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# NBOME

NATIONAL BOARD OF OSTEOPATHIC MEDICAL EXAMINERS

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## **INSTRUCTION AND ASSESSMENT OF DOCTOR-PATIENT COMMUNICATION SKILLS: A NOVEL WEB-BASED APPROACH**

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Continuous Professional Development & Innovations

# Disclosures



None to report



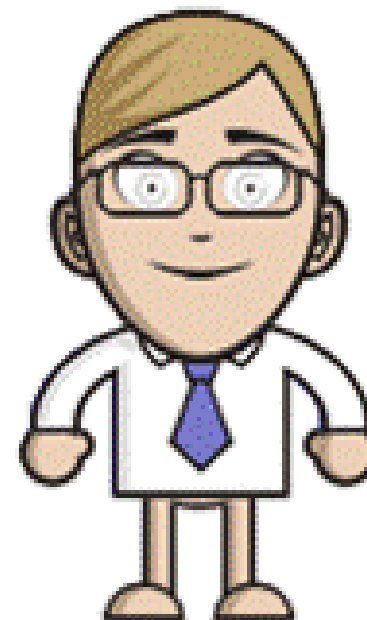
# Description of Learning Need

- **Competency-based assessment for physicians**
  - Patient care
  - Medical knowledge
  - Interpersonal and communication skills
  - Professionalism
  - Systems-based practice
  - Practice-based learning and improvement
  - Osteopathic principles and practice
- **Assessment needs**
  - Resident level assessment (ACGME and AOA competencies)
  - Maintenance of Licensure (MOL)
  - Maintenance of Certification (MOC)
  - Osteopathic Continuous Certification (OCC)



## Description of Learners

- 58,000 Osteopathic Physicians in U.S. (7% of all physicians)
- All physicians
  - Wish to learn to improve the care of patients
  - Are busy
  - Participate in Continuing Medical Education (CME)
  - Need to comply with new state medical board and specialty board requirements
  - Want educational activities which are relevant, practical, and easy to use.





## Background: web-based communication

- Increasing emphasis on competency-based assessment for physicians
  - Medical students
  - Residents
  - Practicing physicians
- Increasing emphasis on doctor-patient communication skills (Teutsch, 2003; Duffy et al, 2004)
- Increasing use of Objective Structured Clinical Examinations (OSCEs) (Boulet et al, 2009)
- Emergence of “Web-OSCEs” (Daetwyer et al, 2010; Novack et al, 2002)



# E-Learning Solution

- Web-based communication assessment of doctor-patient communication skills
- Remote Standardized Patients (RSPs)
  - Commonly used for education and assessment
  - Have been used by schools, residency and licensure
- Many content areas could be considered:
  - Communication with child
  - Communication with colleague
  - Communication with teenager
  - Cultural diversity
  - Delivering bad news
  - Empathy
  - End of life/health care proxy
  - Limited English proficiency
  - Medical mistake



**Remote Standardized Patient (RSP)**

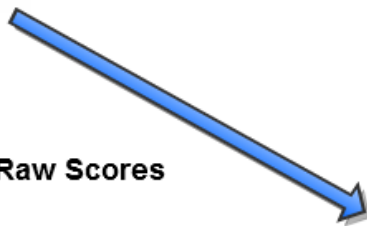
**Physician Learner**



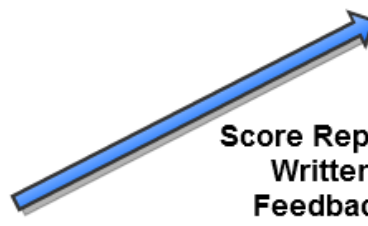
⚡ communication task ⚡



Raw Scores



Score Report /  
Written  
Feedback





- Communication-focused
- Skype
- Physicians receive
  - Verbal feedback
  - Global communication assessment
  - Communication skills checklist
  - Self-assessment
  - Teaching Points
- Implications for
  - CME
  - MOL
  - OCC
  - Resident Education







