# Assessing a Multimodal Curriculum to Develop Resident Professionalism and Communication Skills – A Pilot Study

#### The Problem

- Though critical, professionalism and communication skills are rarely taught.
- A curriculum in professionalism and communication for anesthesia residents, assessed by a patient survey, may improve patient satisfaction.

#### Aim/Goal

Design and implement a simulation and web-based resident curriculum to improve patient satisfaction with these aspects of resident performance as measured by a survey tool based on the validated Four Habits Coding Scheme (4HCS).<sup>2</sup>

#### The Team

- John D. Mitchell MD\*
- Cindy Ku MD\*
- Vanessa Wong, BS\*
- Lauren Fisher DO\*
- Sharon Muret-Wagstaff PhD\*
- Qi Ott MD\*
- ➢ Sajid Shahul MD\*

- Ruma Bose MD\*
- Stephen Cohen MD. MBA\*
- Carrie Tibbles MD+
- Stephanie B. Jones MD\*

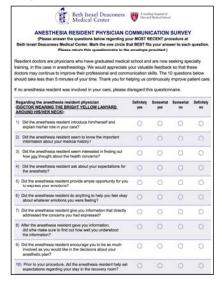
\*Department of Anesthesia, Critical Care and Pain Medicine

+Department of Emergency Medicine

#### The Interventions

- Modified 4HCS into an ambulatory surgical patient survey (Figure 1)
- Sep 2012-Jan 2013: Pre-intervention survey
- ➤ Jan 2013-Mar 2013: Curriculum roll out
  - Simulated scenarios (3) focused on patients' emotions, setting expectations, and shared decision-making
  - Residents completed live sessions, an online module, or both
- Apr 2013-Jun 2013: Post-intervention survey
- Compared pre- and post-intervention data
  - o Chi-squared test for each question
  - To control for individual residents: Student's t-tests on average ratings for questions showing statistical significance in chi-squared analysis

#### Figure 1: Patient survey



## The Results/Progress to Date (Figure 2, Table 1)

- Pre-intervention response rate: 233/920 (25.3%)
- Post-intervention response rate: 236/689 (34.3%)

Figure 2: Chi-squared test results

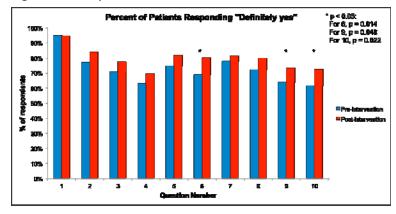


Table 1: Averages and t-test results

Question	Pre-intervention (n = 38 residents)	Post-intervention (n = 38 residents)	Paired p-value	Unpaired p-value
6	3.51	3.69	0.06	0.07
9	3.33	3.49	0.18	0.24
10	3.32	3.51	0.14	0.19

### Lessons Learned

- A patient survey to assess residents' professionalism and communication skills may be able to assess a targeted curriculum
- Responses to the questions corresponding to the curricular focus improved
- Analysis on a per-resident basis may be more accurate in assessing efficacy

## **Next Steps**

- Further statistical analysis to evaluate impact
- Adapt data collection process to improve statistical power
- Adapt the survey to address the needs of other specialties
- 1. Gaiser RR. The Teaching of Professionalism During Residency: Why It Is Failing and a Suggestion to Improve Its Success. Anesth Analg 2009;108:948–54.
- Krupat E, Frankel R, Stein T, Irish J. The Four Habits Coding Scheme: Validation of an instrument to assess clinicians' communication behavior. Patient Educ Couns 2006;62:38–45.



John Mitchell, MD, jdmitche@bidmc.harvard.edu





