

## **MEDICAL STUDENT PHYSICAL EXAM ROUNDS IN THE BCM CORE MEDICINE CLERKSHIP: A PILOT PROGRAM**

**Lead Author:** Evan Michael Fisch, BS

**Contributing Authors:** Nathaniel J. Spezia-Lindner, BA, Giovanni A. Campagna II, Niraj Mehta

**Category:** Education

### **Background**

Prior to starting clinical rotations, medical students learn the components of the physical exam through dedicated small group sessions and textbook readings. While the pre-clinical curriculum provides opportunities to practice physical exams in peer groups and with healthy standardized patients, a critical need exists for students to competently elicit both normal and pathological findings on real patients. Moreover, comfortably performing the physical exam yields intangible benefits including strengthening the therapeutic alliance and providing the patient a sense of comfort.

### **Objectives**

Our objectives were to introduce “physical exam rounds” to the core internal medicine clerkship and to measure their educative efficacy reflected by student comfort in eliciting and interpreting organ system-based exam findings, as well as teaching the components of the exam.

### **Methods**

Medicine core clerkship students at Ben Taub General Hospital round with faculty hospitalist Dr. Niraj Mehta on a weekly basis to examine and discuss patients with abnormal physical exam findings. Surveys measuring participants’ confidence with teaching nine organ system-based physical exams and eliciting and interpreting their findings were administered at the beginning and end of their month at BTGH. Confidence in each metric was self-reported on a 0-10 scale. Response trends were analyzed for significance.

### **Results**

Forty-two MS3s participated. Significantly increased confidence in eliciting, interpreting, and teaching 8/9 organ systems was observed ( $P < 0.05$ ) among all students throughout the three-month clerkship. Students in the first month in particular demonstrated a significantly greater increase in mean reported score of the organ systems examined during rounds vs. those not examined ( $0.9 \pm 0.5$  vs.  $0.4 \pm 0.5$ ,  $P = 0.02$ ). Decreased confidence in any aspect of the physical exam was never observed. Students consistently rated the teaching sessions and supplemental resources as highly valuable (8.9/10 and 8.8/10, respectively) and an important part of the clerkship (8.5/10).

### **Discussion**

As predicted, students gained significant comfort in many aspects of performing and teaching the physical exam. Students from the first month had even greater growth in comfort regarding organ systems specifically examined during rounds compared to those not examined. This may indicate an additional value of the rounds for students who are less experienced in hospital medicine. We conclude that physical exam rounds are a valuable addition to the medicine clerkship, offering students a guided, hands-on opportunity to hone their exam skills. Additionally, we believe these rounds help burgeoning clinicians gain comfort and confidence at bedside, thereby fostering a therapeutic alliance that translates to improved safety and quality of care for patients.