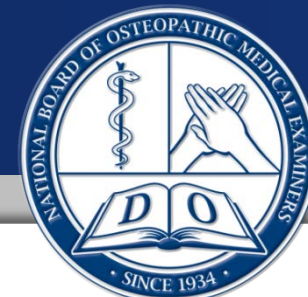
## Short-term goal

- Research
- Purpose: To evaluate the effectiveness and user acceptance of a web-based educational module for doctor-patient communication skills



## Technologies used in the project

- **Email:**
  - Scheduling, troubleshooting, updating
- **PowerPoint**
  - Training
- **Listserv:**
  - Providing opportunity for RSPs to reach out to one another
- **Doodle:**
  - Obtaining RSP availability
- **Skype:**
  - Training, technical support and live encounters
- **SuperTinTin:**
  - Recording encounters (screen capture)
- **NBOME website:**
  - Uploading videos
- **HP Webcam HD-2200:**
  - Standardize video and audio quality
- **Survey Monkey**
  - Surveying (demographics, post-exercise experience)



## Physician Experience

- Recruitment
- Training documents
  - Skype Trouble Shooting
  - Encounter Instructions
- Scheduling
- Pre-encounter
  - Skype Username
  - Technology check
  - Case Introduction



### CASE 103P: Case Introduction

<b>Patient Name</b>	Jay Downing
<b>Age</b>	45 years old
<b>Setting for visit</b>	Primary Care Office
<b>Background</b>	This is the first time you are seeing the patient. He has been followed by your partner, who is on vacation, for many years. In a quick review of his health record, you note he has had a history of intermittent low back pain. An MRI of the lumbosacral spine was done earlier this year. It failed to demonstrate any pathology. His past medical history is otherwise unremarkable.
<b>Chief Complaint</b>	I have back pain and need stronger medicine
<b>Vital Signs</b>	
Resp Rate	18
Heart Rate	92
Blood Press	136/78

### Physician Task

1. Obtain a pain history
2. Address the patient's concerns and pain's impact on daily living
3. Discuss further evaluation and/or treatment options.

\*Note: You are not to conduct a physical exam. Therefore, please refrain from asking the patient to disrobe, perform range of motion testing, or conduct other physical examination maneuvers.



## Physician Experience (continued)

- **Encounter**
  - Doctor-patient communication (15 min)
  - Self-assessment (5 min)
  - Verbal Feedback (10 min)
  - Support: 24-hour staff support (phone)
- **Post-encounter**
  - Email Self-assessment
  - Receive email from NBOME staff
    - Completed Global Assessment
    - Completed Case-specific Checklist (Key Action)
    - Completed Self-Assessment
    - Teaching Points
  - Survey of Experience
  - Focus Group Discussion
- **NBOME Staff support throughout experience (phone, email and Skype)**





## Formative Assessment

- **Four assessments**
  - **Verbal feedback from remote SPs**
    - Emphasis on teaching points for each case
  - **Written Feedback**
    - Communication key action assessment (key action checklist)
    - Global communication skills assessment
      - Likert-type scale
    - Self-assessment of global communication skills



## Global Assessment

- Informed by Essential Communication Elements, Kalamazoo Consensus Statement.**
  - Duffy FD, Gordon GH, Whelan G, Cole-Kelly K, Frankel R. Assessing competence in communication and interpersonal skills: the Kalamazoo II report. *Academic Medicine.* 2004;79(6):495-507.
- Case Development Committee**


