

## End-of-Life Curriculum in the ICU – Time for an Update

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### Background:

End-of-life (EOL) care is an essential skill-set for physicians, yet there remains a significant need for improved resident education in this area. At the University of Colorado Internal Medicine Residency program, the EOL curriculum includes one to two lectures, small-group discussions during outpatient Wednesday Education Sessions (WES), and experiential training on inpatient wards and ICUs. We conducted a residency-based needs assessment to guide development of a revised EOL curriculum to be implemented during ICU rotations.

### Methods:

The needs assessment explored residents' prior experience with EOL care and EOL education. This was distributed across the internal medicine residency through an anonymous survey format.

### Results:

58 residents completed the needs assessment: 22 (37.9%) were PGY1, 21 (36.2%) were PGY2, and 15 (25.9%) were PGY3. Of the 58 residents, 49 (84.5%) had previously led EOL discussions in the ICU, and 81% of these conversations were lead before the end of their intern year. However, only 56.9% of participants had ever had formal education on EOL care. At the time of the survey, 29.3% of all participants felt either uncomfortable or very uncomfortable leading EOL conversations in the ICUs. Specifically, participants felt either uncomfortable or very uncomfortable navigating conflicts between patient/family and the medical team (36.4%), turning off implantable cardiac defibrillators (41.8%), managing symptoms at end of life (27.6%), pronouncing patient death (29.3%), offering autopsy (42.6%), and discussing organ donation (58.6%). Fewer participants felt uncomfortable or very uncomfortable discussing changing code status when a patient was unlikely to recover (13.%) or discussing logistics of transitioning to comfort care in an ICU setting (20.7%). Most participants felt that ICU EOL curriculum should be taught in WES (60.3%), ICU morning didactics (48.3%), and/or a dedicated ICU noon conference (41.4%). The highest proportion felt that a multi-modal educational approach should include simulation-based training with either standardized patients (42.1%) or role play (43.9%).

### Conclusions:

There is a need to improve the EOL education offered to internal medicine residents at the University of Colorado. Most residents feel that adding simulation-based training to the lectures and experiential training that already exist would be beneficial and that this should be conducted through a combination of WES sessions and ICU didactics.

### Future steps:

Based on the survey results, a new curriculum was designed to include just-in-time (JIT) simulation-based training to be implemented into the ICU rotation. This would be in addition to the already existing lectures and small-group discussions in WES. We will collect pre and post surveys to assess for improved resident comfort with EOL care following the addition of the new JIT ICU sessions. We plan to collect the

post surveys twice: once immediately after the JIT session and again 3 months later to evaluate for sustained improvement in resident comfort with EOL care.