

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Fundamentals of Emergency Medicine: A Multimedia Curriculum for the Medical Student Clerkship Using iTunes U

Permalink

<https://escholarship.org/uc/item/8h4003wk>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 16(4.1)

ISSN

1936-900X

Authors

Hess, J.
Sanderson, W.

Publication Date

2015

Copyright Information

Copyright 2015 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

90 Cultivating Student Leadership: An Innovative Seminar in Healthcare Management

Wu T, Dibble B, Sharma R / New York University, Bellevue Hospital, New York, NY; NewYork-Presbyterian Hospital-Weill Cornell Medical Center, New York, NY,

Introduction: The need for physician leaders continues to grow. In response, medical schools have expanded the availability of administration related dual degree programs including Master of Business Administration (MBA) and Master of Public Administration (MPA). Students enrolled in these programs often receive very specialized training about policy, business, and management but many programs do not offer a mechanism to integrate this new knowledge with their existing medical training.

Educational Objectives: We developed the Seminar in Healthcare Management for medical students who were pursuing a secondary MBA or MPA degree. The goal of this curriculum was to provide early exposure to physician leaders from a variety of career paths who have integrated administrative, leadership, or policy work with their clinical careers to enable our students to explore future opportunities.

Curricular Design: The Seminar in Healthcare Management was a six month long program with ten participants, eight MD/MBA candidates and two MD/MPA candidates. The curriculum consisted of monthly seminars supported with outside reading assignments and mentorship opportunities. Speakers were industry experts, professors, and clinical administrators from diverse backgrounds. Seminar topics included: Healthcare Delivery Systems, Medical Malpractice and High Risk Medicine, Physician Payment Policy, Physician Leadership, Health Care and Global Supply Chain, and Hospital Organization Community Commitment.

Impact/Effectiveness: The effectiveness of the seminar was assessed using post session surveys. On a scale of 1-5 (1-poor, 5-outstanding), the mean scores were: reading materials (4.61), lecture content (4.45), presentation style (4.57), overall (4.51). With the success of the first year of the program, we have been advocating to incorporate the Seminar in Healthcare Management as a required part of the core MD/MBA and MD/MPA curricula and to expand the program to other dual degree students.

91 Development and Implementation of an Emergency Medicine Podcast for Medical Students: EMIGcast.com

Lichtenheld A, Burgess T, Chapin N, Nomura M, Kornegay J / Oregon Health and Science University, Portland, OR

Background: Asynchronous learning is a rapidly evolving

frontier in medical education. Podcasts allow users to access content via the internet and are tools used by many emergency medicine (EM) physicians. Podcasts are also effective for undergraduate medical education, valued for their convenience and portability. Effectiveness of a podcast depends on its relevance to the target audience. While there are numerous podcasts directed at physicians, there are few EM podcasts aimed at the unique objectives of medical students.

Educational Objectives: The objective of this educational innovation is the development of a podcast providing an educational, self-sustaining, student-driven, resource for students interested in EM.

Curricular Design: Portable audio recording equipment and an online blog and data storage platform were purchased with grant funds. Under faculty guidance our group identified EM topics of interest and relevance to medical students. Content experts including faculty, residents, and nurses were invited as guest speakers for student-facilitated interviews. Initial episodes featured topics including: milestones for EM-bound students, the medical student's role on rotation, and the transition from medical student to intern. Future recordings will present toxicological emergencies, medical student's role in a code, and success on the interview trail. Web analytics will be used to track podcast uptake. The website's comments feature will solicit feedback and identify topics for future episodes.

Impact: While EM as a specialty has embraced web-based medical education, there remain few podcasts geared towards students interested in the field. This project extends a teaching modality to an audience already accepting of an asynchronous platform. The podcast will not only be available for students at our institution, but to any student with internet access. We have identified faculty and students dedicated to making this a sustainable product.

92 Fundamentals of Emergency Medicine: A Multimedia Curriculum for the Medical Student Clerkship Using iTunes U

Hess J, Sanderson W / University of Wisconsin School of Medicine and Public Health, Madison, WI

Introduction: Graduate medical education didactics for Emergency Medicine have changed considerably over the past several years, moving away from traditional textbook learning and embracing the #FOAMed revolution. Undergraduate medical education has begun to follow, although a comprehensive, all-in-one solution that can accommodate a variety of learning styles specifically tailored to the medical student has proven difficult to deploy. Existing resources tend to focus on text-based material; the use of audiovisual and other interactive content such as podcasts and video lectures can serve to complement the

existing curriculum and increase retention.

