



# Training Housestaff to Open Interviews with Patient-Centered Strategies: Housestaff Perception and Effects on Patient Experience



YALE-NEW HAVEN HOSPITAL

Oladoyin A. Oladeru, MPH<sup>1</sup>; Musleehat Hamadu, MPH<sup>1</sup>; Paul D. Cleary, PhD<sup>1</sup>; Adam B. Hittelman, MD, PhD<sup>2,3</sup>; Simon P. Kim, MD<sup>2,3</sup>; Ketan R. Bulsara, MD<sup>2,3</sup>; Maxwell S.H. Laurans, MD, MBA<sup>2,3</sup>; Daniel B. DiCapua, MD<sup>2,3</sup>; Evie Marcolini, MD<sup>2,3</sup>; Jeremy J. Moeller, MD, FRCPC<sup>2,3</sup>; Babar Khokhar, MD, MBA<sup>2,3</sup>; Jeannette Hodge<sup>3</sup>, Auguste H. Fortin, MD, MPH<sup>2,3</sup>; Janet P. Hafler, EdD<sup>2</sup>; Michael C. Bennick, MD<sup>2,3</sup>; David Y. Hwang, MD<sup>2,3</sup>

<sup>1</sup>Yale School of Public Health, New Haven, CT; <sup>2</sup>Yale School of Medicine, New Haven, CT; <sup>3</sup>Yale-New Haven Hospital, New Haven, CT

## OBJECTIVES

- To assess whether a novel educational initiative for housestaff that teaches patient-centered strategies for opening medical interviews via role-playing exercises:
  - (1) is well-received, and
  - (2) improves the patient experience in resident clinics and inpatient wards.

## BACKGROUND

- While many medical schools emphasize communication skills training for students, training in patient-centered communication for busy housestaff has received less attention.
- Few studies have examined the impact of such training for housestaff on patient experience survey results.

## METHODS

- Collaborative, prospective pre-post intervention study within Yale Departments of Neurology, Neurosurgery, and Urology
- From February-April 2014, housestaff each participated in a two-hour educational session centered on 5 strategic steps to open a patient-centered interview (Fig 1)
- Each session combined didactic lecture and instructional video with small-group sessions to practice skills via role-playing exercises, using department-specific cases (Fig 2)
- Housestaff were surveyed after each session regarding their perception of the program
- Both before (January-February 2014) and after (June-July 2014) the educational intervention period, responses to patient-doctor communication questions from the following patient experience surveys were collected, from the 3 departments:
  - CG-CAHPS in outpatient resident clinics
  - HCAHPS from inpatient wards
- Chi-square test used to compare top-box responses and examine pre-post differences

## RESULTS

- Forty-four of 45 possible residents (97.8%) participated in the intervention.
- A majority (70.5%) of residents indicated on the post-training survey that the role-playing exercise increased their perception of the 5-step strategy.
- There were no significant differences in patient responses to outpatient survey items between the pre- and post-intervention period (Fig 3).
  - The pre- and post-intervention outpatient groups did not differ with regards to distribution of gender, age, educational level, and race.
  - Response rate to the outpatient surveys were similar during the pre- (63/122, 52%) and post-intervention (77/157, 49%) periods ( $p = 0.71$ ).
- Similarly, there were no significant differences in patient responses to inpatient survey items between the pre- and post-intervention period.
  - These findings included an item about how often doctors listened carefully (pre-intervention "Always" responses = 84.1%; post 81.6%,  $p = 0.32$ ).
  - Response rates to inpatient surveys were approximately 20%.

**Figure 1.** The 5-step step method for opening patient-centered interviews (Smith, 2002) that was taught to housestaff, with image taken from instructional video.



