
Rapid review for increasing uptake of 0-5 vaccinations and cancer screening

Wirral Public Health

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Rapid review for increasing uptake of 0-5 vaccinations and cancer screening

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Background

NHS England have the responsibility for commissioning for Section 7a (S7a) Public Health Screening and Immunisation Programmes. In order to support local improvements NHS England have developed S7a PCN Dashboards by aggregating unpublished GP level data.

NHS England have secured non recurrent funding for this financial year 2022/23, to support Place/PCN level initiatives and plans to improve and address inequalities in uptake to the cancer screening programmes and or 0-5 immunisations.

In order to support the development of Wirral bids and to drive local evidence based activity we have undertaken a rapid evidence review of effective interventions to increase uptake of 0-5 vaccinations and cancer screening.

Target Population

- Children aged 0-5 for vaccinations
- Women aged 25-64 for cervical screening
- Women aged 50-70 for breast screening

Aim/Objective

Review of evidence for interventions to address low uptake of vaccinations and cancer screening in target populations as above.

Evidence summary

Vaccine uptake

- Is lowest in deprived communities
- Vaccine hesitancy is not linked to socio-economic status (i.e. those in most deprived areas are not anti-vaccination)
- Interventions most likely to address vaccine hesitancy will address logistical barriers to uptake

Cancer screening uptake

- Improved uptake following individualised invites (letters and phone-calls combination)
- Disabled people 63-78% less likely to take up screening
- Media / communication campaigns can increase uptake
- Self-testing for HPV virus can increase uptake in cervical cancer screening

0-5 vaccination

Target population	Interventions
0-5 vaccination	<p><i>The evidence below draws on wider vaccine research and the plethora of research on vaccine hesitancy produced during the pandemic.</i></p> <p>Address access to vaccines: work with partner organisations, do community outreach, provide vaccines in schools and child care centres, consider home visits and reduce costs associated with getting a vaccine (1)</p> <p>Recalls and reminders increase uptake by 28%; strongest evidence for text messages and autodialer (automated recorded message) (2)</p> <p>Information provision – focus on benefit to individual rather than benefit to others (3), use language and images that do not trigger ‘disgust sensitivity’ such as images of needles puncturing skin, focus on perceived risks and fears, emphasise how the vaccine builds immunity as a natural bodily response (4)</p> <p>Strong healthcare provider recommendation most significant in healthcare provider interventions (5)</p>

	<p>A 2021 evidence review on MMR (6) found that multi-modal interventions can be used to increase uptake in line with wider vaccine research as detailed above. In addition, the use of an online or in person decision aid can increase uptake, although this is not widely available. A retrospective analysis of MMR uptake in areas that offered in school catch up immunisation showed higher rates of uptake compared to those referred into general practice alone (7).</p> <p>Not enough evidence: payments, social media campaigns</p>
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Women aged 25-64 for cervical screening

<p>Women aged 25-64 for cervical screening</p>	<p>2021 Cochrane review (8) concluded:</p> <ul style="list-style-type: none"> • Invitations increase uptake; most successful are personalised (targeted letter, phone-call or face-to-face), a GP invite letter, or with a fixed appointment date. • Educational materials and lay health worker may increase uptake. <p>Self HPV testing likely to increase uptake (9) (this subject due for separate Cochrane review but not yet published)</p> <p>Disabled women 63% less likely to attend cervical screening (10)</p>
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Women aged 50-70 for breast screening

<p>Women aged 50-70 for breast screening</p>	<p><i>No recent systematic reviews on this subject.</i></p> <p>Most interventions aimed at increasing uptake of screening appear beneficial (international 2018 qualitative review (11)):</p> <ul style="list-style-type: none"> • In general, these were media or communication campaigns • Individualised communications recommended • Culture based interventions may increase uptake in Arabic women. <p>A 2013 high quality systematic review focussed on increasing uptake of mammography in low-income women concluded:</p> <ul style="list-style-type: none"> • Multicomponent intervention most effective; mail, phone call and then home visit if mammography not booked within 4 weeks of initial contact • Face to face no more effective than simple interventions such as pamphlet or letter <p>A 2006 meta-analysis (12) found that two letters were more effective than one letter plus a phone-call, and was also marginally more cost effective.</p> <p>Disabled women 78% less likely to attend breast screening (10)</p>
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Vaccine Hesitancy

Strongest evidence for causes of vaccine hesitancy for childhood vaccinations (4, 13).

Understanding which factors are consistently associated with vaccination decisions is important in order to identify messages which should be targeted by communications aimed at increasing childhood vaccination uptake.

- Concern over side-effects was the most important predictor for parents consenting to their children being vaccinated
- Perception of low risk of susceptibility to illness or low severity of illness
- Perception that vaccine is not effective
- No vaccine recommendation by a healthcare professional
- Logistical barriers: inconvenient time or place of vaccination
- Larger families (3 plus children) were more likely to refuse immunisations
- Lower vaccine confidence in rural areas in UK
- Mistrust in authority
- Risk aversion; a perception of new vaccines being more risky than old ones

Vaccination hesitancy does not relate to socio-economic status or education level.

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