Delirium is a distressing disorder that is common in older people, particularly those with dementia. People with delirium can become confused and have problems with thinking and reasoning. They can become drowsy or agitated. These problems can come and go over hours and days. Although delirium is usually reversible, it can have serious consequences, including increased hospitalisation, risk of death and worsening dementia.

Why is it important to prevent delirium?
In many cases, delirium is caused by an underlying physical illness. Because of this, it is important to recognise it early on, find out what those underlying causes are and treat them.

However, treating delirium does not appear to avert the poor outcomes linked to it, so the priority must be prevention rather than treatment. Delirium prevention has been shown to be possible in inpatients using multicomponent interventions designed to identify and address its risk factors (Marcantonio et al, 2001).

Why care homes?
There is little research on delirium and, in particular, on delirium in care homes for older people. Residents are likely to have a high risk of developing delirium because the risk factors – older age, dementia, physical illness, poor mobility – are common in the care home population.

Preventing delirium involves delivering quality care by: recognising and addressing sensory impairments; ensuring adequate hydration and nutrition; preventing infections and falls; reducing the adverse effects of medication; and better pain management.

As such, addressing the problem of delirium could also improve the quality of care and outcomes for residents, including fewer accident and emergency attendances and unplanned admissions to hospital.

However, there have been no studies investigating the effectiveness of multi-component interventions for delirium prevention in care homes for older people.

Study objectives
Our four main objectives were to:

» Design an evidence-based intervention to prevent delirium that was suited to the care home setting;
» Test its feasibility – whether it could be implemented and was acceptable to care home staff, and what it would cost;
» Look for preliminary evidence of its potential to improve care and outcomes for residents;
» Learn how to improve the design of a future trial of the intervention.

Methods
We developed Stop Delirium!, an enhanced educational package targeting care home staff. This is based on research evidence for delirium prevention in hospitals which was extrapolated because of a lack of direct evidence from care homes research.

Implementing multifaceted interventions is challenging, so the package incorporates evidence-based strategies to change practice, such as championing, interactive teaching, reminders and being tailored to the setting.

Details of the methods used to design the intervention and a full description of it have previously been published (Siddiqi et al, 2010; 2008). Key components included:

» A specialist delirium practitioner working in six homes over 10 months, acting as a trainer and a champion to engage staff in the project;
» A focus on targeting risk factors for delirium;
» An education/training package consisting of three 20-minute flexible and interactive sessions for all staff, including night staff, delivered by the delirium practitioner using a variety of written materials;
» Working groups recruited from staff (qualified and unqualified) who volunteered to participate, and facilitated by the delirium practitioner.

These groups identified key issues on

Preventing delirium in older people
Delirium is usually reversible but can have serious consequences, such as increased hospitalisation, risk of death and worsening dementia. The condition is often caused by an underlying physical illness so it is important to recognise it early and diagnose and treat the underlying causes.

Results
Records from 286 residents were included; they had significant levels of cognitive problems and comorbid illnesses. Over half had a diagnosis of dementia, almost one-third were receiving an antidepressant and fewer than one-third had the capacity to give consent.

Most staff reported seeing residents with delirium daily or several times a week. Interviews confirmed they routinely managed residents who were confused, cognitively impaired and physically unwell.

The home was perceived as a demanding place to work and dealing with aggression and confusion were challenging parts of everyday life. Staff had a range of experience and used various strategies, but there was a sense that the work was difficult.

Although 75% did not have nursing training, they reported they had expertise in managing residents’ “usual” behaviour as they knew them well and were well placed to notice changes. While staff turnover was around one-third in 10 months, more than half the staff had been in the role for more than five years.

While the questionnaire responses suggested delirium was often seen, when asked to describe acute changes in behaviour, staff did not readily mention delirium or acute confusion and were not confident in recognising, preventing or managing delirium before the intervention.

Feasibility of the intervention
Stop Delirium! was successfully implemented in all six care homes. More than 90% of staff attended on-site education sessions. Working groups were convened at each home to produce solutions and materials relevant to delirium prevention.

The project was very well accepted. Staff were keen that it should continue after the study and, in some homes, identified a delirium champion to continue training. However, managers did not think homes would be able to implement Stop Delirium! without outside help. The direct cost of delivering it over 10 months was £33,502.

Impact on care
Self-reported staff confidence in recognising, preventing and managing delirium increased after the intervention from 34.4% to 67.7%. By participating in working groups, staff felt empowered to take on different roles and reported a sense of pride in being asked for their expertise. Interviews showed evidence of changes in staff practice, such as a greater readiness to investigate for underlying physical causes if residents’ behaviour changed.

In interviews, staff showed more awareness of delirium; this may explain the post-intervention survey finding of an increase in recorded delirium episodes. The number of prescriptions fell and the proportion of residents who had a cognitive test in the previous six months increased.

What we have learnt
Staff knowledge of and day-to-day contact with residents means they are well placed to help prevent delirium by identifying and addressing its risk factors. However, we found staff were not confident in delirium prevention or recognition. Providing training and using their knowledge of residents could improve quality of care.

Staff were receptive to the Stop Delirium! training and found it relevant. With a high staff turnover, a systematic training programme is needed rather than a one-off training session. Training also needs to include managers to secure engagement. It is unlikely that care home staff could take on the training role without external support, but there is potential to identify a “delirium champion”, who might deliver it under supervision.

There was evidence that staff benefited in terms of increased self-esteem and confidence by participating in the working groups. This was an important finding as staff confidence is associated with better quality of care.

Conclusion
Our findings suggest a multicomponent intervention for delirium prevention is feasible and has the potential to change staff practice. Additional advantages include reducing hospital admissions and driving up the quality of care for all residents.

Addressing delirium in care homes presents an opportunity to improve care for one of the most vulnerable populations and should be a priority for clinicians and researchers alike.


References