

## THE BREADTH AND DEPTH OF STANDARDIZED PATIENTS IN THE TEACHING AND ASSESSMENT OF CLINICAL SKILLS

**Gayle Gilva-McConvey**  
Sentara Center for Simulation & Immersive Learning  
Eastern Virginia Medical School

**Heidi A. Lane**  
Virginia Tech Carilion School of Medicine

**Carrie Bohnert**  
University of Louisville School of Medicine



## Quick Survey

- Do you currently work with SPs?  
Yes  
No
- How do you use SPs?  
Teaching  
Assessment  
Do not use



## 1960



### Howard meets Sam

- *“Don’t worry, I fixed him – I put my Babinski on the other foot and changed my sensory findings.”*

## 1963



Dr. Howard Barrows – need for a reproducible and realistic experience for his neurology students

“Hollywood Invades USC Medical School”...scantly clad models are making life a little more interesting for the USC medical students

The First article: **The Programmed Patient: A Technique for Appraising Student Performance in Clinical Neurology in the journal of Medical Education**

## 1964

## Late 1960s

### The Original Definition

A person who has been carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled clinician.

In performing the simulation, the SP presents the “gestalt” of the patient being simulated, not just the history but the body language, physical findings and the emotional and personality characteristics as well.

-HS Barrows

- **Task:**
  - Portray the patient
  - Provide feedback (patient eyes)

## 1972



Dr. Paula Stillman – need for an assessment model

Standardizes mothers in the pediatric setting who complete checklists on

- content (what questions were asked)
- process (how questions were asked)

Calls them “paraprofessionals”

## 2 Theologies Collide

Dr. Barrows



- Reform Medical Curriculum: looking for alternatives
- Clinical reasoning: integrating cognitive learning and practical experience
- Patient centered feedback
- Use simulated patients with checklists from (patient's eyes)

Dr. Stillman



- Improve traditional educational methods
- Concrete behaviors, basic skills, thoroughness
- Structured feedback instruments & Checklists
- Use real patients as instructors

1980-  
1990

- Early 1980s Geoff Norman introduces the term "Standardized Patients"
- 1980 **OSCEs** continue to grow globally and in numerous disciplines
- 1987 Jan-Joost Rethans reports the use of SPs as **unannounced patients** in the Netherlands
- 1990 **National Board of Medical Examiners** starts research for national licensure exam: reliability, validity, feasibility, generalizability

1992-  
2004

- 1992 **Medical Council of Canada** implements national licensure exam
- 1998 **Educational Commission for Foreign Medical Graduates** (ECFMG - US) implements an assessment
- 2001 **Association of Standardized Patient Educators** Organized
- 2004 **National Board of Medical Examiners** (NBME) USMLE Step 2 CS goes live

### Fact or Myth?

SPs are trained only to portray patients to respond to specific words/phrases.

### Fact or Myth?

SPs are trained only to portray patients to respond to specific words/phrases.

- SPs are trained to pace information according to learning objectives
- SPs react to student questions and behaviors

### Fact or Myth?

Communication Feedback is from the patient perspective and requires training.

## Fact or Myth?

Communication Feedback is from the patient perspective and requires training.



## SP Feedback

- Definition:
  - "... provides the learner with powerful and undeniable information about the impression he or she left with that individual.
  - ...unique and valuable information about how [Learner] actions behaviors and communication techniques affected the SPs' emotional experience, trust, and understanding of information exchanged.
- Purpose
  - "... the SP's feedback fills a critical educational role in the interpersonal and affective domains".

