 2003.
8. Colliver JA, Swartz MH, Robbs Review of systems, et al. The effect of using multiple standardized patients on the inter-case reliability of a large-scale standardized patient examination administered over an extended testing period. Acad Med. October 1998;(10 Supple) S81-83.

Contact Information: Phone (217) 545-4967 **http://www.siumed.edu/adraf/rprofiles/Colliver.html**

Andre F. De Champlain, Ph.D., Senior Psychometrician at the National Board of Medical Examiners.

Brief History: Andre De Champlain, PhD obtained his Ph.D. in Educational Statistics, Measurement, & Evaluation from the University of Ottawa in 1992. His is currently Senior Psychometrician at the National Board of Medical Examiners. His main areas of interests are focused in the application and adaptation of psychometric/statistical methods and models to performance assessments in medical education (e.g. OSCEs and SP exams), including scoring models, standard setting approaches, etc. Additionally, Dr. De Champlain has an interest in validation research as it applies to high-stakes medical licensing examinations.

Publications:

1. MacMillan MK, De Champlain AF, Klass DJ. Using tagged items to detect threats to security in a nationally administered Standardized Patient examination. Acad Med. Oct 1999; 74(10 Suppl):S55-57.
2. A. De Champlain. Further discussion of standardized patient checklists and videotaped performances (Letter). Acad Med. 2000; 75:316-317.
3. Klass D, De Champlain A, Fletcher E, King A, et al. Development of a performance-based clinical skills for the United States Medical Licensing Examination. Bull. 1998; 85:177-181.
4. De Champlain AF, Macmillan MK, Margolis MJ, et al. Do discrepancies in standardized patients' checklist recording affect case and examination mastery-level decisions? Acad Med. Oct. 199873(10 Suppl) S75-77.
5. De Champlain AF, Margolis MJ, King A, et al. Standardized patients' accuracy in recording examinees' behaviors using checklists. Acad Med. Oct. 1997; 72(10 Suppl 1):S85-87.

6. De Champlain AF, Margolis MJ, Macmillan MK, et al. Predicting mastery level on a large scale standardized patient test: a comparison of case and instrumented-score based models using discriminant functional analysis. Adv Health Sci Educ Theory Pract.2001; 6(2):151-158.
7. Champlain AF, Macmillan MK, Margolis MJ, et al. Modeling the effects of a test security breach on a large-scale Standardized Patient examination with a sample of international medical graduates. Acad Med. Oct 2000; 75(10 Suppl):S109-111.
8. McMillan MK, Fletcher EA, Champlain AF, Klass DJ. Assessing post-encounter note documentation by examinees in a field test of a nationally administered Standardized Patient test. Acad Med. Oct 2000; 75(10 Suppl):S112-114.
9. Margolis MJ, De Champlain AF, Klass DJ. Setting examination-level standards for a performance-based assessment of physicians' clinical skills. Acad Med. Oct 1998; 73(10 Suppl):S114-116.

Contact Information: National Board of Medical Examiners, 3750 Market Street, Philadelphia, PA 19104-3102. Telephone (215) 590-9500. **webmail@nbme.org**

Jack Ende, M.D., Professor of Medicine, University of Pennsylvania Health System,
Penn Center for Primary Care, Philadelphia, PA. Administrative Appointment: Chief, Medicine, Penn Presbyterian Medical Center Practice.

Brief History: He began his career at Boston University School of Medicine where he became involved in medical education, first as Director of Medical Student Education, and then as Residency Training Program Director for the Department of Internal Medicine. Dr. Ende developed systems for training medical students and residents in outpatient sites. In 1996 Dr. Ende became Professor of Medicine, and in 1997 he assumed his current position as Chief of Medicine at the University of Pennsylvania Medical Center-Presbyterian. In addition to his administrative duties, He has provided national leadership in internal medicine education as President of the Association of Program Directors in Internal Medicine, as Section Editor of the primary care syllabus for the American College of Physicians' MKSAP XI, Associate Editor for MKSAP XIII, and as Editor of the Federated Council for Internal Medicine's Resource Guide to Curriculum Development. Dr. Ende currently serves on the Editorial Board of Academic Medicine and Teaching and Learning in Medicine, and represents Internal Medicine on the Primary Care Organizations Consortium Steering Committee.

