An evaluation of domiciliary medication review by pharmacists in older people.

The HOMER trial

A randomised controlled trial of home based medication review by pharmacists in older people; a comparison of the use of two health utility measures in older people; and an evaluation of an adapted version of the abbreviated mental test.

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Submitted for the degree of Doctor of Philosophy

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Abstract

Adverse drug reactions are an important cause of hospital admission. The National Service Framework for Older People recommends medication review as one solution. This study investigates whether home-based medication review by pharmacists affects hospital re-admission. 872 older people (over 80) discharged after an emergency admission, were randomised to receive either two pharmacist visits or usual care. The primary outcome was total emergency re-admissions at six months.

This study incorporated two methodological questions. The first investigated measures of quality of life in older people. The EQ-5D, is a popular tool, but is criticised for its range of dimensions and sensitivity. The new Assessment of Quality of Life (AQoL) offers greater richness in dimensions. The two measures were compared in terms of practicality, construct validity, agreement, and sensitivity.

A second methodological issue was assessment of confusion for trial stratification purposes. The abbreviated mental test (AMT) is a validated screening tool but it includes one question involving person identification which can be difficult to ask. This study investigated replacing that question with photographs, in terms of practicality, sensitivity and specificity.

Within the trial there were 178 re-admissions in the control group and 234 in the intervention group by six months; an increase of 30% (rate ratio=1.30, 95% confidence interval [C.I.] 1.07-1.58, p=0.009). 49 intervention group deaths occurred compared to 63 control deaths (Hazard ratio = 0.75, 95% C.I. 0.52-1.10, p=0.14). Further research is required to explain the counter-intuitive finding of increased hospital admissions.

The comparison of the EQ-5D and AQoL demonstrated poor agreement. Although the AQoL appeared to have marginally more favourable construct validity, the EQ-5D was easier to administer, had a higher completion rate, and proved more sensitive to change.

The AMT's person identification question proved difficult to ask. Photographs were a practical solution which performed well when incorporated within the AMT.