Table1
Development of the OSTE

PROCESS	OUTCOME
1. Conduct planning meetings.	Goals of evaluation established; basic structure and content of OSTE determined; constraints identified; item writing material developed.
2. Conduct item writing workshops.	OSTE case materials, including case scenarios and scripts for student/patient simulations, and instructions for students for student/preceptor interactions.
3. Select and edit cases	Final material for eight cases covering a variety of common patient illnesses and student characteristics
4. Recruit Standardized Patients (SPs) and Standardized Students (SSs)	Eight patients and twelve students agree to participate
5. Practice and videotape student/patient interactions to be used in OSTE	Multiple videotapes of eight different student/patient scenarios; most students videotaped in at least two different scenarios, multiple times
6. Review videotapes	Five best cases selected; student-case assignments determined including back-ups
7. Pilot session I	Five faculty volunteers participate in pilot OSTE; Students practice being "in role" and using checklists
8. Review pilot session tapes and results	Checklist modified; logistical problems identified and possible solutions generated
9. Pilot session II	Additional faculty volunteers participate in a second pilot; solutions to logistical problems tested, student performances improved, checklist revisions tested
10. Student training with final version of checklist using transcripts and videotapes of student/preceptor encounters from pilot sessions.	Students are competent in applying scoring guidelines. Discrepancies are addressed and resolved. Final preparations for "going live" are complete.

Table 2
Development of the Paper and Pencil Test

PROCESS	OUTCOME
1. Conduct planning meetings	Goals of evaluation established; structure and content of paper/pencil test set; item writing materials for multiple choice items developed.
2. Conduct item writing workshops	Six scenarios including background information and short dialogs between students and patients, followed by several multiple choice items
3. Item review and editing for uniform formatting and compliance with item writing guidelines for multiple choice items	Scenarios and test items in uniform format
4. Pilot items with expert faculty	Problematic items and distractors identified
5. Review and revise items and distractors	Agreement on final versions of items and correct responses

Table 3
The OSTE Process

Student ->			Discuss encounter. Preceptor provides feedback, student stays in character	Rewinds tape	Completes checklist and rating scales for last encounter
Preceptor ->	Views tapes of student-patient encounter	Prepares to give feedback		Transitions to next station	Watches next tape of student and patient encounter
Time allotted ->	3 minutes	1 minute	5 minutes	1 minute	3 minutes

Table 4
Descriptive Statistics for OSTE Checklist Items

Item	Pre (N=30)	Post (N=20)	Total (N=50)
Targeted items – related to skills taught in the workshop			
Asks for your perspective first, before offering own opinion or feedback.	.90 (.24)	.95 (.13)	.92 (.20)
Provides positive feedback on COMMUNICATION SKILLS – general.	.72 (.22)	.81 (.19)	.76 (.21)
Provides positive feedback on COMMUNICATION SKILLS – reference to specific behavior.	.47 (.25)	.54 (.26)	.50 (.25)
Provides positive feedback on MEDICAL SKILLS/KNOWLEDGE – general or specific.	.61 (.18)	.52 (.21)	.58 (.20)
Provides corrective feedback on COMMUNICATION SKILLS – general.	.86 (.17)	.87 (.12)	.86 (.15)
Provides corrective feedback on COMMUNICATION SKILLS – specific.	.70 (.18)	.66 (.23)	.69 (.20)
Provides corrective feedback on MEDICAL SKILLS/ KNOWLEDGE - general or specific.	.49 (.24)	.46 (.23)	.48 (.23)
* Proposes or elicits an action plan – any reference to plan.	.64 (.21)	.82 (.24)	.71 (.24)
* Proposes or elicits a complete action plan (what student will do, what preceptor will do and timeline).	.23 (.23)	.46 (.30)	.32 (.28)
Non-targeted items – not directly related to skills taught in the workshop			
* Asks questions to elicit your understanding of the patient's perceptions/feeling/beliefs.	.74 (.24)	.56 (.22)	.67 (.24)
Asks questions or prompts you to state what you might do differently in the future.	.74 (.26)	.77 (.27)	.75 (.26)
Asks questions about your feelings.	.53 (.20)	.48 (.20)	.51 (.20)
Asks questions probing medical knowledge (e.g., risk factors, symptoms, etc.)	.41 (.29)	.35 (.21)	.39 (.26)

Note: All checklist items were scored 1/0. An asterix indicates that the t-test for that item was statistically significant at .05 level. Means and SDs are over preceptors, after aggregating across cases.

Table 5
Descriptive Statistics for OSTE Ratings Scale Items

Item	Pre (N=30)	Post (N=20)	Total (N=50)
Overall, this preceptor had a good understanding of my perception of the encounter with the patient, what I felt I did well, and where I felt I needed improvement.	4.1 (.37)	3.9 (.66)	4.0 (.51)
* Overall, the CONTENT of the feedback I received will help me improve my performance.	3.9 (.41)	3.6 (.51)	3.8 (.48)
The manner in which this preceptor DELIVERED feedback made it a positive learning experience.	4.2 (.50)	4.0 (.69)	4.1 (.58)
* It is likely that I will do something differently in the future as a result of the feedback I received.	4.0 (.37)	3.7 (.62)	3.9 (.51)
I would recommend this preceptor to other students.	4.1 (.52)	4.0 (.64)	4.0 (.57)

Note: Rating scale items were on a 1 to 5 scale. An asterix indicates that the t-test for that item was statistically significant at .05 level. Means and SDs are over preceptors, after aggregating across cases.