

# Partnering is Paramount: Engaging Care Partners to Improve Delirium Identification

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A 76-year-old woman with a history of mild dementia is admitted overnight after a fall. On morning rounds, she is groggy but slowly wakes up and is able to tell you she is in the hospital. A recent clinic note indicates that she lives alone with some supports, but her cognitive abilities at her baseline are not detailed within the electronic medical record (EMR). You are uncertain whether her current mental status is a change from her baseline and, if so, if this is due to delirium.

## Why should you care about a diagnosis of delirium in this patient?

Delirium is a clinical syndrome of acute changes in attention, consciousness, and cognition. It is a common and preventable condition that is associated with devastating short- and long-term consequences. Patients who develop delirium experience a nearly 12-fold risk of long-term cognitive impairment, more than 2-fold rates of institutionalization, and an

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almost 2-fold increase in mortality across studies with a mean follow-up period of nearly 2 years.<sup>1</sup> On a systems level, delirium is associated with longer hospital stays, greater staffing needs, and substantial costs, accounting for up to \$152 billion in annual health care

patients who are at risk for delirium, such as those with preexisting dementia. We also advocate for more consistent application of already known best-practices for delirium identification (Figure). The following steps should be taken in these efforts.

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spending.<sup>2,3</sup> Evidence-based programs, such as the Hospital Elder Life Program,<sup>4</sup> may reduce delirium incidence by nearly one-half but are not practiced in all hospitals.

Patients with preexisting cognitive impairment are particularly vulnerable to delirium. Persons living with dementia are hospitalized at greater frequency than other adults, and up to half of all hospitalized adults with dementia develop delirium.<sup>4</sup> Patients who develop delirium superimposed on dementia face a higher risk of adverse outcomes—including higher rates of institutionalization and increased mortality at 12 months—than patients who experience either delirium or dementia alone.<sup>5</sup>

We propose the development of comprehensive approaches to support communication and collaboration among hospital teams and care partners when advancing the care of

## Improve Delirium Recognition by Clinicians

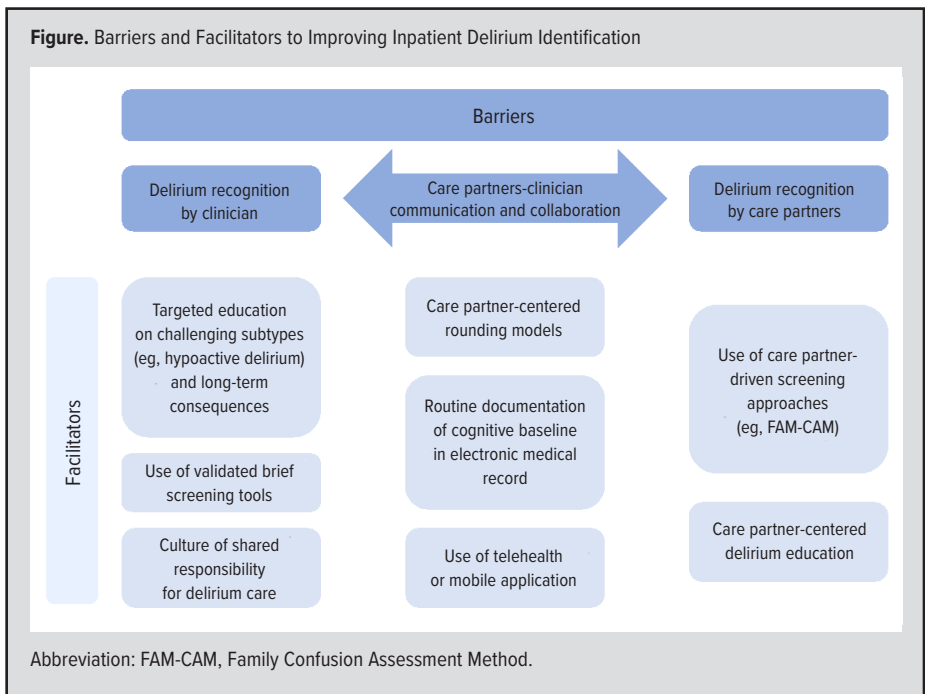
Prompt identification of delirium and differentiation of the condition from preexisting dementia is critical, as early identification can improve patient outcomes, inform prognostication, and reduce health care costs.<sup>5-7</sup> Unfortunately, delirium identification remains challenging in clinical practice, with only 35% of cases being recognized.<sup>2</sup> As in the case above, in the absence of care partners at bedside, it may be difficult for hospital clinicians to appreciate whether a patient with preexisting cognitive impairment is experiencing an acute cognitive change; this information is rarely well-documented within the EMR. Clinicians may misattribute delirium symptoms to underlying dementia or acute illness—particularly when a patient is experiencing hypoactive delirium.<sup>6</sup> Clinicians

also may have an inaccurate understanding of the prevalence and consequences of delirium, leading them to downplay its clinical importance. A recent study found that many hospital medicine clinicians do not fully appreciate the downstream sequelae of delirium, including the increased risk of cognitive impairment.<sup>8</sup>

Several strategies could facilitate clinician engagement in delirium identification. First, there is evidence of a gap between hospital clinicians' self-perceived competence and clinical practice patterns with regards to delirium.<sup>7</sup> Prior work examining clinician understanding of delirium has focused largely on knowledge of delirium risk factors and symptoms, rather than diagnostic approaches and consequences. Clinicians may benefit from targeted education in these areas, including how to detect more challenging delirium subtypes and the long-term consequences of delirium.