Publications:

1. Ende J. Feedback in clinical medical education, JAMA. 1983; 250:777-781. An often-quoted review of the importance of feedback.
2. Arnold RM, Fox E and Green MJ. Medical Ethics. In: Ende J, Kelley MA, Ramsey PG, Sox HS. Graduate Education in Internal Medicine: A Resource Guide to Curriculum Development. The report of the FCIM Task Force on the Internal Medicine Residency Curriculum pp. 28-30, 1997.
3. Ende J, Davidoff F. What is a Curriculum? Ann Intern Med. 1992; 116:1055-1057.

Contact Information: (215) 662-9990.

Lisa D. Howley, PhD Educational Psychologist , Consultant, and Adjunct Professor, University of North Carolina at Charlotte

Brief History: Dr. Howley is an Educational Psychologist with over 10 years experience in the field of medical education and standardized patients. Her current research focuses on the development of authentic and student-centered instruction and performance-based assessments in adult professional education. She currently provides consulting services to educational programs and teaches graduate courses across disciplines in educational research, statistics, evaluation, testing and assessment. From 2002 to 2005, Dr. Howley served on the faculty of the University of North Carolina at Charlotte, as Assistant Professor of Educational Research. Prior to this appointment, Dr. Howley was the Director of the Clinical Skills Training and Assessment Program at the University of Virginia's School of Medicine. In this role, from 1994 to 2003, she developed, administered, and evaluated standardized patient programs for medical, nursing and allied health curricula, including health literacy communication materials. Dr. Howley's doctorate in Educational Psychology was granted in 1999 from the University of Virginia and emphasized instructional design, research, and evaluation. She currently serves on the Board of the Association of Standardized Patient Educators.

Publications:

1. Howley LD, Simons DF, Murray JA. Focusing feedback on interpersonal skills: A workshop for Standardized Patients, 3rd edition, unpublished training manual, 2005.

2. Howley LD, Martindale J. The efficacy of standardized patient feedback in clinical teaching: A mixed methods analysis. Med. Educ Online. 2004; 9:18.
3. Howley LD, Wilson WG. Direct observation of students during clerkship rotations: A multi-year study. Acad. Med 2004; 79(30276280).
4. Howley LD. Assessment of clinical competence in medical education: Where we've been and where we are going. Evaluation and the Health Prof. 2004, 27(3):285-303.

Contact Information: ldhowley@bellsouth.net

David Irby, PhD is Vice Dean for Education and professor of Medicine at the University of California, San Francisco's School of Medicine.

Brief History: In his leadership role, he directs the undergraduate, graduate and continuing medical education programs of the School of Medicine and the Office of Medical Education. He is most noted for his research on clinical teaching in medicine. Dr. Irby is also noted for his faculty development workshops that have been conducted nationally and internationally. He directs a year long, part-time Teaching Scholars Program at UCSF.

Publications:

1. Irby DM. What clinical teachers in medicine need to know. Academic Medicine 69:333-342, 1994. Overview of the knowledge domains required to teach clinical medicine in general: knowledge of the subject matter, learners, and principles of teaching and content-specific instruction.
2. Educational Innovations in Academic Medicine and Environmental Trends
David M. Irby, PhD, LuAnn Wilkerson, EdD. Journal of General Internal Medicine 2003; 18:370-376.
3. Irby DM, Aagaard E, Teherani A. Teaching points identified by preceptors observing one-minute preceptor and traditional preceptor encounters. *Academic Medicine* 2004; 79 (1): 50-55.
4. Irby D, Aagaard E, Teherani A. Teaching Scripts Used in Response to One Minute Preceptor and Traditional Preceptor Encounters. *Academic Medicine*. 2004; 79:50-55.
5. Irby D, Bowen J. Time-Efficient Strategies for Learning and Performance. *Clinical Teacher*. 2004; 1(1): 23-28.

6. Irby D, Cooke M, Lowenstein D, Richards B. The Academy Movement: A Structural Approach to Reinvigorating the Educational Mission. *Academic Medicine*. 2004; 79:729-736.
7. Irby D, Papadakis M. Does Good Clinical Teaching Really Make a Difference? Amer. J. Med. 110(3):231-232, 2001.
8. Pinsky L, Irby DM. "If at first you don't succeed": using failure to improve teaching. Acad Med. 1997 Nov; 72(11):973-976.

