Flagging dementia patients for better hospital care

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Cedars-Sinai investigators are using electronic health records to identify hospitalized patients likely to have dementia. The method they developed, detailed in a study published in the *Journal of the American*

Geriatrics Society, is designed to help medical staff tailor care to best serve these patients.

"People with dementia or cognitive impairment can be especially vulnerable in the hospital if their care team is unaware," said Zaldy Tan, MD, MPH, medical director of the Jona Goldrich Center for Alzheimer's and Memory Disorders at Cedars-Sinai and first author of the study. "Our study is the first to investigate the feasibility of utilizing the electronic health record to identify these patients and alert the hospital team to help guide clinical care."

If a patient with dementia is hospitalized for an unrelated condition, such as a fall or infection, they might not be able to accurately describe their medical history or safely make decisions about their medical care, Tan said. Patients with dementia might also need help to understand discharge instructions or just to stay calm in the hospital environment.

"Diagnoses such as Alzheimer's disease, dementia or cognitive impairment are often not documented in a patient's medical records," said Tan, who is also director of the Memory and Healthy Aging Program and the C.A.R.E.S. Program at Cedars-Sinai. "And if providers are not aware that their patient has dementia, they may not call a loved one who can provide critical information, help with decision-making, and provide support."

To identify these patients, investigators created a secure algorithm to search patients' electronic health records for a diagnosis of dementia and for prescriptions for medications approved by the Food and Drug Administration to treat dementia.

"The biggest challenge in creating the algorithm was the variety of clinical scenarios that led to a potential diagnosis of dementia," said Cameron Escovedo, MD, MS, physician leader of Enterprise

Information Services at Cedars-Sinai and co-author of the study. "We had to account for multiple scenarios to ensure the algorithm was complex enough to capture everyone."

When the algorithm detects a patient with possible dementia, a yellow banner pops up on the patient's chart to make hospital staff aware.

"Given the poor patient outcomes currently associated with dementia care in the hospital setting—including increased risks for falls, use of restraints, and prescription of antipsychotic medications—there was a need for a method to accurately identify these patients," said Nancy Sicotte, MD, chair of the Department of Neurology at Cedars-Sinai and senior author of the study. "Our algorithm alerts the hospital team to the presence of cognitive impairment so that they can employ targeted interventions and ultimately improve outcomes for vulnerable hospitalized patients."

To help ensure that medical staff understand how to respond to these patients once identified, a team of nurses and physicians at Cedars-Sinai created and tested a training program and published their results in the journal *Geriatric Nursing*.

"About 25% of the nursing staff on the units where we tested this training felt they had not previously received comprehensive training in the care of persons with dementia," said nurse practitioner Deana Rhinehart, DNP, first author of the study. "Our goal was to help bridge the gap in knowledge and confidence within our nursing teams."

The training was conducted over multiple 45-minute virtual sessions led by Rhinehart and nurse practitioner Dyane Gatmaitan, NP, a co-author of the study. Sessions included interactive case studies and question-and-answer segments.

"Topics included effective communication, documentation of behaviors, delirium versus dementia, refusal of medications, general behavior management and patient advocacy," said Gatmaitan. "We are finalizing a rollout plan to expand this training to additional units in March."

Tan said that the identification system will be expanded to all medical and some surgical units, and that the system and the training—currently in use only at Cedars-Sinai—could easily be deployed at other institutions as well.

More information: Zaldy S. Tan et al, Alerting providers to hospitalized persons with dementia using the electronic health record, *Journal of the American Geriatrics Society* (2023). DOI: 10.1111/jgs.18673

Deana M. Rhinehart et al, Intervention to improve acute care nurses confidence and knowledge in hospital dementia care, *Geriatric Nursing* (2023). DOI: 10.1016/j.gerinurse.2023.08.026

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