- SET THE STAGE FOR THE INTERVIEW**
  - Welcome the patient.
  - Use the patient's name.
  - Introduce self and identify specific role.
  - Ensure patient readiness and privacy.
  - Remove barriers to communication.
  - Ensure comfort and put the patient at ease.
- ELICIT CHIEF CONCERN AND SET AGENDA**
  - Indicate time available. (e.g., "We've got about 20 minutes together today...")
  - Indicate own needs. (e.g., "...and I see that we need to review the blood tests you had done yesterday...")
  - Obtain list of all issues patient wants to discuss; specific symptoms, requests, expectations, understanding. (e.g., "...but before we do that, it would help me to get a list of other things you wanted to discuss today." "Is there something else?")
  - Summarize/finalize the agenda; negotiate specifics if too many agenda items. (e.g., "You mentioned 8 things you were hoping to cover. In the time we have together today, I don't think we can tackle them all. Can you tell me which two are most troublesome for you; we'll do a good job with those and I'll see you back soon to address some of the others.")
- USE NON-FOCUSING SKILLS THAT HELP THE PATIENT TO EXPRESS HER/HIMSELF**
  - Start with open-ended request/question. ("Tell me about your headache.")
  - Use nonfocusing open-ended skills (attentive listening): silence, neutral utterances, nonverbal encouragement.
  - Obtain additional data from nonverbal sources.
  - Nonverbal cues, physical characteristics, accoutrements, environment, self.
- USE FOCUSING SKILLS TO LEARN 3 STORIES**
  - Elicit Symptom Story.
    - Description of symptoms, using focusing open-ended skills such as:
      - Echoes (repeat the patient's words, e.g., "Excruciating pain?")
      - Summaries ("First you had a fever, then two days later your knee began to hurt, and yesterday you began to limp.")
      - Requests ("That sounds important; can you tell me more about it?")
  - Elicit Personal Story.
    - Broader personal/psychosocial context of symptoms, patient beliefs/attribution, again using focusing open-ended skills.
      - (E.g., "How has this affected you?" "What did you think might be going on?")
  - Elicit Emotional Story.
    - Ask emotion-seeking questions.
      - Direct: "How are you doing with this?" "How does this make you feel?"
      - Indirect: "What has your knee pain been like for your family?"
  - Respond with words that empathically address the emotion (NURS).
    - Name: "You say being disabled by this knee pain makes you angry."
    - Understand: "I can understand your feeling this way."
    - Respect: "This has been a difficult time for you. You show a lot of courage."
    - Support: "I want to help you to get better."
  - Expand the Story.
    - Repeat cycle for each major concern/problem.
- TRANSITION TO MIDDLE (DOCTOR-CENTERED) PHASE OF THE INTERVIEW**
  - Brief summary.
  - Check accuracy.
  - Indicate that both content and style of inquiry will change if the patient is ready. ("I'm going to switch gears now and ask you some questions to better understand what might be going on.")
  - Continue with middle of interview.

## LIMITATIONS

- No control group in pre-post design
- Short timeframe
  - One-time educational intervention
  - Patient data only collected for two months pre- and post-intervention
- Ceiling effect with regards to high pre-intervention patient experience scores in outpatient clinics
  - However, national percentile data do show room for improvement

**Figure 2.** An example of a case from the role-playing exercises through which housestaff practiced the 5-step method in small groups. For each exercise, one resident played the "doctor," one resident played the "patient," and one resident was an observer tasked with giving the "doctor" feedback. Cases were department-specific, such as the neurology / neurosurgery case below. Residents rotated through all roles during their sessions, using multiple cases.

