

# Delirium Tackled by Massachusetts CSI Teams

AACN Clinical Scene Investigator Academy teams at four Massachusetts hospitals focus on preventing, recognizing and managing delirium.

**D**elirium affects 60 to 80 percent of all intubated patients and is associated with a threefold increase in mortality. Despite this, it often goes undiagnosed, accounting for billions in additional hospital expense.

Nurses at four Massachusetts area hospitals participating in the AACN Clinical Scene Investigator (CSI) Academy national leadership and innovation training program focused their improvement projects on prevention, recognition and management of delirium.

"Collectively the Massachusetts teams made a significant fiscal impact," says AACN past president Dave Hanson, lead faculty for the Boston teams, and regional director, Providence Health & Services, Southern California. "Even more significant is the impact on the patients' lives. As CSIs, they led the way to improve clinical quality and enhance patient safety."

The Massachusetts General Hospital project, "Collaborate to Extubate," heightened staff nurse awareness of the ABCDE+F bundle related to extubation coordination. They decreased ventilator days by 50 days in one quarter, resulting in projected annual savings of \$304,400.

The ABCDE bundle was the focus at Newton-Wellesley Hospital, where "Rise and Shine" sought to decrease ventilator days, ICU length of stay (LOS) and the total number of days on continuous IV sedation, while increasing compliance with CAM-ICU delirium assessment and implementing early mobility within 48 hours of intubation. As a result, average ventilator days per patient



decreased 4.62 days from 2012 to 2013, 60 percent of eligible patients achieved early mobility and ICU LOS decreased by four days, saving nearly \$1.5 million per year.

The team at Beth Israel Deaconess Medical Center sought to achieve more than 90 percent accuracy in delirium assessments using the CAM-ICU tool, attain more than 90 percent inter-rater reliability in delirium assessments, facilitate meaningful interdisciplinary discussion about delirium assessment and sedation management, and decrease benzodiazepine use 50 percent in patients with documented delirium. The team exceeded its goals with a 60 percent reduction in the incidence of delirium and cost savings of \$4,919 per patient, with projected annual savings of nearly \$1.8 million.


Baystate Medical Center's CSI team aimed to decrease delirium by promoting sleep and increasing collaboration. The multidisciplinary team used

the "THINK" mnemonic for each patient in order to determine causative factors for delirium and address sleep on daily rounds. Outcomes were significant: lower overall average noise levels in the medical and surgical ICUs and a 5 percent decrease in the incidence of CAM-ICU positive scores in the medical

ICU. The outcomes resulted in savings of \$409.95 per patient, with

projected annual savings of \$860,895.

"The impressive documented results of all our CSIs spotlight the value of nurses leading collaborative improvement efforts," Hanson says. "The future of nursing and healthcare is in very capable hands with these bedside nurses as our future leaders."

Learn more about nurse-driven initiatives in the CSI Academy Innovation Database at [www.aacn.org/csi](http://www.aacn.org/csi). 

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