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

Title

Emergency Medicine Neurocritical Care Bootcamp: A Collaborative Curriculum with Simulation Based Learning

Permalink

<https://escholarship.org/uc/item/80g7b2f3>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 24(3.1)

ISSN

1936-900X

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Publication Date

2023

DOI

10.5811/westjem.61060

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preparedness of the session compared to traditional lecture reviews.

Effectiveness: Residents reported overwhelming agreement in all four domains. 20 of 25 (80%) residents completed the survey. High levels of agreement were reported for motivation (4.75, 95% CI=4.51-4.99), engagement (4.85, 95% CI=4.64-5.00), challenge (4.75, 95% CI=4.51-4.99), and overall exam preparedness (4.8, 95% CI=4.57-5.00) compared to traditional lecture-based review methods.

53 Development of a Emergency Department Operations and Throughput Curriculum for Resident Physicians

Bryan Stenson, David Chiu

Introduction: Emergency Departments (ED) across the country are facing ever increasing levels of crowding and boarding. As a result, it has become more and more difficult to generate throughput through the ED. Furthermore, as volume increases, resources are getting further constrained which leads to multiple bottlenecks in the progression of patients through the ED. There exists little formal education on this topic for ED resident physicians, even though this is a major aspect of the job of an ED physician and a significant contributor to physician burnout.

Educational Objectives: This curriculum introduces the basic concepts of queuing theory, human behavior, data analysis and process improvement methodology to teach ED resident physicians to be able to analyze congested EDs and propose changes to fix bottlenecks, increase throughput, better match staffing levels to ED volume.

Curricular Design: The curriculum was designed to be as interactive as possible and is composed a mix of lectures, small-group interactions/discussion, and question/answer sessions. Lectures were used to introduce basic concepts around resource bottlenecks, queuing theory, schedule optimization, process/change management. Prior to the session, each resident received a data set that reflects a real-world ED problem. Three case studies were used. One case around need for additional shift. Another around adjusts of the schedule to fit patient arrival. A third around analyzing delays in CT imaging. Participants were broken up into small groups to do their own analysis and present each case study as well as their own data analysis and their solutions to the problem.

Impact/Effectiveness: This curriculum has been given at two independent residency programs and has been met with positive feedback. Many commented on the significance of the topic, but little formal education/curriculum regarding it. The case studies were well received and made the session practical and interactive.

54 Emergency Medicine Neurocritical Care Bootcamp: A Collaborative Curriculum with Simulation Based Learning

James VandenBerg, Lauren Koffman, Dillon Warr, Penny Garcia, Jane Cripe

Introduction: Neurologic emergencies (NE) are a core component of emergency medicine (EM) training. We identified gaps in education of NE, which require identifying subtle physical exam findings that are challenging to reproduce in simulation. We believed using Standardized Patients (SP) in NE simulation cases would reinforce these exam findings, supplement our resident’s training, and add realism to the cases. We collaborated with our neurocritical care team to adapt a neurology simulation-based learning (SBL) bootcamp for EM residents.

Educational Objectives: The primary aim was to have EM residents National Institute of Health Stroke Scale (NIHSS) certified and improve knowledge and treatment of NEs.

Curricular Design: EM residents completed an educational needs assessment and weaknesses included: acute stroke, seizures, and meningitis. Neurocritical Care faculty prepared didactics on these topics. A previously created simulation-based learning (SBL) course designed by our neurocritical care team for neurology residents was adapted for EM residents, with cases

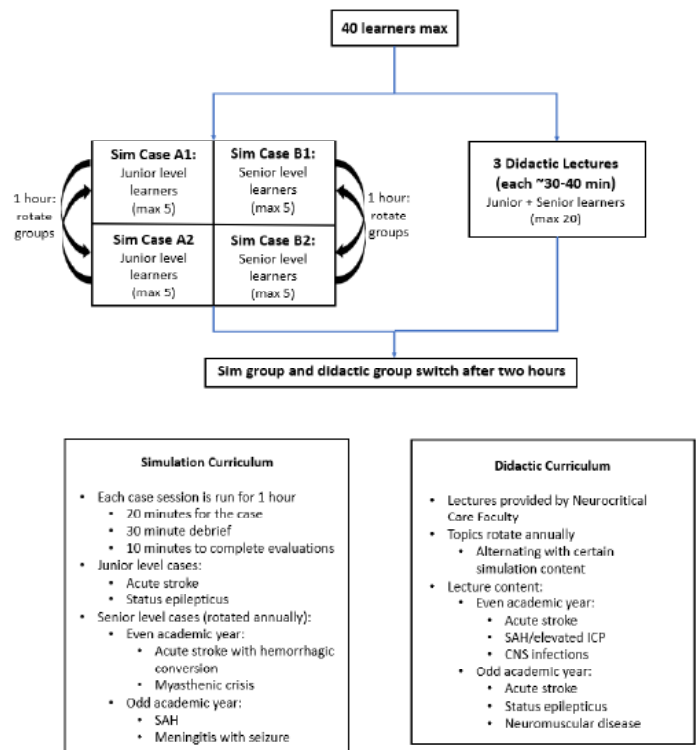


Figure 1. Curriculum overview.

