



FOCUS ON RESEARCH

TITLE: Is statin use associated with care-home admission (describing care-home admission as a novel study 'outcome' using long term follow up of trial participants and screenees)

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Aim: Admission to a place providing long-term continuous care, a care-home, is a common but not inevitable life event for older adults. Research around care-homes is limited and we don't really understand the reasons why some people become so dependent they require care-home admission and others are able to remain at home even in very old age.

We performed a two stage study. Firstly, we assessed whether National electronic health-care data, that is routinely recorded, can be used to identify people who required care-home admission in the recent past. We then used the electronic health-care data to test whether taking statin (cholesterol lowering) tablets in mid-life or older age had any effect on being admitted to a care-home.

Project Outline/Methodology: For the first stage, we requested care-home information from a series of National registers and databases. We used the annual care-home Census, information on medication prescriptions and information from hospital attendances. We compared each to see which one identified the most care-home residents.

We then linked the care-home information to an electronic file containing information on participants in two historical, research studies looking at the effects of statin tablets in thousands of adults. In these studies half the participants took statin and half took placebo (inactive pills). We described whether those who took statin or placebo were more likely to require care-home admission.

Key Results: We found that our chosen National health-care records could identify care-home residents, but no single source identified them all and using a combination of information worked best.

When we linked care-home information to the statin research study information, there was no suggestion that taking statins increased or decreased the chance of being admitted to a care-home. Factors associated with care-home admission were age, sex, smoking and social deprivation.

Conclusions: We know that statins can have various positive and detrimental health effects beyond lowering cholesterol. However, we saw no effect of statins on care-home admission status.

Although we did not see a statin effect, we were able to demonstrate that routinely collected health-care data can be used for large scale care-home research.

What does this study add to the field?

Previous studies have suggested certain factors associated with care-home admission (age, sex, presence of a carer) and our data support these findings. A possible beneficial or harmful effect of statins on care-home admission has been postulated previously. Our results suggest that statins have no major impact on care-home admission.

Implications for Practice or Policy: The majority of older adults wish to stay in their own homes if possible. Our findings demonstrate that using routinely recorded health-care data can allow researchers and policy makers to look for factors that may promote staying at home or factors that may increase the risk of needing care-home. Making use of National information that is already recorded and available should allow us to answer questions around care-home in a more efficient and economical way than previous methods.

Where to next? To ensure the care-home information we used is completely accurate, we hope to assess whether these data identify all people resident in a care-home in a group of older adults where we are already sure of their care-home status.

As an exemplar of how information could be used in the future, we propose linking the care-home data to a National database describing stroke in Scotland. This would allow us to look at which factors may predict care-home admission following stroke and may even suggest some factors that we could try to treat to prevent or delay care-home admission.

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