The Delirium Screening and Education Program improves patient care experience in the perioperative medicine clinic



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Background

Delirium is a common, costly, and demanding complication affecting hospitalized patients. Over 50% of older adults are diagnosed with delirium after emergent surgery, with an estimated annual cost to the US healthcare system of \$150 billion. Identifying high-risk patients preoperatively can aid in surgical decisionmaking and provide time for patients and care teams to focus on preventative care. Indeed, with appropriate perioperative care, delirium is preventable in up to 40% of cases. The American Society of Anesthesiologists Brain Health Initiative and the standards described in the American College of Surgeons Geriatric Surgery Verification Program strongly support this avenue of care.

Methods

The Mini-Cog screening instrument was administered in the perioperative medicine clinic to 40 patients over 65, scheduled for elective surgery. Using a protocol developed by Dworkin and Lee (2016), the Mini-Cog score was mapped to a risk of developing delirium. The patient, along with any attending family, were educated on delirium, including modifiable risk factors and techniques to reduce the risk of harm. Seventy-two hours after surgery, the patients were interviewed. Utilizing thematic analysis of the interviews, the educational materials were modified to optimize areas of concern expressed by patients.

The Screening

The Mini-Cog is a quick, commonly used cognitive screening tool wherein the patient is asked to memorize three words for 5 minutes ("banana," "chair," and "sunrise") and draw an analog clock at "ten past eleven." Each word, the clock numbers, and the clock hands displaying the correct time are all worth one point, for a maximum score of five.

Mini Cog Score	Risk of Post-Op Delirium
5	4.5%
4	8.5%
3	17%
2	29%
1	46%
0	64%

The Education

The educational sessions were geared toward the patient and their family members alike, going over what delirium is, what it would look like were it to present, and how they might work to prevent or mitigate its effects.

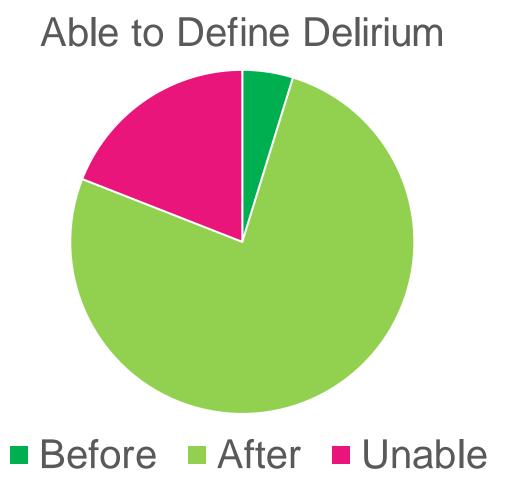
Example of Abridged Education:

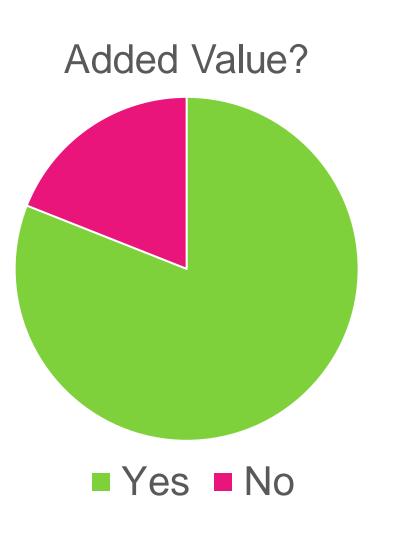
- stay hydrated
- sleep during night, stay awake during day
- walks the halls for exercise (helps stay awake)
- bring hearing aids, glasses, dentures, calendars/watches

Results

The interview data addressed two broad areas: what the patients learned from the session, and how they felt about the service. In 45% of interviews, patients reported feeling more aware of their cognitive health because of the discussion; while only 5% of patients could define "delirium" before the intervention, >80% could afterward; 70% of patients/families felt the service actively added value to their care experience, and indicated a preference for continuing the program.







Conclusions

Considering these promising findings and support of concept from the American College of Surgeons and American Society of Anesthesiologists, our care team recommends that this program continue and expand into standard practice of perioperative medicine. The onus is on all of us, from postop to preop, to continue to combat the effects of delirium.

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