Contact Information: **irby@medsch.ucsf.edu**

Suzanne Kurtz, S.M. BA (Elizabethtown Coll), MA PhD (Denver) Professor of Communication, Faculty of Education. Dr. Kurtz is professor, Faculties of Education and Medicine and chair, Communication Program in Medicine, University of Calgary, Canada.

Brief History: Dr. Kurtz has focused her career on improving communication practices in health care and education and on developing curricula and methods for teaching and learning communication skills. She has worked with a variety of groups in the health care field, on both the national and international levels. She is co-author of such publications as "Teaching and Learning Communication Skills in Medicine," "

Publications:

1. Kurtz S, Laidlaw T, Makoul G, Schnabl G. Medical Education Initiatives in Communication Skills. Journal of Cancer Prevention and Control. Vol.3:1, February 1999: 37-45.
2. S.M. Kurtz, J.D. Silverman "The Calgary-Cambridge referenced observation guides: an aid to defining the curriculum and organizing the teaching in communication training programs." Medical Education 1996, 83-89.
3. Kurtz SM, Silverman JD, Draper J (1998) Teaching and Learning Communication Skills in Medicine. Radcliffe Medical Press (Oxford).
4. Silverman JD, Kurtz SM, Draper J (1998) Skills for Communicating with Patients. Radcliffe Medical Press (Oxford) Kurtz S, Silverman J, Benson J, Draper J (2003) Marrying Content and Process in Clinical Method Teaching: Enhancing the Calgary-Cambridge Guides Academic Medicine;78(8):802-809.
5. Kurtz S, Makoul G, Essential elements of communication in medical encounters. The Kalamazoo Consensus statement. Acad Med 76(4) 2001 (Essay).

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Gregory Makoul, Ph.D. Associate Professor and Director of the Program in Communication & Medicine at Northwestern University, where he oversees communication education for the Feinberg School of Medicine and communication research for the Division of General Internal Medicine.

Brief History: Dr. Makoul is a fellow of the Oxford Centre for Ethics and Communication in Health Care Practice and a member of Northwestern's Robert H. Lurie Comprehensive Cancer Center. His research, conducted both in the United States and England, focuses on communication, decision making, and health promotion in medical encounters, as well as communication skills teaching and assessment. He developed North America's most widely used model for teaching and assessing communication skills, and is on the editorial board of both Patient Education and Counseling and the Journal of Health Communication. Dr. Makoul serves as a research mentor for graduate students, medical students and fellows.

Publications:

1. Makoul G. 2001. The Framework for teaching and assessing clinical skills. (SEGUE, method - Give Information, Understand the patient perspective and end-encounter Communication). Patient Education and Counseling 45(1):23-24.
2. Kurtz S, Laidlaw T, Makoul G, Schnabl G. Medical Education Initiatives in Communication Skills. Journal of Cancer Prevention and Control. Vol.3:1, February 1999: 37-45.
3. Makoul G. Communication skills education in medical schools and beyond. MSJAMA 2003; 289-93. Mack and Grier. The day one talk. J. Clin Oncol 2004. 22:563-566.
4. G Makoul "Medical student and resident perspectives in delivering bad news." Academic Medicine 1998 S35-S37
5. Makoul G, Curry RH, Tang PC. The use of electronic medical records: communication patterns in outpatient encounters. J Am Med Inform Assoc. 2001 Nov-Dec; 8(6): 610-5.
6. Makoul G. Essential elements of communication in medical encounters: the Kalamazoo consensus statement. *Acad Med.* 2001; 76:390-393.

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Brian Mavis, Ph.D. Associate Professor, Director, Office of Medical Education Research and Development, Michigan State University School of Human Medicine, East Lansing, Michigan.

Brief History: Associate Professor, Office of Medical Education Research and Development, Michigan State University, 1999-present • Director, Office of Medical Education Research and Development, Michigan State University, 2004-present. Areas of research interest: performance-based competency assessment, educational program evaluation and medical student admissions. Teaching: social context of clinical decisions and interviewing skills.

Publications:

1. Mavis, B., Ogle, K., Lovell, K. & Madden, L. Medical students as standardized patients to assess interviewing skills for pain evaluation. Medical Education. 2002; 36: 135-140.
2. Mavis, B. & Henry, R. Between a rock and a hard place: Finding a place for the OSCE in medical education. Medical Education. 2002; 36(5): 408-409.
3. Henry, R. & Mavis, B. A strategy for developing educational evaluations for learner, course and institutional goals. Journal of Veterinary Medical Education. 2002; 29(3): 147-152.
4. Mavis, B. Fundamentals of evaluation in medical education. Session one of the series: Evaluation of student learning: A continuum. International Association of Medical Science Educators. Webcast audio seminar series: April 6, 2004.

