Diagnosis: Delirium

Initiative Type

Service Improvement

Status

Deliver

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Summary

Delirium is a common, morbid and mortal condition and studies of hospital coding repeatedly demonstrate that delirium is likely under recognised. For numerous reasons, the diagnosis of delirium has been the remit of specialised clinicians and formal diagnostic tools which were time consuming and required specialist training. The 3D-CAM is a new rapid diagnostic tool which has high sensitivity

and specificity for delirium and has been validated in the acute care setting including patients with cognitive impairment. It requires minimal training to use and takes approximately 3 minutes to use at the bedside. Combined with rapid screening tools (The 4AT score) which are already implemented in the Royal Brisbane and Women's Hospital (RBWH), the recognition and diagnosis of delirium can now be made with greater confidence by a large spectrum of clinicians from junior medical and allied health staff to senior staff. Improving the recognition of delirium enables clinicians to provide safer care by reducing unnecessary treatment and medications, which has been demonstrated to occur when the delirium is not recognised by clinicians. The Diagnosis: Delirium project is being undertaken in conjunction with the Clinical Excellence Queensland Improvement Fellowship.

Key dates

Feb 2018

Feb 2019

Implementation sites

Royal Brisbane and Women’s Hospital

Partnerships

Royal Brisbane and Women’s Hospital (RWBH) Internal Medicine Research Unit, RWBH Delirium and Dementia workgroup, RWBH Department of Internal Medicine and Aged Care

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Aim

To improve the diagnostic rates of delirium in acute hospital inpatients by providing clinicians with a rapid and reliable tool for the diagnosis of Delirium.

Benefits

- Early Screening for delirium.
- Diagnosis of delirium.
- Identifying and treating underlying causes.
- Preventing falls and pressure injuries.
- Minimising use of antipsychotic medicines.
- Transition from Hospital care.

Background

Delirium is a common disorder in elderly hospital inpatients however it is largely under-recognised. Delirium is characterised by an acute fluctuating change in mental status and poor attention accompanied by perceptual disturbances. Patients with delirium may demonstrate signs of agitation and restlessness (hyperactive delirium), be withdrawn or quiet (hypoactive delirium), or a combination of both (mixed delirium). Studies show the prevalence of delirium in hospital inpatients (>65 years) ranges from 11-42 per cent, however only 12-35 per cent of these cases of delirium are recognised by clinicians. Previous studies at the RBWH have identified delirium in 22 per cent of general medicine patients aged 65 years and older. Additionally, delirium has been shown to persist in 45 per cent of patients at discharge and in 33 per cent of cases one month after discharge and is a risk factor for readmission to hospital. Some patients never recover to their pre-morbid/baseline level of cognition following delirium, with subsequent reduced function and cognitive decline. Delirium has a significant impact on patient outcomes and presents a large burden on family members and the healthcare system. Delirium is associated with many adverse outcomes including increased risk of death, institutionalisation and incident dementia. Delirium is a strong risk factor for in-hospital falls and its prevention has been shown to successfully reduce inpatient falls. Delirium is also associated with prolonged length of stay, inappropriate pharmacological management, and an increase in complications. Misdiagnosis of delirium results in missed opportunities for treatment, including safe discharge planning. Early diagnosis and clinician management of delirium has also been shown to improve patient outcomes and non pharmacological prevention strategies when delirium is diagnosed can reduce inpatient falls and reduce healthcare costs. Delirium also represents a significant cost burden to health care providers and costs more than US$164 billion per year in the USA. Delirium is

a treatable and preventable condition and early identification, management and prevention represents significant cost savings opportunities for hospitals. The importance of recognising and treating delirium is reflected in the Australian Delirium Clinical Care Standards (DCCS). The DCCS provides guidance to clinicians and health services on delivering appropriate care to people at risk of, or with delirium, including:

1. Early Screening for delirium
2. Diagnosis of delirium
3. Interventions for prevent delirium
4. Identifying and treating underlying causes
5. Preventing falls and pressure injuries
6. Minimising use of antipsychotic medicines
7. Transition from Hospital care

It is important to note that satisfying DCCS Standards 4 to 7 is dependent on effective diagnostic of delirium.

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