Berenson et al., 2012

## Training SPs to give Communication Feedback

- SPs provide feedback as proxy reinforcing specific communication techniques: i.e. –"Closure"
  - ✓ *"When we think of closure, we think of **what, what, when**. As this patient, I was clear **what** you were going to do - that you were going out to order tests. I knew **what** I was going to do - to get dressed and wait for you to return. To strengthen your closure you may want to talk about **when** our next appointment should be made to review the test results."*
- SP speaks in first person from patients perspective:
  - ✓ *"When you asked me about my sexual partners I noticed that you stopped making eye contact with me and kept looking at your watch and sighing, so I felt unheard."*

## Fact or Myth?

SP Ratings are the same as Real Patients

## Fact or Myth?

SP Ratings are the same as Real Patients

Fiscella et al: Unannounced SPs and Real Patients rating of physician communication style differ and provide different information. (2007)

- USPs have better psychometric properties than real patients
- Real Patient ratings are based on a cumulative experience with Doctors/nurses that they have selected to stay in the practice.

## Fact or Myth?

You have to be a doctor to grade a student.

## Fact or Myth?

You have to be a doctor to grade a student.

- Studies showed that SPs are:
  - less biased when trained to score from a rubric
  - have less need to "interpret" rubric
- and
  - Interrater reliability between SPs (.80 - .93) is better than between physicians (.51 - .68)

## Fact or Myth?

SPs are less accurate than Faculty/Teachers completing checklists

## Fact or Myth?

SPs are less accurate than Faculty/Teachers completing checklists

- Studies have reported that SP with **only limited** training reliably evaluated 83% of the same clinical skills that were evaluated by faculty physicians. With training – 95%.
- Interrater reliability between physicians and SPs have reported at .80+

## Fact or Myth?

SPs are expensive

## Fact or Myth?

SPs are expensive

- SP and/or Physical Teaching Associates can reduce faculty time and cost greatly
- Savings may range from \$30,000 to \$100,00+

## Fact or Myth?

*Because it is a simulation, it is OK to make last minute changes*

## Fact or Myth?

*Because it is a simulation, it is OK to make last minute changes*

- It's inappropriate to make last minute changes to cases, checklists, or any other elements of the simulation without some impact to the experience and the learning objectives.

## Definitely Myths:

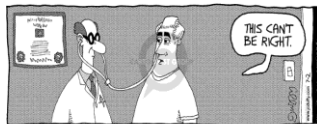
- "I'm a patient (or health professional ) so I am qualified to be an SP."
- "Oh I have a crazy aunt who would be perfect for this."
- Among actors: it's "just like any other acting job."
- "This work is easy because it doesn't involve any experience or training."
- I want to "teach those stupid students a lesson." (*yikes...*)
- If you hire doctors they will need less training

## 1975



Paula trains the first Physical Examination Instructor

- Physical Examination Teaching Associates/Instructors (PTA)



## PTA or PETA

- Physical Examination Teaching Associates are individuals who are specifically trained to teach, assess, and provide feedback to learners about thorough and comprehensive physical examination techniques. They also address the communication skills needed to provide a comfortable exam in a standardized manner, while using their bodies as teaching tools in a supportive, non-threatening environment.

## The Living Body as Teaching Tool

- Studies reported faculty reliably assessed 68% of the skills, PTA reliably assessed 83% of the skills.
- There was no significant difference in student performance on an OSCE when taught by physicians or PTAs
- One report found complaints by hospitalized patients about medical student examinations dropped from 1.6 per six weeks to zero following introduction of PTAs to the curriculum

## MUTA/GTA

Male Urogenital or Gynecological Teaching Associates are men or women who are specifically trained to teach, assess, and provide feedback to learners about accurate urogenital and rectal or pelvic, rectal and breast examination techniques. They also address the communication skills needed to provide a comfortable exam in a standardized manner, while using their bodies as teaching tools in a supportive, non-threatening environment.



ASPE

## Non-Traditional roles of the SP in Communication



## Non-traditional roles of the SP in Teaching/Assessment

- Procedures
  - Suturing
  - Ultra Sound
  - Scrubbing
- Patient Notes
- Hand-offs
  - Transfer of Care
  - Verbal and non-verbal
  - Reporting

## The SP Re-defined

Individuals who are trained to portray role in a realistic, standardized and repeatable way (where portrayal/presentation varies based only on learner performance).