Global Communication Assessment (Continuous Professional Development)* <small>[10-25-2012]</small>			
PHYSICIAN'S NAME: _____		RATER'S NAME: _____	
		CASE NUMBER: _____	
		DATE: _____	
<b>1. BUILDS THE RELATIONSHIP</b>	<input type="checkbox"/> 1 NEEDS MUCH IMPROVEMENT	<input type="checkbox"/> 2 NEEDS SOME IMPROVEMENT	<input type="checkbox"/> 3 DONE ADEQUATELY
	<input type="checkbox"/> 4 DONE EXCELLENTLY	<ul style="list-style-type: none"> <li>Uses words and non-verbal cues that demonstrate care &amp; concern</li> <li>Adjusts tone and pace to patient's needs</li> <li>Listens, encourages patient's participation, and redirects appropriately</li> <li>Shows interest in psychosocial and biomedical issues</li> <li>Shares talk time; no verbal dominance</li> </ul>	
<b>2. OPENS THE DISCUSSION (BEGINNING OF INTERVIEW)</b>	<input type="checkbox"/> 1 NEEDS MUCH IMPROVEMENT	<input type="checkbox"/> 2 NEEDS SOME IMPROVEMENT	<input type="checkbox"/> 3 DONE ADEQUATELY
	<input type="checkbox"/> 4 DONE EXCELLENTLY	<ul style="list-style-type: none"> <li>Allows patient to complete opening statement without interruption</li> <li>Asks "anything else?" to elicit full set of concerns</li> <li>Summarizes goals for visit</li> </ul>	
<b>3. GATHERS INFORMATION</b>	<input type="checkbox"/> 1 NEEDS MUCH IMPROVEMENT	<input type="checkbox"/> 2 NEEDS SOME IMPROVEMENT	<input type="checkbox"/> 3 DONE ADEQUATELY
	<input type="checkbox"/> 4 DONE EXCELLENTLY	<ul style="list-style-type: none"> <li>Balances open-ended and close-ended questions</li> <li>Responds to verbal &amp; nonverbal clues</li> <li>Refocuses the interview as important biomedical or psychosocial information arise</li> <li>Flow is logical and organized</li> <li>Indicates transitions</li> <li>Summarizes and gives patient opportunity to correct or add information</li> </ul>	
<b>4. UNDERSTAND THE PATIENT'S PERSPECTIVE</b>	<input type="checkbox"/> 1 NEEDS MUCH IMPROVEMENT	<input type="checkbox"/> 2 NEEDS SOME IMPROVEMENT	<input type="checkbox"/> 3 DONE ADEQUATELY
	<input type="checkbox"/> 4 DONE EXCELLENTLY	<ul style="list-style-type: none"> <li>Elicits patient's beliefs, concerns &amp; expectations about illness &amp; treatment</li> <li>Acknowledges and validates patient's perspective</li> <li>Asks about patient's understanding of illness or situation</li> </ul>	

Continuous Professional Development and Innovations, NBOME 2012



## Case-Specific Checklist

- Case Development Committee



**Case 103P Low Back Pain (10/21/2012)**

Physician: \_\_\_\_\_  
 RSP: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

Checklist Items	No	Yes	Comments
1. <b>Location</b> (e.g. "Where is the pain located?")	<input type="checkbox"/>	<input type="checkbox"/>	
2. <b>Palliation</b> (e.g. "What do you do to make the pain better?")	<input type="checkbox"/>	<input type="checkbox"/>	
3. <b>Provocation</b> (e.g. "What makes the pain worse?")	<input type="checkbox"/>	<input type="checkbox"/>	
4. <b>Quality</b> (e.g. "What is the pain like?" "Is it dull or sharp?")	<input type="checkbox"/>	<input type="checkbox"/>	
5. <b>Radiation</b> (e.g. "Does the pain radiate anywhere?")	<input type="checkbox"/>	<input type="checkbox"/>	
6. <b>Severity</b> (e.g. "On a scale of 1-10, how would you rate the pain?")	<input type="checkbox"/>	<input type="checkbox"/>	
7. <b>Associated Symptoms</b> (e.g. "Any other symptoms with the pain?" "Any numbness or weakness?")	<input type="checkbox"/>	<input type="checkbox"/>	
8. <b>Timing</b> (e.g. "How long has the pain been present?" "Is it constant?")	<input type="checkbox"/>	<input type="checkbox"/>	
9. <b>Impact on daily living</b> (e.g. "What are you worried about?")	<input type="checkbox"/>	<input type="checkbox"/>	
10. <b>Diagnosis/prognosis</b> (e.g. "You may not need surgery")	<input type="checkbox"/>	<input type="checkbox"/>	
11. <b>Opioid use</b> (e.g. "You may need <u>opiods</u> for pain, but you should not be using your wife's medications")	<input type="checkbox"/>	<input type="checkbox"/>	
12. <b>Alternative treatments</b> (e.g. "Other treatments to consider are OMT, physical therapy, yoga, stretching")	<input type="checkbox"/>	<input type="checkbox"/>	