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Brief History: Dr. Pangaro is also an instructor in the Department of Medicine at Georgetown University School of Medicine. Dr. Pangaro earned his undergraduate and medical degrees at Georgetown University. He completed his residency training and a fellowship in endocrinology at Georgetown University Hospital. Dr. Pangaro is a fellow of the American College of Physicians-American Society of Internal Medicine and he is a former president of the Clerkship Directors of Internal Medicine.

Publications:

1. Pangaro L. Investing in descriptive evaluation: a vision for the future of assessment. Med Teach.2000; 22:478 -81.
2. Evaluating development of professional skills: Vocabulary and method for the descriptive evaluation of students in clinical clerkship. Uniformed Services of the Health Sciences, Bethesda MA. (202-782-4923).
3. Pangaro L. A new vocabulary and other innovations for improving descriptive in-training evaluations. Acad Med. 1999; 74:1203-7.
4. Hemmer PA, Pangaro L. The effectiveness of formal evaluation sessions in better identifying students with marginal funds of knowledge. Acad. Med. 1997;72(7):641-643
5. Hemmer PA, Pangaro L. Can a descriptive evaluation system detect student growth during a clerkship? Using descriptive evaluation to detect student growth. Proceedings from Annual 2000 Meeting of the Clerkship Directors of Internal Medicine, Teach Learn Med, 13:199-205, 2001.
6. Battistone MJ, Milne C, Sande MA, Pangaro LN, Hemmer PA, Shoemaker TS. The feasibility and acceptability of implementing formal evaluation sessions using descriptive vocabulary to assess student performance on a clinical clerkship. Teach Learning Med 14(1): 5-10, 2002.

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Attending Physician, UWMC - Roosevelt, General Internal Medicine Center &WHCC, Division of General Internal Medicine.

Brief History: Education and training: M.D., University of Washington, Seattle, Washington, 1989, Residency in Internal Medicine Primary Care, University of Washington, Seattle, Washington, 1989-90, 1991-92, Residency in Family Medicine Residency, Providence Hospital, Seattle, Washington, 1990-91, Fellowship in Medical Education, University of Washington, Seattle, Washington, 1996-97. Honors - Society of General Internal Medicine, The National Award for Innovation in Medical Education, 1999; Innovative Teaching Award, UW Section of General Internal Medicine, 1997; Graduated high honors, U.W. Medical School (co-ranked first in class), 1989
Northwest Association of Physical Medicine and Rehabilitation Award, 1989;
Alpha Omega Alpha, inducted junior year, 1988. Current research interests, Evidence-based medicine, Cardiovascular risk factors, Physical diagnosis, Women's health, Faculty development in education and Feedback and evaluations.

Publications:

1. Pinsky L, Irby DM. "If at first you don't succeed": using failure to improve teaching. Acad Med. 1997 Nov; 72(11):973-976.
2. Pinsky LE, Monson D, Irby D: How excellent teachers are made: reflecting on success to improve teaching. Advances in Health Sciences Education, 1998; 3:207-215.
3. Pinsky LE, Deyo RA. Clinical guidelines: A strategy for translating evidence into clinical practice. In: Geyman J, Deyo R, Ramsey S, eds. Evidence-Based Clinical Practice: Concepts and Approaches. Woburn: Butterworth Heinemann, in press.
4. Gardner G, Pinsky LE, MD Perception and Attitude of Medical School Faculty toward Participation in University-Sponsored Continuing Medical Education. J Contin Educ Health Prof. 1999; 19(2):122-128.

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Armin Schubert, M.D. Cleveland Clinic Foundation, Cleveland Ohio. Department Chairman, General Anesthesiology; Committee on Overseas Anesthesia Teaching Program (Education and Research).

