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ECONOMIC EVALUATION OF FALLS PREVENTION STRATEGIES: SYSTEMATIC REVIEW

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Aim:

Economic evaluations provide information to enable comparison of value for money from health services and treatments. Our objective was to systematically review studies reporting the economic value of falls prevention strategies in older adults.

Method:

We conducted a comprehensive search of the MEDLINE, OVID, PUBMED, EMBASE, and NHS EED databases to identify cost-effectiveness, cost-utility or cost-benefit studies based on fall prevention interventions published in the English language (from 1945 through June 2008). The quality of all studies was assessed using the Quality of Health Economic Studies instrument and the checklist for cost-effectiveness analyses. We noted the comparator evaluated, cost outcomes, perspective, time horizon, sensitivity analyses, discount rate, efficacy, intervention tested, treatment duration, study population, setting (community, residential care), country, and impact factor of the journal.

Results:

Of the 27 titles abstracted, identified and reviewed, we excluded 13 and selected 14 abstracts for full text review. The 12 studies meeting our inclusion criteria for this systematic review included 11 cost-effectiveness, one cost-utility, and one cost-benefit analyses. Eight studies were part of a randomised controlled trial, two were from a controlled trial, and two reported a decision analytic model. Comparison of the results was difficult due to the different perspectives taken, the cost items included, and the methodology used for calculating incremental cost-effectiveness and cost-benefit ratios. Cost-effectiveness analyses showed that Tinetti's multifactorial programme targeted at eight fall risk factors, the Otago Exercise Programme delivered to over 80 year olds, and a home safety programme if delivered to the subgroup of participants with a previous fall, were all cost saving.

Conclusion:

Economic evaluations are sparse in the falls literature but crucial to gaining an understanding of clinically and economically feasible interventions for optimal targeting at populations of older adults at high risk for falls.