

Preventing hospital-acquired delirium in elderly patients



ABOUT DELIRIUM

Delirium is often misdiagnosed as dementia. Unlike dementia which develops over time, delirium begins quickly and can last days, weeks or months.

SYMPTOMS

- Reversed sleep-wake schedule
- Visual or auditory hallucinations
- Agitation, lethargy or swings between the two states
- Withdrawal from people, activities
- Fear of being harmed or held captive

The challenge

Delirium is a common yet underdiagnosed condition that occurs in 29 to 64 percent of hospitalized elderly patients. It contributes to more than \$164 billion in health care costs in the United States annually mostly in longer hospital stays and follow-up care in nursing homes.¹ Despite its prevalence and cost, most hospitals in the U.S. do not have well developed protocols to prevent delirium.

	IMPACT ON PATIENTS ²	
	DELIRIUM	NO DELIRIUM
Higher death rates*	22%	11%
Longer hospital stays	21 days	9 days
More discharged to long-term care	47%	18%

*at six months

Preventable condition

An estimated 30 to 40 percent of delirium cases are preventable.¹ Prevention strategies address the following triggers:

- Anti-anxiety drugs or multiple medications
- Lack of mobility from restraints or catheters
- Dehydration or poor nutrition
- Infections
- Abnormal levels of sodium and potassium
- Disrupted sleep

The solution

ASSESS ALL PATIENTS OVER 70

Each month, Methodist Hospital evaluates about 330 patients over the age of 70 to see if they have delirium when they are admitted and whether they can benefit from delirium prevention protocol. Patients may not benefit if they are in medical isolation, if they have delirium when they are admitted or if they are at the end-of-life and need less stimulation.

PROVIDE INTERVENTIONS WITHIN 48 HOURS OF ADMISSION

Patients have the highest risk of developing delirium within 72 hours of admission. The Methodist nursing staff works to assess the mental state of all patient's 70 years and older within four hours of admission using the



ELLEN'S STORY

Days before 75 year old Ellen Ylitalo was hospitalized with an infection, she had been alert, independent and living in her own home. But when she arrived at Methodist Hospital with her daughter Molly, Ellen was very sick, disoriented and irritable. Molly has been a nurse for nearly 30 years and she recognized that her mother could be developing delirium.

“She was not herself and I was worried,” she recalls. Things began to get better when trained volunteers for Methodist’s delirium prevention program began visiting Ellen. By the time she left the hospital four or five days later, her cognition had returned to normal. Now 80, Ellen continues to live an independent and full life.

Confusion Assessment Method (CAM) tool. The CAM, which is built into the patient’s electronic medical record, is repeated twice a day during a patient’s hospital stay.

ESTABLISH THE HELP PROGRAM

Methodist became the first hospital in Minnesota in 2010 to implement a program based on the Hospital Elder Life Program (HELP) which was developed by Dr. Sharon Inouye at the Yale University School of Medicine.

Methodist maintains a team of about 150 volunteers who undergo 16 hours of training. Volunteers visit a patient for up to three times daily. Volunteers include college students who can earn credits and community volunteers.

HELP ACTIVITIES	
FOCUS	TOOLS
Orientation to person, place, time	Newspapers, conversation, cards from family
Mental stimulation	Card games, crossword puzzles, music or pet therapy
Hearing, vision	Cleaning glasses, providing sound amplification devices

TAKE A TEAM APPROACH

A Gerontological Clinical Nurse Specialist at Methodist educates professional staff on delirium prevention. For example, nurses review medications and make sure patients get enough fluids and walk whenever possible. Physicians are engaged to detect signs of delirium early and to reduce risk factors by managing pain while also minimizing narcotic painkillers.

Results

The delirium prevention program at Methodist Hospital has been fully implemented since 2012.

- More than 87 percent of all patients 70 years and older who are admitted to Methodist do not show signs of delirium
- HELP program volunteers visited 2,824 of patients 70 years and older in 2014
- 98 percent of patients who received the visits were delirium free at discharge
- Estimated reduced medical costs: \$2,500 per patient³

Sources:

1. Effectiveness of multicomponent non-pharmacological delirium interventions: a meta-analysis; Journal of American Medical Association Internal Medicine; Feb. 2015
2. American Delirium Society
3. Delirium in elderly adults: diagnosis, prevention and treatment; Nature Reviews Neurology; April 2009

ABOUT THIS REPORT

In 2007, HealthPartners became one of the first organizations to begin working with the Institute for Healthcare Improvement to develop models of care that simultaneously accomplish three objectives, known as the “Triple Aim”: improve health, deliver excellent patient experience of care, and reduce the cost of care. This report details one of our Triple Aim initiatives. More information is available at healthpartners.com.