Publications:

1. Schubert A, Smith MP. Workshop: Oral practice examination in anesthesiology residences. Society for Anesthesia. October 1995.
2. Smith M, Schubert A, Ryckman JV. The effects of anxiety on oral practice examination. Society for Education in Anesthesia. May 1992.
3. Schubert A, Hull A, Tetzlaff J, Mauer W. Barnes A. Reliability and validity of anesthesiology "mock orals" during a three-year period. Anesthesiology 1992; 77:A1118.
4. Schubert A, Tetzlaff JE, Tan M, Ryckman J, et al. Consistency, inter-rater reliability, and validation of 441 consecutive mock oral examinations in Anesthesiology: Implications for use as a tool for assessment of residents. Anesthesiology 91(1):288-298, July, 1999.
5. Smith MP, Ryckman J, Schubert A: Level of subjective anxiety did not correlate to performance on oral examination (OPE). Society for Education in Anesthesia, Spring 1993.

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Paula Stillman, M.D., MBA, Christiana Health Care System, Department of Medicine, Newark, Delaware.

Brief History: While teaching pediatrics at the University of Arizona in the 1970s, Paula Stillman needed a reliable way to evaluate her students' clinical competence. Her solution was to train and use "patient instructors" or "standardized patients." Stillman's system is a competency based program, Objective Structured Clinical Evaluations (OSCE), developed to assess medical students, foreign medical graduates, and U.S. doctors in danger of losing their licenses. Her system has also been adopted by medical schools in China.

Publications:

1. Stillman PL, Sabers DL Using a competency-based program to assess interviewing skills of pedical house staff. J of Med Educ. 1978. 53:493-496.

2. Stillman PL, Burpeau-Di Gregorio MY, Nicholson GI, et al. Six years of experience using patient instruction to teach interviewing skills. J Med Educ. 1983; 58:941-5.
3. Stillman PL, Egan MB, Philbin M, Haley HL. Results of a survey on the use of standardized patients to teach and evaluate clinical skills. Academic Medicine 1990; 65:288-92.
4. Stillman P, Swanson D, Regan MB, et al. Assessment of clinical skills of residents utilizing standardized patients. A follow-up study and recommendations for application. Ann Intern Med 1991; 114(5):393-401.

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Robyn Tamblyn, Ph.D. Dr. Robyn Tamblyn is a Professor in the Department of Medicine and the Department of Epidemiology and Biostatistics at McGill University, Faculty of Medicine.

Brief History: Dr. Tamblyn is a Canadian Institutes of Health Research (CIHR) scientist and a McGill University William-Dawson scholar. She also holds a position as Medical Scientist at the McGill University Health Center Research Institute. She heads a CIHR-funded team to investigate the use of e-health technologies to support integrated care for chronic disease.

Publications:

1. Barrows H.S., Tamblyn R.N. Problem-based learning: An approach to medical education. New York. Springer Publishing Co., 1980.
2. Tamblyn, R., Klass, D., Schnabl, G. & Kopelow, M. (1990). Factors associated with the accuracy of standardized patient presentation. Academic Medicine, 65, S55-56.
3. Tamblyn R, Benaroya S, Snell L, et al. The feasibility and value of using patient satisfaction ratings to evaluate internal medicine residents. J Gen Intern Med 1994; 9:146-152.
4. Tamblyn R, Abrahamowicz M, Berkson L et al. First-visit bias in the measurement of clinical competence with standardized patients. Acad Med. 1992; 67(10 Suppl): S22-S24.
5. Martin JA, Reznick RK, Rothman A, Tamblyn RM, Regehr G. Who should rate candidates in an objective structured clinical examination? Acad Med. Feb 1996;71(2):170-175.

6. Tamblyn R. Schnabl G. Klass D. et al. How standardized are standardized patients? Proc Annual Conf Res Med Educ. 1988;27:168-153.
7. Tamblyn R, Abrahamowicz M, Scharch B, et al. Can standardized patients predict real-patient satisfaction with the doctor-patient relationship? Teach Learn Med 1994; 6:36-44.

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Cees van der Vleuten, MA, PhD, Dr. van der Vleuten is currently chair of the Department of Educational Development and Research of the Faculty of Medicine of the University of Maastricht in The Netherlands. He received an M.A. in Psychology (cum laude) from the University of Tilburg, Tilburg, and a Ph.D. in Education, University of Maastricht, The Netherlands.