Clinicians must understand and appreciate the need for validated screening tools used in conjunction with clinical judgement. In the United Kingdom, routine delirium screening has been associated with decreased mortality among individuals with dementia.<sup>5</sup> However, it remains unclear how to practically implement routine screening more broadly, who precisely would benefit from screening, and how frequently screening should occur. Furthermore, perceived time constraints and competing clinical priorities are ongoing barriers. One promising strategy, the Ultra-Brief Confusion Assessment method (UB-CAM), uses a 2-item screen that takes fewer than 40 seconds to determine if a more extended interview with the 3-Minute Diagnostic Assessment for Delirium (3D-CAM) is indicated.<sup>9</sup> Answers to the UB-CAM may be tracked efficiently in real time using the EMR.

Unfortunately, delirium screening tools will not be helpful if the results are not translated into effective care strategy, such as a targeted workup for potentially reversible precipitants. There also needs to be cultural shift among health care teams to embrace the construct that delirium identification is everyone's responsibility. Effective, team-based approaches to promoting shared responsibility in delirium identification must be tailored locally.



### Engage Care Partners to Enhance Recognition and Understanding of Delirium

Care partners have unique expertise regarding patients outside of the hospital and are essential allies in determining whether a patient has an acute change in cognition—particularly for patients with preexisting dementia. Care partners may recognize symptoms that clinicians do not, and care partner-centered tools (such as the Family Confusion Assessment Method<sup>10</sup>) have the potential to improve delirium detection rates.<sup>11</sup> Care partners frequently experience stress when their loved ones develop delirium, and having the opportunity to contribute to delirium identification and prevention may mitigate feelings of helplessness and lack of control.<sup>12</sup> Yet care partners are not systematically engaged in delirium identification on most hospital wards and report significant barriers to such engagement, including uncertainty about how to collaborate with clinicians.<sup>13</sup>

Care partners may need education to recognize signs and symptoms of delirium. In prior work, care partners have expressed a need for accessible information regarding delirium, in addition to improved communication and emotional support from clinicians.<sup>14</sup> One example of an educational tool is “This is Not My Mom,” a website that provides delirium education tar-

geted to care partners. However, the optimal timing, modality, and content of these educational efforts are not well-defined, and existing educational initiatives are not broadly available or consistently implemented across health systems.<sup>15</sup> Efforts are needed to continue to develop, deliver, and evaluate accessible care partner education.

### Develop Novel Care Partner-Clinician Communication and Collaboration Models

The implementation of systems-level delirium education and screening should be done in parallel with cost-effective, reproducible approaches to support clinician and care partner communication and collaboration. In the case above, a member of the clinical team may speak to a care partner to obtain collateral information about the patient's baseline mental status. However, there are not structures in place to capture such care partner expertise and to share this information among the patient's care team. Thus, team members may have duplicative conversations with care partners, may miss important opportunities for information collection, or collectively may fail to assess for acute cognitive changes due to a sense of a diffusion of responsibility.

Care partner engagement models for delirium have been explored in the intensive

care unit (ICU), and insights from these settings should be applied to general care wards. Parsons Leigh et al assessed physician, nurse, and care partner perceptions towards delirium collaboration as part of larger study of care partner-administered delirium detection tools in the ICU. Their findings highlighted the need for overarching strategies to support routine delirium screening, including regular communication with care partners about delirium on rounds and electronic tools to efficiently capture delirium screening results.<sup>16</sup> In a wards-based pilot study by Rosenbloom et al, modules on improving delirium identification and nurse/caregiver partnership were developed for both care partners and nurses. Implementation of the modules was associated with improved care partner delirium knowledge and more positive nurse/care partner attitudes towards collaboration.<sup>17</sup>

Support tools—such as those that proactively solicit details on patient preferences and routines—can be integrated into the EMR, improving patient-centered care and potentially facilitating more timely delirium identification by providing baseline mentation information. Virtual platforms also may offer opportunities to improve or optimize communication regarding delirium identification during hospital stays, including both care partner-clinician and clinician-clinician communication. Innovative examples include the use of telehealth delirium screening, which has been associated with improvements in screening accuracy in the ICU, and mobile applications that simplify serial cognitive assessments.<sup>18,19</sup> Future work should examine how to apply potential technologies to general medicine wards in a way that is accessible and appropriate for the highest risk patients, such as those with underlying dementia.

## Conclusions

Delirium is a common and preventable hospital-acquired condition associated with high morbidity and mortality that disproportionately affects patients with dementia. Despite the existence of validated screening tools, delirium is frequently missed in clinical practice. Suboptimal communication and collaboration between care partners and hospital

clinicians contribute to inadequate delirium detection. Improved collaboration between hospital teams and care partners—in conjunction with evidence-based strategies for delirium prevention—may meaningfully improve patient, care partner, and systems-level outcomes, and efforts to address these gaps should be a priority for clinicians and health care systems.

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