

0779 **ASSESSING THE COST-EFFECTIVENESS OF CONVENTIONAL GROUP BASED EXERCISE AND TAI CHI AS INTERVENTIONS TO REDUCE THE RISK OF FALL-RELATED INJURIES IN OLDER PEOPLE**

A Park\*, D McDaid *Correspondence: London School of Economics and Political Science, Houghton Street, London, WC2A 2AE, UK*

10.1136/ip.2010.029215.779

**Objective** To determine whether there is an economic case for investment in group exercise programmes or Tai Chi compared with recommended multi-factorial programmes as protective interventions against the risk fall-related injury in older people.

**Methods** A decision analytic model compared costs and effects of conventional group exercise, Tai Chi and multi-factorial interventions for individuals aged 65+. A literature review identified parameters for the model, including risk of falling and sustaining injury, quality of life, costs of interventions, health service use and institutionalisation risk. The economic analysis was conducted from a health and social care perspective, using 2008 UK pounds. The main outcome was incremental cost per quality-adjusted life-year (QALY) gained. To explore uncertainty sensitivity analyses were run varying effectiveness, cost and utility gains associated with the interventions.

**Results** Participation in Tai Chi classes was shown to dominate investment in multi-factorial fall prevention strategies and conventional group exercise with both lower expected costs (1087 vs 1190 or 1255 per participant) coupled with a small increase in quality of life. Our results remained robust

in sensitivity analysis. In the worst case scenario the cost per QALY gained using Tai Chi was 14 899, a value considered highly cost effective in the UK healthcare system.

**Conclusions** Our economic analysis suggests that both exercise and Tai Chi are potentially cost effective intervention strategy for the prevention of fall related injuries in community dwelling older people.