Brief History: Dr. van der Vleuten is the recipient 2005 Hubbard Award from the NBME. The award is given to individuals recognized as making significant contributions to the pursuit of excellence in the field of evaluation in medicine. Dr. van der Vleuten has made outstanding contributions to the field of evaluation in medicine. An internationally known and highly respected researcher and scholar, his research has advanced assessment of medical knowledge in a variety of unique formats. Dr. van der Vleuten has helped medical schools around the world improve assessment, especially by making the concepts and principles of assessment understandable to educators around the world. He has contributed substantially to the development of evaluation methods and has helped to improve the quality of both individual assessment and program assessment

Publications:

1. van der Vleuten CPM, Swanson DB. Assessment of clinical skills with standardized patients: State of the art. Teaching and Learning in Medicine. 1990;2(2):58-76.
2. van der Vleuten, C. Making the best of the “long case”. Commentary. Lancet Vol. 347, Issue 9003. 1996, 704-705.
3. Wass D, van der Vleuten, Shatzer J. et al. Assessment of clinical competence. Lancet. Issue 357, Vol 9260. 2001, 949-949.
4. Schuwirth L, van der Vleuten C: Merging views on assessment. (Editorial) AACOM, Dec. 2004. 38:12, 1208-1210.

5. Ram P, van der Vleuten C, Rethans JJ, Grol R, Aretz K. Assessment of practicing family physicians: comparison of observation in a multiple-station examination using Standardized Patients with observation of consultations in daily practice. Acad Med. Jan 1999; 74(1):62-.
6. Wass V, Jones R, Van der Vleuten C: Standardized patients or real patients to test clinical competence? The long case revisited. Med Ed 2001, 35:321-325.

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FEEDBACK SURVEY

Association of Standardized Patient Educators (ASPE) Project Award "Training Standardized Patients to Give Feedback to Medical Trainees: The State of the Art"

Patti Hatchett, B.S. PI; Carolyn Haun, B.S.; Linda Goldenhar, Ph.D. Consultant
University of Cincinnati College of Medicine, Department of Education
Center for Clinical Development and Assessment

Who trains/evaluates your standardized patients, Faculty, Clinicians, SP Trainers (staff), SP Instructors (SPIs), Other, please be specific.	
What criterion/credentials are used to select standardized patient trainers?	
To what degree do clinicians and/or faculty provide input into how standardized patients are trained to provide feedback?	

What are the clinicians' and/or faculty goals, objectives and expected outcomes in providing feedback to their students?	
Do these goals, objectives and expected outcomes differ from those of the standardized patient trainers? If so, please describe these differences.	
Please indicate each scenario in which SP or SPI feedback is provided: interview only; physical exam only; interview and physical exam combined; teaching sessions; practice sessions; testing sessions; other	
What, if any, type of feedback do your standardized patients provide? **Verbal** – i.e. provided directly to the learner during or following the exercise **Written** – i.e. provided via written report following the exercise **Corrective** – i.e. including information pointing out the learners' improper performance of techniques **Instructive** – i.e. including information pointing out the proper performance of techniques **Reflective** – i.e. including information on how the feedback provider felt about the learner's performance and what they perceived as a patient in that person's care **Formative** – i.e. provided during or following the educational exercise for growth **Summative** – i.e. provided during or following testing experiences for skills assessment **Other** – please describe.	
Please site the source of your training methods, if any. Please give complete information regarding the source	

reference. (I.E. Article, website, textbooks, handbooks, videos, web-based learning, other, please be specific.)	
How do you assess the degree to which your standardized patients are complying with the feedback procedures? (For example, self monitoring via video and/or checklist review; peer monitoring via real time and/or video review; trainer and or clinician monitoring via real time and/or video review; corrective feedback; student response regarding feedback received; combination of above or other, please be specific.)	
If you do assess compliance, what type of remediation is provided if standardized patients are not compliant? Please describe in detail. **If they are compliant, please describe how you reward this behavior.**	
Do you gather/measure the students' reactions and/or perceived behavior changes as a result of the standardized patient feedback? If so, how is it done?	
If feedback is given by both faculty and SP/SPIs, do you gather any data to compare outcomes such as student reactions or behavior changes? If so, how is this done?	
To what end is the data gathered? Will the data be shared? (I. E. for program improvement, standardized patient education, faculty and/or clinician education, research or other.)	
Please describe any specific future plans or directions you have for your standardized patient program feedback training efforts.	

What, if any, limitations do you foresee in moving in the direction you have chosen?	
Additional comments or suggestions or pearls of wisdom:	