Educational Objectives: This project's objective is to take the core content that a senior medical student is expected to learn and consolidate it into an easy-to-use, all-in-one educational tool that accommodates a variety of individual learning styles.

Curricular Design: The project's design is centered around Apple's iTunes U platform for iOS®. The curriculum is focused around the most common chief complaints and core content expected of the student learner. Each section contains both required and supplemental materials, including video lectures, podcasts, review articles, and reference materials in PDF format. Students independently progress through the curriculum and come prepared for a weekly simulation session that reinforces key concepts learned the week prior.

Impact/Effectiveness: A post-rotation survey indicated that this curriculum was well received, with 92% of students reporting they preferred the iTunes U "Fundamentals" over a textbook-based curriculum. Students rated podcasts and video lectures as the most helpful modalities. The majority of students felt this curriculum prepared them for clinical shifts in the emergency department. Comments from the survey revealed that students valued the portability and the multiple learning modalities that could be tailored to their individual learning styles.

93 Pre-Clinical Medical Student Simulation for Early Team Leader and Patient Assessment Experience

Noelker J / Washington University in St. Louis, St. Louis, MO

Introduction: Most medical school curriculums limit clinical exposure to the final 2 years of training. Without practical experience on a medical team, it can be difficult for junior medical students to translate their basic science knowledge into patient assessment, or feel at ease discussing care plans in front of a team.

Educational Objectives: The goals of this simulation were to build comfort with assessing patients in front of colleagues as team leaders, and for students to become more familiar with determining whether patients are stable or unstable based on vital sign (VS) evaluation.

Curricular Design: First and second year medical students took turns acting as team leaders in simulated clinical scenarios involving cardiac patients. The 4 cases included atrial fibrillation, pericarditis with tamponade, pulseless electrical activity arrest, and ST segment elevation myocardial infarction. Each case required interpretation of stable and unstable VS, electrocardiogram review, and initiation of basic

diagnostic ordering and management. Prior to this session only 22% of student had participated in a real patient resuscitation. None had ever been team leader for either a real or simulated cardiac resuscitation. Pre- and post-session surveys assessed their comfort with patient evaluation in front of peers on a 1-5 scale (1-very comfortable, 5-very uncomfortable), and their perceived ability to assess unstable VS on a scale of 1-3 (definitely, maybe, not at all).

Impact: Before the session 22% rated their comfort with patient evaluation as a 2/5, vs. 88% 3/5, whereas afterwards 12.5% rated 1/5, 62.5% rated 2/5, and only 25% rated 3/5. Perceived VS assessment improved as well: pre-session 88% noted 2/3, while 22% reported a 3/3, while post session 25% 1/3 noted 62.5% 2/3 and only 12.5% 3/3. We conclude that integration of simulated clinical assessment early in the medical school curriculum increases student comfort with leadership and possibly improves basic clinical assessments.

94 Utilizing ACGME Milestones as Evaluation Metrics and SLOE Reporting During a Four Week Fourth Year Emergency Medicine Clerkship: A Two Year Experience

Quinn S, Worriow C, Yenser D, Jayant D, Johnson S, Bailey B, Eustice E, Kohlhepp J, Rogers R, Kane B / Lehigh Valley Health Network, Bethlehem, PA

Introduction/Background: The Accreditation Council for Graduate Medical Education Milestones presume graduating medical students will enter residency at a Milestone Level 1. At current, the Council of Emergency Medicine Residency Directors standardized letter of evaluation (SLOE) does not specifically assess or communicate the performance by students on an emergency medicine clerkship using the Milestones; however, residency programs must begin assessing residents on the Milestones immediately upon entry.

Educational Objectives: With Institutional Review Board approval, we sought to determine first if an assessment of the milestones could be done during a 4 week 4th year medical student clerkship. If assessable, we then sought to determine the proportion of medical students performing at Milestone Level 1.

Curricular Design: For 2013-2014, we implemented a Milestones-based clerkship assessment and reporting system in our institutional SLOE using our traditional clerkship design and evaluation process. During this phase, for 75 students 55 SLOEs were issued, of which 50 contained our Milestone summary. Deficiencies were noted in Milestones 12 (8) and 14 (3). Review of that data led to redesign of the clerkship and its evaluations for 2014-2015. Figures 1 and 2 note our iterative changes. On-shift assessment forms include anchors Occasionally (>60%), Usually (>80%) and Always (100%) at points 1,