for both junior and senior learners. One facilitator was required per simulation room to run the cases. Trained SPs were used for the acute stroke cases. Residents completed online NIHSS certification prior to the course. The bootcamp was 4 hours long and included 2 hours of simulation and didactics each (curriculum format shown in Figure 1). Both faculty and learner evaluations were completed (Figure 2).

Impact/Effectiveness: Residents received didactics from topic experts and applied these concepts in a simulation setting. The course received universal praise due to its use of SPs and their ability to simulate neurologic deficits. Future iterations of the course will include our EM and ICU nurses to help facilitate cases, collaborating with neurology residents to simulate real world processes, and performing further educational needs assessments from learners.

Faculty's Evaluation of Junior Level Learner's: Acute Stroke

Please check the below boxes regarding whether the actions were observed or not observed during the simulation scenarios. Feel free to add additional comments to help guide your debriefing.

Criteria	Observed	Not Observed	Comments
Calculated NIHSS			
Team confirmed patient's "last known well" time			
Obtained accu-check			
Activated stroke protocol and obtained CTH			
Assessed patient for exclusion criteria for tPA			
Treated elevated BP to below 185/110 prior to giving tPA			
Administered tPA			
Treated elevated BP to below 180/105 post tPA			
Counseled patient on diagnosis and plan			

Additional comments:

Figure 2. Example faculty's and learner's evaluation forms.

55 Emergency Medicine Resident Financial Wellness Curriculum

Erin Butler, Darielys Mejias-Morales, Latha Ganti

Introduction/Background: Resident physicians are at increased financial risk given their debt burden, low income, and lack of formal financial management education during their training. Deficiencies in financial literacy for taxes, investments, savings, and insurance have been identified among resident physicians. These deficiencies could potentially affect the well-being of residents and contribute to burnout while in residency.

Educational objectives: 1) Incorporation of financial management education into residency didactics for short- and long-term financial success of resident physicians. 2) Improve financial literacy of residents.

Curricular design: Curriculum was structured as interactive lectures along with small group discussions/workshops. This educational method was chosen based on the extensive amount of material to cover and to promote engagement from the learners' end. Topics included budgeting and savings principles, student loan repayment options, insurance, retirement plans/savings, and investment strategies. The curriculum also includes a discussion panel about monetary compensation in Emergency Medicine and strategies for job offer evaluation and contract negotiations. Lectures were divided into five sessions, some of them divided into small groups based on the year of residency (PGY1, 2, 3). The course culminates in residents developing their own written financial plan based on their individual priorities.

Impact/Effectiveness: Evaluation showed that after the lecture series residents felt better prepared and more comfortable with financial concepts. Residents also reported increased motivation to continue learning about financial wellness, to get life and disability insurance, and to seek individualized financial advice. The incorporation of financial wellness into our residency academic curriculum allowed residents to optimize their finances during training and to better prepare for long-term financial management.

56 Feel Good Fridays: Incorporating Wellbeing into Resident Morning Reports

Sarah Lee, Ritika Gudhe

Introduction/Background: Physician well-being and resiliency continues to be an essential topic of focus and discussion in medical training, particularly in the specialty of Emergency Medicine (EM). Residents of EM are often faced with critical patients, diseases, and scenarios that make them especially vulnerable to burnout. Having a longitudinal means to incorporate wellness and wellbeing in a busy resident schedule would provide a regular avenue for discussion and outlet for debriefing.

Educational objectives: The objective of Feel Good Fridays is to incorporate resident wellness into regular morning reports to provide a weekly forum for residents to decompress and discuss wellness. It will also increase resident awareness of wellbeing resources.

Curricular design: The SIUH EM residency program has weekday morning reports at 10AM in which a resident is pre-assigned on the schedule to give a short chalk talk on a medical topic of their choice or an interesting case presentation with learning points. This academic year, we have started the Feel Good Fridays initiative in which Friday morning reports are purposefully focused on wellbeing and wellness. Examples include discussing topics such as physician suicide awareness, sleep schedules with shift work, imposter syndrome, and second victim syndrome. Some