NBOME, Continuous Professional Development and Innovations, 2012



## Self-Assessment

- Global Assessment
- Modified for self assessment

<b>Global Communication Assessment (Continuous Professional Development)*</b> <small>(10-25-2012)</small>				
PHYSICIAN'S NAME: _____		RATER'S NAME: _____		CASE NUMBER: _____ DATE: _____
<b>1. BUILDS THE RELATIONSHIP</b>	<input type="checkbox"/> <b>1 NEEDS MUCH IMPROVEMENT</b>	<input type="checkbox"/> <b>2 NEEDS SOME IMPROVEMENT</b>	<input type="checkbox"/> <b>3 DONE ADEQUATELY</b>	<input type="checkbox"/> <b>4 DONE EXCELLENTLY</b>
	<ul style="list-style-type: none"> <li>• Doesn't express care or concern (verbally &amp;/or non-verbally)</li> <li>• Does not adjust tone or pace to patient's needs</li> <li>• Interrupts or redirects frequently</li> <li>• Shows no interest in psychosocial issues, only focuses on biomedical issues</li> <li>• Fails to share talk time; verbally dominates</li> </ul>			
<b>2. OPENS THE DISCUSSION (BEGINNING OF INTERVIEW)</b>	<input type="checkbox"/> <b>1 NEEDS MUCH IMPROVEMENT</b>	<input type="checkbox"/> <b>2 NEEDS SOME IMPROVEMENT</b>	<input type="checkbox"/> <b>3 DONE ADEQUATELY</b>	<input type="checkbox"/> <b>4 DONE EXCELLENTLY</b>
	<ul style="list-style-type: none"> <li>• Interrupts patient's opening statements</li> <li>• Does not elicit full set of concerns</li> <li>• Does not summarize goals for the visit</li> </ul>			
<b>3. GATHERS INFORMATION</b>	<input type="checkbox"/> <b>1 NEEDS MUCH IMPROVEMENT</b>	<input type="checkbox"/> <b>2 NEEDS SOME IMPROVEMENT</b>	<input type="checkbox"/> <b>3 DONE ADEQUATELY</b>	<input type="checkbox"/> <b>4 DONE EXCELLENTLY</b>
	<ul style="list-style-type: none"> <li>• Does not balance open-ended and close-ended questions</li> <li>• Ignores patient's expression or clues about concerns</li> <li>• Prematurely narrows the focus of the interview</li> <li>• Flow is illogical and disorganized</li> <li>• Doesn't indicate transitions</li> <li>• Doesn't summarize</li> </ul>			
<b>4. UNDERSTAND THE PATIENT'S PERSPECTIVE</b>	<input type="checkbox"/> <b>1 NEEDS MUCH IMPROVEMENT</b>	<input type="checkbox"/> <b>2 NEEDS SOME IMPROVEMENT</b>	<input type="checkbox"/> <b>3 DONE ADEQUATELY</b>	<input type="checkbox"/> <b>4 DONE EXCELLENTLY</b>
	<ul style="list-style-type: none"> <li>• Doesn't elicit patient's beliefs, concerns &amp; expectations about illness &amp; treatment</li> <li>• Doesn't acknowledge and validate patient's perspective</li> <li>• Doesn't ask about patient's understanding of illness or situation</li> </ul>			

