

ATS Highlights 2022: Critical Care Assembly Early Career Professionals



Jacqueline M Kruser, MD MS

Assistant Professor

*Department of Medicine, Division of Allergy,
Pulmonary and Critical Care Medicine*

University of Wisconsin

Website: <https://www.medicine.wisc.edu/apcc/kruser-lab>

Twitter: @jackykruser

Tell us about yourself.

I am a pulmonary and critical care physician-scientist in Madison, Wisconsin. I joined the UW faculty in February of 2021 after completing my clinical and research fellowships at Northwestern University. Although I was born and spent my early years in Canada, I have become a proud Midwesterner during my various stints in Minnesota, Indiana, Illinois, and Wisconsin.

Is your research clinical, basic science, or translational?

I conduct health services and outcomes research that aims to improve healthcare delivery in the intensive care unit.

Tell us about your research.

The motivation of my research is to make sure we don't lose the humanity of our patients, their families, and our ICU clinicians amidst the technical, faced-paced, complex ICU environment. Our work uses a range of cross-disciplinary methods from health services research, engineering, and medical social sciences to understand how the structures, cultures, and systems underlying ICU care delivery affect treatment decision making. We are currently focusing on treatment decisions about long-term life support.

What manuscript published in an ATS journal would you like us to highlight?

Clinical Momentum in the Intensive Care Unit. A Latent Contributor to Unwanted Care. Annals ATS. PMID: PMC5427724.

Do you have an inspirational quote?

"When we try to pick out anything by itself, we find it hitched to everything else in the Universe."
–John Muir



Please follow us on Twitter!



@ATSCritCare

If you or someone you know would like to be featured as an ATS Critical Care Assembly Early Career Professional, please email (cc@thoracic.org)

ATS Highlights 2022: Critical Care Assembly Early Career Professionals

Jacqueline M Kruser, MD MS

Assistant Professor

Department of Medicine, Division of Allergy,

Pulmonary and Critical Care Medicine

University of Wisconsin

A Process Model of Intensive Care to Evaluate Decision Making in Acute Respiratory Failure

Rationale: For patients with acute respiratory failure who are not recovering, decisions to prolong or stop mechanical ventilation can be burdensome for patients, families, and clinicians. Novel strategies that address the longitudinal, accumulative nature of intensive care hold promise to reduce these burdens. Our objective was to generate a longitudinal process model that represents the current state of intensive care for patients with acute respiratory failure requiring mechanical ventilation.

Methods: We conducted focus groups and semi-structured interviews at two academic medical centers, using a systems engineering framework of process flowchart modeling and directed qualitative content analysis. The 70 study participants represented 17 distinct roles and included interprofessional medical intensive care unit and palliative care clinicians, patient survivors, and surrogates.

Results: Participants refined and endorsed a process model of intensive care, applicable to any patient with acute respiratory failure requiring mechanical ventilation (shown, in part, in the **Figure**). Active deliberation about use of mechanical ventilation or additional life-sustaining treatments occurs at four distinct, critical periods during an intensive care stay (intubation, early deliberation, deterioration, prolonged mechanical ventilation). These critical periods are inconsistently recognized and acted on. Variation in clinician practice and regular rotation of clinicians are key contributors to process inconsistency. Without active deliberation, the process defaults to prolongation of life-sustaining treatment.

Conclusions: A longitudinal model of intensive care for patients with acute respiratory failure illustrates a process currently predisposed toward prolongation and accumulation of life-sustaining treatments. Standardizing recognition and active deliberation during the critical periods may lessen decision-making burdens on patients, families, and clinicians.

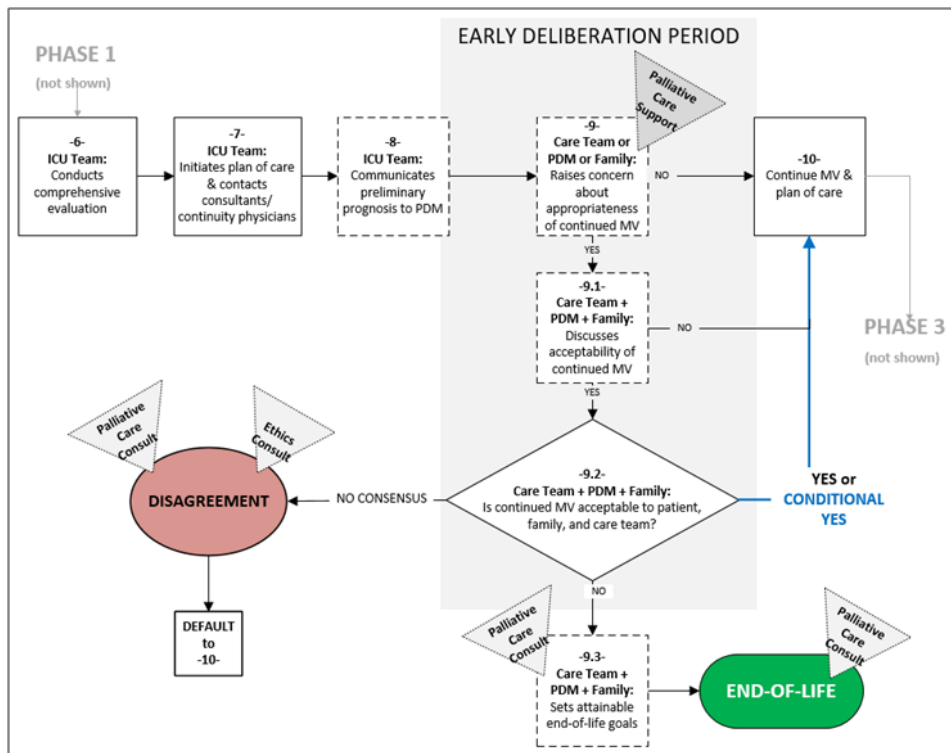


Figure. A selected portion of the process flowchart model demonstrating the longitudinal process of decision making for patients with acute respiratory failure.