Supplementary material S4: Site I urgent care team in depth case study

Site I's urgent care team was the first team to begin piloting the community delirium toolkit, in August 2020. The team has submitted data throughout the pilot and provided qualitative feedback on the use of the toolkit. A more detailed look at their experience with the toolkit allows insight to how its adoption has affected their work.

Context

The service is staffed by 25 nurses and 15 healthcare assistants, split across four geographical teams. The service is also supported by a medication manager and a pharmacy technician. The team previously included occupational therapists and physiotherapists, who have since been moved from the team but are still accessible for direct referral. The service has daily communication with social services about their patients. The service covers 32 GP areas and all care homes in the same area. It provides a routine service for patients who have chronic health conditions (typically patients with chronic obstructive pulmonary disease, and heart failure), as well as those who are frequent attendees at hospital; as well as 15 urgent beds.

Routine referrals come from; district nurses, Ambulance Service community paramedics, Macmillan nurses, secondary care if the patient is a frequent attendee, GPs, and therapists. Urgent referrals come from similar sources, but also include hospital wards, mainly acute assessment units. Monthly referrals (routine/urgent) range from 10 to 40. The total caseload for all four geographical teams is about 100 routine cases. The number of referrals in 2020 was similar to previous years despite COVID-19, although there may have been a reduction in the number of flu cases and referrals from secondary care. A new scheme which started in October 2020, where community paramedics in the Ambulance Service diverted patients to the team, resulted in an increase in referrals via this pathway.

Adoption

In preparation for adopting the GM community delirium toolkit, all nurses in the team were provided with training on using the toolkit. This was over a two-week period and involved a detailed look at the key resources and focusing on signs and symptoms of delirium. The healthcare assistants were also provided with training using the GM delirium leaflet, to help them spot the signs of delirium in patients. All training was delivered before going live with the toolkit. Each of the four geographical areas, then had a link nurse who took the lead on delirium, including collating all data as part of the pilot.

As a result of the pilot, all nurses used the toolkit to identify and manage patients with delirium. They all administered the 4AT screening tool. They also all used the TIME bundle provided to ensure they followed a standardised and structured approach to identify the causes of delirium and followed the management plan. All the staff reported that the toolkit provided consistency of care for all patients. As a result, they found that the nurses have become more confident dealing with known or suspected cases of delirium. Cases of delirium have been diagnosed earlier and there has been a greater emphasis on prevention.

Blood tests and ECGs taken on patients with suspected delirium were regarded as urgent. Blood results are returned the same or following day, and ECG results interpreted immediately by telemetry. Bladder scanning was needed on one or two patients, which required a referral to a dedicated team outside the service; however, this had not resulted in any delays in accessing this when needed.

Team reflections on factors that contributed to success

The staff reported that it has become 'business as usual' to adopt a watch and wait approach rather than to prescribe antibiotics; where there is no clear infectious cause of delirium found. They had started to note that for some patients the change of environment may have been a contributory cause to the development of delirium. Previously this might have been attributed to a urine infection by the family. Increased education and awareness about delirium has helped identify or consider other causes, including environmental changes, when people have returned home from hospital.

The team have noted that more patients now have family members living with them due to the COVID-19 pandemic. This may have improved the ability of patients to manage at home. For example, they had noted improvement in nutrition and hydration, which may have prevented some cases of delirium. This has been reflected back to patients and families, where patients are at risk of developing delirium, and is being taken forward as a prevention strategy.

The team shared the delirium leaflet with family members and patients where a patient had a delirium diagnosed in the community or delirium prior to discharge from hospital. Feedback suggests patients and carers have found it useful to know and understand what delirium is and how to prevent it.

The community delirium toolkit has become firmly embedded in team practice. In addition, the team have also made links with other associated services. For example, one of the paramedics from the local ambulance centres has devised a QI project to enhance paramedic assessment for delirium using the 4AT.