Assigning Online Educational Modules Prior to Orientation is a Feasible Approach to Increase Interns’ Level of Readiness for Internship

Lynn Buckvar-Keltz, Ian Fagan, Thomas S. Riles, Sondra Zabar, Donna Phillips, Jeff Manko, Alex Mack, Kinga L. Eliasz, Adina Kalet
NYU School of Medicine

PROBLEM STATEMENT AND GOALS

With the anticipation of bearing responsibility for patient care, transitioning to residency is often a stressful time in the life of a new physician. Program directors and hospital administrators responsible for patient safety also share concerns regarding resident preparedness. Providing incoming interns with e-learning modules prior to commencing their residency was piloted as a means of addressing issues related to patient assessment, management, and patient safety. We postulated that during the period between match day and July 1, soon-to-be-residents would have the time and be eager to focus on patient care cases. We studied whether they in fact would view the modules and, if so, find them helpful in their preparation for residency.

APPROACH/METHODS

The NYU faculty created a series of online modules (WISE-OnCall) to address acute presentations of common clinical problems such as dyspnea, chest pain, abdominal pain, and oliguria. Each module was designed specifically for senior medical students and early interns with an emphasis on distinguishing life threatening diagnoses from the more benign causes. The importance of recognizing potentially critical situations from among the many causes, initiating management, and escalating their concerns to seniors is addressed in each of the modules. Five of the modules in this series were assigned to the 145 incoming housestaff that were recently matched in Internal Medicine, Surgery, Emergency Medicine, OB&GYN, Orthopedics, Neurology (PGY 2s), and Neurosurgery.

Prior to First Night-onCall Event

Interns were required to view 5 WISE-OnCall modules:
- Hypertension
- Dyspnea
- Abdominal Pain
- Pain Management
- Documentation

RESULTS

RETROSPECTIVE PRE-POST ATTITUDES SURVEY

Of the assigned modules (Abdominal Pain, Pain Management, Dyspnea, Hypotension, and Documentation), each was completed by 130-135 of the 145 residents.

Of the unassigned modules (Chest Pain, Hypertension, Lower Extremity Pain, Oliguria, and Certifying a Death), each was viewed by 18-38 residents.

In a survey administered during a patient safety orientation event, 93% of responders (n=228) felt the modules increased their level of readiness for internship.

To what extent do you agree that the following module increased your level of readiness for Internship...

- Hypertension
  - N = 123
  - 1.6% (2) disagree
  - 3.3% (4) somewhat disagree
  - 42.3% (52) somewhat agree
  - 52.8% (65) agree

- Dyspnea
  - N = 127
  - 3.1% (4) disagree
  - 3.9% (5) somewhat disagree
  - 44.1% (56) somewhat agree
  - 45.8% (62) agree

- Abdominal Pain
  - N = 127
  - 3.9% (5) disagree
  - 2.3% (3) somewhat disagree
  - 42.2% (54) somewhat agree
  - 51.6% (66) agree

- Pain Management
  - N = 127
  - 1.6% (2) disagree
  - 2.4% (3) somewhat disagree
  - 37.5% (48) somewhat agree
  - 54.3% (69) agree

- Documentation
  - N = 84
  - 5.6% (5) disagree
  - 4.7% (4) somewhat disagree
  - 40.7% (35) somewhat agree
  - 40.8% (36) agree

6-MONTH FOLLOW-UP PROGRAM SURVEY

All 145 residents were sent a 6-month follow-up survey which had a response rate of 37.2%. 68% of respondents found that the assigned modules prepared them for internship.

In retrospect, to what extent do you agree that the 5 WISE-OnCall Modules prepared you for Internship?

72% of respondents said they would recommend WISE-OnCall to incoming interns.

LESSONS LEARNED & NEXT STEPS

Providing incoming interns with a series of online educational modules prior to their orientation is a feasible approach that could help prepare house staff to recognize and manage acute inpatient problems and as a result feel more ready for internship. At a minimum it provides an excellent review of the underlying causes of acute patient conditions that they will encounter and a framework for providing timely assessment and management. The e-learning modules allow the incoming cohort of interns an opportunity to familiarize themselves with problems they will encounter prior to being integrated into a fast-paced and complex health care system.

ACKNOWLEDGMENTS

The orientation event could not have been designed, implemented or assessed without the tremendous support and dedication from our incoming interns, NYSIM facilitators, faculty, and the PMET team.

The WISE-OnCall modules are funded by the Frank and Sarah Olsen family gift and the James and Frances Berger family gift.

LEARNING OBJECTIVES

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