Information given to the resident playing the "doctor":	Instructions given to the resident playing the "patient":
<p>Mr./Ms. Smith is a right-handed 50-year-old who presented to the ED with 1 month of headaches and a new onset of brief generalized tonic-clonic seizure earlier today at work. In the ED, the patient returned to his/her neurologic baseline and underwent a head CT, which revealed a single 2cm right parietal intracranial mass with vasogenic edema but no midline shift. The patient was already given the news by the ED staff and neurology/neurosurgery consult teams that he/she has a brain mass, but he/she does not yet know what the plan is.</p> <p>PAST HISTORY Hypertension, depression</p> <p>MEDICATIONS Atenolol, citalopram</p> <p>SOCIAL HISTORY Patient is married; lives with spouse and 17-year-old daughter. Works as an accountant. No smoking or ETOH history.</p> <p>PHYSICAL EXAM Afebrile with normal vital signs; no clear deficits on neuro exam at this time.</p> <p>DATA Normal labs, with Cr = 0.9. CXR is clear.</p> <p>TASK You are the first resident from the inpatient team to meet the patient, who is in the ED and awaiting a bed. In theory, you would have a total of 20 minutes to meet the patient, confirm what you've been told above, and explain to the patient the plan moving forward (e.g., admission to the hospital, steroids, levetiracetam, brain MRI). However, for this abbreviated 5-10 minute exercise, your primary goals are simply to meet the patient and (1) set the proper stage for the interview; (2) elicit the patient's chief concern and set agenda items for discussion; (3) begin the interview with open-ended questions, focusing on symptoms; (4) elicit context regarding the psychosocial/emotional situation; and (5) transition smoothly to the "doctor-centered" phase.</p>	<p>You are Mr./Ms. Smith. You are a 50-year-old accountant. You have had new onset headaches for 1 month and passed out at work this morning. You awoke in the ED and are back to normal. The ED staff has told you that you had a seizure and that your head CT shows a brain mass on the right side of your brain. Your spouse and 17-year-old daughter were in the room with you when you heard the news but have just stepped out. The admitting resident is now coming to speak to you. You are visibly shocked over the news and anxious.</p> <p>THINGS ON YOUR MIND YOU WANT TO DISCUSS WITH THE DOCTOR</p> <ul style="list-style-type: none"> <li>What the results of the head CT mean</li> <li>Whether you need to be admitted to the hospital</li> <li>Whether you need surgery</li> <li>Whether you can drive in the future ("I've been told that folks with seizures can't drive!")</li> </ul> <p>YOUR INITIAL SYMPTOM HISTORY "One month ago, I started to get headaches, even though I've never had headaches before. Initially they would come and go, but then they got more persistent—a pounding feeling that wouldn't go away, no matter what I did. I thought perhaps they were due to stress, since life has been crazy recently. My wife/husband just stepped out of the room, but he/she can tell you too just how busy things have been. This morning I was at work at my desk and must have blacked out, because I woke up to find myself here. People told me that I had a seizure, which I've never had before in my whole life. I was shocked to hear about the brain mass because I've been otherwise healthy throughout my life—just some high blood pressure and some mild depression, both of which have been well treated by my family doctor."</p> <p>The script above is to provide you with initial answers to your doctor's open-ended questions regarding your symptoms and personal/emotional context. Feel free to expand on what is written above as appropriate.</p>

**Figure 3.** Outpatient responses to CG-CAHPS survey items related to doctor communication, collected from resident clinics. The "Pre-test" column represents data from January-February 2014 before the educational intervention for housestaff, whereas the "Post-test" column represents data from June-July 2014, after the intervention. Percentages represent those patients giving the highest rating for each respective survey item (i.e., top-box). The percentiles from the national CAHPS database that these percentages represent are given as a reference.

Survey Item (Outcome Top Category Response)	Pre-test n = 63	2013 CAHPS National Percentile n=428,154*	Post-test n = 77	2013 CAHPS National Percentile n=428,154*	P-value
<b>Doctor's Communication</b>					
Provider explained things in a way that was easy to understand (Yes)	93.7%	60	92.1%	50	0.15
Provider listened carefully (Yes)	93.7%	50	90.9%	25	0.34
Spoke to provider about health questions or concerns (Yes)	90.5%	25	92.2%	50	0.95
Provider gave easy to understand information about health questions or concerns (Yes)	93.3%	75	85.9%	<25	0.73
Provider showed respect for what I had to say (Yes)	92.1%	<25	96.0%	60	0.74
Provider spent enough time (Yes)	93.7%	60	90.7%	25	0.50
Recommend provider's office to family and friends (Definitely Yes)	90.5%	>90	92.1%	>90	0.79
Share thoughts on experience in resident clinics (Positive experience)	79% (n=33)	N/A	76% (n=51)	N/A	0.39

## CONCLUSIONS AND FUTURE DIRECTIONS

Residents strongly supported an interdepartmental, role-playing educational program highlighting a 5-step strategy for opening patient-centered interviews. The inability to demonstrate improved patient experience due to the program may be related to limitations noted above. Implementing recurring training, conducting observed real-life patient encounters with one-on-one feedback, and extending the duration of patient experience data collection may help uncover evidence of patient experience improvement during future project iterations.

## ACKNOWLEDGEMENTS

- We thank Rosemarie Fisher and Jack Contessa for their help with training our faculty preceptors.
- We thank the Yale Departments of Neurology and Urology for funding.