

## An Acute Care Curriculum: From An Idea To Reality

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**A**s an internal medicine hospitalist at the Cleveland Veteran Affairs (VA) Medical Center, I care for patients on the inpatient ward and in the emergency department (ED). Many VA EDs are staffed by physicians who are trained in both internal medicine and emergency medicine. I view myself as a clinician-educator, having the opportunity to work with both internal medicine residents and medical students. The Accreditation Council for Graduate Medical Education (ACGME) recognizes ambulatory experience as an integral part of internal medicine training. Residents are expected to demonstrate sufficient knowledge to recognize and provide initial management of emergency medical problems.<sup>1</sup> Through my work with residents, the concept for an acute care curriculum was created. I want to share my experience on how the curriculum project progressed from an abstract idea to a reality. This project has been a collaborative effort with supportive colleagues and has evolved into the process described below:

1. *Develop an idea for a curriculum/education project.* This was by far the most difficult part. I wanted to create something unique and interesting for the residents, without duplicating an existing educational experience. This entailed reviewing the existing program and examining opportunities to introduce a new project, with minimal disturbance in the residents' schedules. Discussions about projects were held with the chief residents and

with my hospitalist colleagues, and the result was the acute care curriculum.

2. *Perform a needs assessment.* I surveyed the residents, chief residents, the hospitalists at our institution, and the residency program leadership for interest in this voluntary curriculum and for topics that would be most beneficial for residents.
3. *Create objectives.* The objective of the curriculum was to provide residents with the skills necessary for the initial management of emergency medical problems in two potential settings: 1) in an urgent care/ED setting and 2) on night float with limited supervision. We wanted to do this by creating daily focused lectures and workshops, with each session lasting between 20 and 30 minutes.
4. *Develop an assessment tool for the curriculum.* The residents were asked to complete an anonymous survey after each lecture or workshop. The survey collected feedback on the quality of the lecture or workshop, residents' confidence in demonstrating the skill, perceived overall usefulness of the lecture or workshop, major take-home points, and participant questions and suggestions. I used this information to identify specific areas for improvement and adapted the curriculum to address these needs.
5. *Manage logistics.* This was the next most difficult step. I met with the chief residents to identify the best time and

setting for the curriculum based up on the residents' schedules. Second- and third-year residents are divided into groups, and each group follows a six-plus-two schedule (i.e. six weeks of inpatient medicine followed by two weeks of ambulatory) repeated throughout the two years. The curriculum was intended to follow the schedule of the second- and third-year residents. First-year residents have additional time set aside for primary care, so their schedule is not as predictable as second- and third-year residents. Due to morning rounds, morning report, scheduled noon lectures, afternoon lectures by inpatient attendings, and residents' need for patient care time, I realized that including the curriculum for inpatient residents would be difficult. I therefore focused on the residents' ambulatory schedules. Ambulatory residents have lectures on chronic disease management on Friday mornings for a half day, which provided an opportunity to schedule lectures and workshops Monday through Thursday. Since the 8-9 am hour historically has a lower patient volume in the ED than other times, 8 am was chosen as the lecture time.

6. *Create a pilot study.* For approximately 2.5 months, a colleague and I gave three to four lectures for each two-week ambulatory ED rotation. Our individual schedules and clinical duties precluded us from providing daily lectures Monday

continued on page 2

## SIGN OF THE TIMES

continued from page 1

through Thursday. At the end of the pilot study, the residents and chiefs were again surveyed.

7. *Roll out the curriculum.* The pilot study was well received, and the decision was made to move forward with the acute care curriculum. I followed an interdisciplinary approach when recruiting colleagues. Core faculty included hospitalists and ED physicians as well as intermediate care technicians (ICTs). (At the VA, ICTs are corpsmen in the military who possess practical experience from military service and add a valuable perspective to our work.) The acute care curriculum went live in January 2016.
8. *Disseminate results.* I am currently collecting data. I plan to review the surveys, develop a manuscript, and submit it for publication.

This project did not require external funding. The largest expense was my time. Fortunately, my schedule had protected academic time, which provided me with the opportunity to work on this curriculum. My supportive colleagues value educating residents and have graciously volunteered their time. The supplies needed for the workshops were already available in the ED. The Cleveland VA has a simulation lab, and we were able to request simulators, which will be incorporated into the curriculum when they arrive. The simulators include a knee for arthrocentesis; a torso to practice venopunctures in the internal jugular, external jugular, and femoral veins; an arm for peripheral intravenous punctures; and skin pads for learning how to incise and drain an abscess and for suturing. We also had workshops on splinting upper and lower extremities. The simula-

tors we chose would teach residents simple and common procedures that one would expect to use in an urgent care/ED or on the wards. We may introduce other simulators based on the needs and requests of the residents.

By far, this has been the largest education project that I have undertaken. It has been fun, intellectually stimulating, and stressful at times. Looking back, would I do it all again? Definitely!

### References

1. Accreditation Council for Graduate Medical Education (2015). ACGME program requirements for graduate medical education in internal medicine. Available at: [https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/140\\_internal\\_medicine\\_07012015.pdf](https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/140_internal_medicine_07012015.pdf)

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