Interventions to increase influenza vaccination rates of those 60 years and older in the community

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Authors' objectives
Background: The effectiveness of interventions to increase the uptake of influenza vaccination in people aged 60 and older is uncertain. Objectives: To assess access, provider, system and societal interventions to increase the uptake of influenza vaccination in people aged 60 years and older in the community.

Search methods: We searched CENTRAL (2014, Issue 5), MEDLINE (January 1950 to May week 3 2014), EMBASE (1980 to June 2014), AgeLine (1978 to 4 June 2014), ERIC (1965 to June 2014) and CINAHL (1982 to June 2014). Selection criteria: Randomised controlled trials (RCTs) of interventions to increase influenza vaccination uptake in people aged 60 and older. Data collection and analysis: Two review authors independently assessed study quality and extracted influenza vaccine uptake data.

Main results: This update identified 13 new RCTs; the review now includes a total of 57 RCTs with 896,531 participants. The trials included community-dwelling seniors in high-income countries. Heterogeneity limited meta-analysis. The percentage of trials with low risk of bias for each domain was as follows: randomisation (33%); allocation concealment (11%); blinding (44%); missing data (49%) and selective reporting (100%). Increasing community demand (32 trials, 10 strategies) The interventions with a statistically significant result were: three trials (n = 64,200) of letter plus leaflet/postcard compared to letter (odds ratio (OR) 1.11, 95% confidence interval (CI) 1.07 to 1.15); two trials (n = 614) of nurses/pharmacists educating plus vaccinating patients (OR 3.29, 95% CI 1.91 to 5.66); single trials of a phone call from a senior (n = 193) (OR 3.33, 95% CI 1.79 to 6.22), a telephone invitation versus clinic drop-in (n = 243) (OR 2.72, 95% CI 1.55 to 4.76), a free groceries lottery (n = 291) (OR 1.04, 95% CI 0.62 to 1.76) and nurses educating and vaccinating patients (n = 485) (OR 152.95, 95% CI 9.39 to 2490.67). We did not pool the following trials due to considerable heterogeneity: postcard/letter/pamphlets (16 trials, n = 592,165); tailored communications (16 trials, n = 388,164); customised letter/phone-call (four trials, n = 82,465) and client-based appraisals (three trials, n = 4016), although several trials showed the interventions were effective. Enhancing vaccination access (10 trials, six strategies) The interventions with a statistically significant result were: two trials (n = 2112) of home visits compared to clinic invitation (OR 1.30, 95% CI 1.05 to 1.61); two trials (n = 2251) of free vaccine (OR 2.36, 95% CI 1.98 to 2.82) and one trial (n = 321) of patient group visits (OR 24.85, 95% CI 1.45 to 425.32). One trial (n = 350) of a home visit plus vaccine encouragement compared to a home visit plus safety advice was non-significant. We did not pool the following trials due to considerable heterogeneity: nurse home visits (two trials, n = 2069) and free vaccine compared to no intervention (two trials, n = 2250). Provider- or system-based interventions (17 trials, 11 strategies) The interventions with a statistically significant result were: two trials (n = 2815) of paying physicians (OR 2.22, 95% CI 1.77 to 2.77); one trial (n = 316) of reminding physicians about all their patients (OR 2.47, 95% CI 1.53 to 3.99); one trial (n = 8376) of posters plus postcards (OR 2.03, 95% CI 1.86 to 2.22); one trial (n = 1360) of chart review/feedback (OR 3.43, 95% CI 2.37 to 4.97) and one trial (n = 27,580) of educational outreach/feedback (OR 0.77, 95% CI 0.72 to 0.81). Trials of posters plus postcards versus posters (n = 5753), academic detailing (n = 1400) and increasing staff vaccination rates (n = 26,432) were non-significant. We did not pool the following trials due to considerable heterogeneity: reminding physicians (four trials, n = 202,264) and practice facilitators (three trials, n = 2183), although several trials showed the interventions were effective. Interventions at the societal level We identified no RCTs of interventions at the societal level.

Authors' conclusions: There are interventions that are effective for increasing community demand for vaccination, enhancing access and improving provider/system response. Heterogeneity limited pooling of trials.


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