Outreach to nursing homes improves early identification of sepsis

BERKSHIRE HEALTH SYSTEMS

Berkshire Health Systems (BHS) is an integrated health system serving the Berkshires. A private, not-for-profit organization, BHS serves the region through a network of affiliates which include Berkshire Medical Center, the BMC Hillcrest Campus, Fairview Hospital, Berkshire Visiting Nurse Association, BHS physician practices, and long-term care associate Berkshire Healthcare Systems.

Challenge

Nursing home residents are seven times more likely to be diagnosed with sepsis than the general population and elders with multiple chronic conditions are more likely to have poorer outcomes than younger, healthier patients.¹

In January 2018, staff from Berkshire Medical Center and Berkshire HealthCare System's (BHCS) skilled nursing facilities (SNFs) and hospice began a collaboration to improve early identification of sepsis in nursing home residents. For BHCS, an integrated delivery system, the partnership between the acute care hospital and their nursing home affiliates was the perfect opportunity to work on improving outcomes for one of the most vulnerable patient populations. In addition, the collaboration gave the team a chance to set goals related to reducing readmissions, developing advanced directives and smoothing transitions of care.

Action

The team began by adapting two tools – a screening tool and a vital sign watch tool – that had been developed by the Minnesota Hospital Association specifically for use in long-term care facilities. Next, the team created an educational presentation for nursing home staff, and chose two nursing homes for a pilot test of the program. The program began in June 2018 and, after a successful pilot, expanded to all 15 skilled nursing facilities in the system. Now that nursing home staff are aware of the risks and symptoms of sepsis, BHS is seeing fewer admissions for sepsis, because infections can be prevented altogether or recognized and treated earlier in the nursing home setting. **Even if a patient develops sepsis, nursing home clinicians can order screening labs and treatment earlier** – improving a patient's chance of survival and potentially reducing the need for a long hospital stay.

Tools for this Project

- Educational Presentation on Sepsis for SNF staff
- <u>Sepsis In-service Post-Test for SNF staff</u>
- <u>Sepsis Vital Sign Monitoring Tool</u>
- <u>Stop Sepsis in Its Tracks Checklist for SNF staff</u>
- <u>Seeing Sepsis Algorithm</u>

Outcomes

Now a year into the project, the team is pleased with the results. In the four months since implementing the program to all SNFs in the system, they have reduced the number of sepsis admissions, increased the number of patients with advanced directives and improved the coordination between nursing home and hospital staff.



Exhibit A: Total sepsis cases per month from BHCS SNF's 2018 Six SNF's in the Berkshires

¹Ginde A, Moss M, Shapiro N and Schwartz R. Impact of Older Age and Nursing Homes Residence on Clinical Outcomes of US Emergency Department Visits for Severe Sepsis. J Crit Care. 2013 Oct; 28(5): 606-611.