Continuous Professional Development and Innovations, NBOME 2012





## Teaching Points

- Summary of Case
- Medical History
- Pain History
- Case-specific Information
- References



### CASE 103P: Case Teaching Points

<b>Patient Name</b>	Jay Downing
<b>Age</b>	45 years old
<b>Setting for visit</b>	Primary Care Office
<b>Background</b>	This is the first time you are seeing the patient. He has been followed by your partner, who is on vacation, for many years. In a quick review of his health record, you note he has had a history of intermittent low back pain. An MRI of the lumbosacral spine was done earlier this year. It failed to demonstrate any pathology. His past medical history is otherwise unremarkable.
<b>Chief Complaint</b>	I have back pain and need stronger medicine
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Resp Rate	18
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#### Physician Task

1. Obtain a pain history
2. Address the patient's concerns and pain's impact on daily living
3. Discuss further evaluation and/or treatment options.

#### Teaching points

- The medical history is the foundation for being able to diagnose, treat, and prevent illness. The principles of osteopathic care are identified in Foundations of Osteopathic Medicine, 3<sup>rd</sup> Edition
  1. The patient is the focus for health care.
  2. The patient has the primary responsibility for his or her health.
  3. An effective treatment program for patient care is founded on the tenets of osteopathic medicine and
    - incorporates evidence-based guidelines,
    - optimizes the patient's natural healing capacity,
    - addresses the primary cause of disease, and
    - emphasizes health maintenance and disease prevention.
- As part of the medical history, eliciting a detailed pain history is important when developing a differential diagnosis and understanding how the pain impacts the patient's quality of life and daily living. A pain history should include onset, frequency, duration, location, quality, radiation, severity, associated symptoms, as well as relieving and aggravating factors. A commonly used mnemonic, PPQRSTTTA, is used to remember the important history elements when obtaining a pain history.
- **PPQRSTTTA**
  - Palliation
  - Provocation
  - Quality
  - Radiation
  - Severity
  - Timing
    - Onset
    - Frequency
    - Duration
  - Associated Symptoms



## Remote Standardized Patient (RSP) Training

- **Introduction to Osteopathic Medicine: 20 min**
  - Review prerecorded PowerPoint Presentation
- **Case Training: 4-6 hours**
  - Portrayal
  - Scoring (checklist and global assessment)
  - Technology
  - Delivering verbal feedback
- **Technology Check: 1 hour**
- **Dress Rehearsal: 1 hour**



## Remote Standardized Patient (RSP) Experience

- **Training documents**
  - Technology Set Up Procedures
  - Skype Trouble Shooting
  - Encounter Instructions
- **Scheduling**
- **Pre-encounter**
  - Skype Username
  - Skype Account
  - SuperTinTin
- **Encounter**
  - Doctor-patient communication (15 min)
  - Complete evaluation forms (5 min)
  - Verbal Feedback (10 min)
  - Support: 24-hour staff support (phone)
- **Post-encounter**
  - Complete evaluations: checklist, global assessment, technology report
  - Upload video to NBOME research website
  - Survey of experience
- **NBOME Staff support throughout experience (phone, email and Skype)**





## Summary

- **Web-based communication formative assessment using RSPs**
- **Authentic**
- **Practice-relevant**
- **Allows physicians to participate in a meaningful exercise, while potentially satisfying**
  - Licensure requirements
  - Specialty board requirements for continuous professional development
  - Residency program requirements



## Next Steps

- **Analyze data**
  - Scoring
  - Survey of Residents
  - Survey of RSPs
  - Focus Group of Residents
  - Focus Group of RSPs
- **Dissemination of findings**



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**THANK YOU**



# Example Video