SPs can be used for teaching and assessing and to give feedback on learner techniques.

- Tasks
  - Realistically Portray the role
  - Observe and document performance
  - Provide patient perspective in feedback
  - Provide structured feedback in communication techniques
  - Provides technical teaching

## SO - What's in a name?

- Programmed Patient
- Simulated Patient
  - Pretend Patient
  - Surrogate Patient
  - Practice Patient
  - Fake Patient
- Role Players
  - Confederates
  - Embedded Participant
- Patient Instructor
  - Teaching Associate
  - Standardized Patient Instructors
- Standardized Patient
  - Patient actor
  - Medical Actor
  - Unannounced Patient



## Drawbacks and Benefits

- James Tulsy suggested one time that we need to remember that the worst thing about simulation is that it's not real, and the best thing about simulation is that it's not real.
- Using Simulated Portrayals in training health care professionals is an empirically verified method of teaching. If one cannot demonstrate this in a simulated environment with no risk to the learner except making visible the deficiencies in their skills in order to correct and practice them, then,
  - what faculty in their right mind would permit the learner access to a real patient where all kinds of unintentional consequences can occur?

## Bibliography of SP Research

- Karen Szauter, MD  
University of Texas Medical Branch - Galveston

[http://www.utmb.edu/ocs/Bibliography/sp\\_](http://www.utmb.edu/ocs/Bibliography/sp_)

## Questions



## Thank you



Gayle Gliva-McConvey  
givaga@evms.edu



Heidi Lane  
[halane@carilionclinic.org](mailto:halane@carilionclinic.org)



Carrie Bohnert  
carrie.bohnert@louisville.edu

## Resources for Training

Association of SP Educators

<http://www.aspeducators.org/>

ASPE – Singapore, November 18-20, 2016

ASPE – Alexandria, VA, June 4-7, 2017

SP Course: Maastricht University

<https://she.mumc.maastrichtuniversity.nl>

Maastricht, Netherlands, April 5-7, 2017

Standardized Patient Trainer Listserv [sp-trainer@u.washington.edu](mailto:sp-trainer@u.washington.edu)

## References

- The Use of Paraprofessionals to teach interviewing skills. Stillman PL, Sabers De, Redfield BM, Pediatrics 1976
- Communication between nurses and SPs with cancer: evaluation of a communication training program, Kruijver IP, Kerkstra A et al, European Journal of Oncology Nursing 1977
- The Use of Practical Instructors to Evaluate a Complete Physical examination, Still PL, Ruggil JS, Savers D, 1978
- The use of instructor-Patients to teach Physical Examination, Anderson, KK, Neer TC, Journal of Medical Education, 53(10): 831-836 1978
- An Objective Method of Assessing Physical Examination skills of Nurse Practitioners, Journal of Nursing Education, Stillman PL, Levinson D, Janneruggil, 18(3) 31-32 1979
- A comparison of Resident Performance on Real and Simulated Patients. Norman GL, Tugwell P, Feightner, J. Journal of Medical Education, Vol 57 708-715, Sept. 1982

## References

- SPs in general practice: a different look at the consultation, Rethans, JJ, van Boven CPA, British Journal of Medicine 1987
- Teaching Foundational Physical Examination Skills; Study Results Comparing Lay Teaching Associates and Physician Instructors, Academic Medicine, Barley G, Fisher J, Dwinnell B, Wite K, 81(10 Suppl): S22-25. 2006
- Ratings of Physician Communication by Real & Standardized Patients. Fiscella k, Franks, P et al. Annals of Family Medicine 2007
- Use of SPs for Teaching & Assessing Clinical Skills David Swanson (NBME and Pauls Stillman UMASS\_ Evaluation & the Health Professions vol 13 No 1 march 1990 79 – 103