# ICU

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resources to facilitate safe discharge from the ICU and hospital, with only 50% able to be discharged home."

Senior author Professor Rinaldo Bellomo commented that better understanding of PerCI could assist ICU teams in discussing prospects for patients who have been in the ICU a long time. "We need to help the fraction who are inevitably going to die do so with dignity, and at the same time help those who are not fated to die to get better treatment," he said. ■

**Reference**

Theodore J Iwashyna TJ, Hodgson CL, Pilcher D, Bailey M, van Lint A Chavan S, Bellomo R (2016) Timing of onset and burden of persistent critical illness in Australia and New Zealand: a retrospective, population-based, observational study. Lancet Respir Med, published online May 4, http://dx.doi.org/10.1016/S2213-2600%2816%2930098-4.

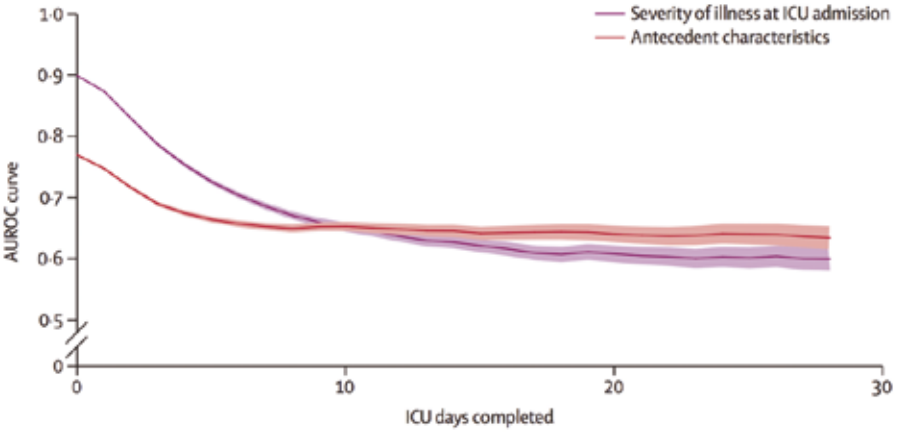


Image credit: University of Michigan and Monash University

Around Day 10 of an ICU stay, patients enter a state called persistent critical illness, or PerCI, where the reason they entered the hospital becomes less important than who they were before they became ill or injured

# DEDICATED RESUSCITATION UNIT IMPROVES TRANSFER TIMES

Image credit: University of Maryland Medical System

Lewis Rubinson

A critical care resuscitation unit (CCRU) at the University of Maryland Medical Center (UMMC) has significantly improved transfer times for non-trauma critically ill patients, according to a recent study (Scalea et al. 2016).

In its first full year of operation, for the subset of adult patients admitted for critical care, transfers increased 64.5 percent compared to a previous year (2,228 vs. 1,354), with a 93.6% increase in critically ill surgical patients. Of the 2,228 patients, 1,318 (59.2%) were transferred to the CCRU; the remaining 910 patients were transferred directly to a UMMC ICU. More transfer patients required an operation during their hospital stay (46 percent vs. 31.1 %) and a higher percentage were in the operating room within 12 hours of arriving (41 % vs. 21.4 %). For patients requiring operations, median time to arrival and operating room (118 vs 223 minutes and 1,113 vs 3,424 minutes, respectively) and median hospital length of stay (13 vs 17 days) were reduced significantly. Patients arrived in nearly half the time (129 vs. 234 minutes). The CCRU also significantly decreased the percentage of lost admissions from 25.7 % to 14 % in this subset.

Co-author Lewis Rubinson, MD, PhD, Associate Professor of Medicine at University of Maryland School of Medicine, said in an email to *ICU Management & Practice*: "We believe this is a game changer. We have begun to emulate the trauma system for non-trauma time-sensitive critical care and believe this is a logical and powerful way for academic centres to coordinate all of their time-sensitive transfers rather than having them occur haphazardly."

Dr. Rubinson added: "Direct transfer to ICUs makes sense to reduce another round of handoffs. The dilemma is that availability for admissions must be 24/7. Workflow in ICUs works contrary to admissions when there are many patients to round on—either rounding gets short changed or the admission does not receive all hands on deck. When rounds are over, direct transfers could receive more attention but there is not always bed availability. In addition, most ICUs are not set up to take the referring facilities' information and establish a pre-arrival readiness posture to be able to optimise immediate evaluation, resuscitation and intervention for patients. Lastly, if we directly admitted to each specialty ICU than each would require 24/7 open staffed available beds to be able to meet emergent demand. We have 7 adult specialty ICUs and the amount of resources which would be required to make sure each individually is always ready for an emergent admission would be tremendous. Also, the different ICUs would not have optimal capability to take a patient outside of their specialty. The ability to move patients from receipt and resuscitation allows for an ongoing readiness posture to take the next patient." ■

**Reference**

Scalea TM, Rubinson L, Tran Q et al. (2016) Critical care resuscitation unit: an innovative solution to expedite transfer of patients with time-sensitive critical illness. J Am Coll Surg, 222(4): 614-21.