



The diagram features a central hand pointing upwards. Surrounding the hand is a circular interface with the text "Scotland's health" in the center. Five icons are arranged around the circle: a purple icon of a stack of coins with a pound symbol (£), a blue icon of an open book, a yellow icon of a house, a green icon of two people holding hands, and a teal icon of two hands being washed. Dotted lines connect these icons to the central text and to each other.

**Scotland's
health**

Interventions to improve engagement with immunisation programmes in selected underserved populations

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Undervaccination in underserved populations

- Underserved populations experience significant health inequalities.
- Barriers to vaccination are varied and complex.
- Suboptimal vaccination in underserved groups puts them at increased risk of vaccine-preventable diseases.



Rapid evidence review to support the VTP

- The VTP is an opportunity to identify new ways to design and deliver immunisation services taking into consideration the needs of underserved groups.
- We sought to identify effective interventions to improve engagement with immunisation programmes in selected underserved populations.



Selected underserved groups

- People from deprived areas
- People whose first language is not English
- People with learning disabilities
- Gypsy/Traveller communities



Methodology

- A search of 7 databases identified 1,149 studies.
- Studies were selected if:
 - they were conducted in high-income countries
 - they assessed an intervention that aimed to improve vaccination uptake or to change an intention to vaccinate.
- 20 studies were included.



Evidence landscape

Underserved populations	Included studies (n=20)	Types of studies	Countries
People from deprived areas	8	Systematic reviews, evaluations, randomised controlled trials, quasi-experimental studies, modelling study	US, Canada, Australia, UK
People whose first language is not English	6	Observational studies, quasi-experimental studies, randomised controlled trials	US, Canada
People with learning disabilities	3	Systematic reviews, randomised controlled trial	UK, Australia
Gypsy/Traveller communities	3	Systematic review, scoping review, qualitative study	UK



People from deprived areas

- A range of approaches were evaluated in 8 studies, of which one was a systematic review of 41 studies.
- The evidence largely came from the US, and varied in quality. Deprived study populations were very heterogeneous, and were predominantly urban.
- Multicomponent interventions featured across all age groups. There was great heterogeneity in their component parts because the interventions were tailored to support specific populations and contexts.



People from deprived areas

- For children and young people, a large systematic review provided moderate-quality evidence that locally designed multicomponent interventions are effective in reducing inequalities in immunisation.
- Multicomponent interventions could include identification, promotional materials, education, patient reminder/recall, outreach (eg home visits), training of healthcare workers, prompts for healthcare workers, additional services (eg clinics), standing orders (eg non-prescribing healthcare professionals) and/or community involvement.



People from deprived areas

- The review also concluded that:
 - interventions that included home visiting and escalated in intensity could be effective
 - outreach interventions alone were not effective
 - there was mixed evidence for social marketing
 - there was limited evidence for text message reminders
 - centralised reminder/recall systems worked better than practice-based ones.



People from deprived areas

- Interventions to increase parental awareness on vaccination that included social marketing and postcard campaigns had only modest effects in 2 studies.
- A reminder intervention for healthcare professionals modestly increased influenza vaccination among non-up to date children.
- In 2 studies, prenatal and postpartum periods were used as opportunities to improve vaccination uptake among deprived mothers and their infants.
- Evidence for interventions in deprived adult populations was limited to one pharmacist-driven initiative of uncertain effectiveness.



People whose first language is not English

- Linguistically appropriate information, such as translated resources and/or bilingual facilitation, featured in all 6 studies identified for people whose native language was not English.
- Three studies evaluated educational interventions to increase participant knowledge of a disease area and to change an intention to vaccinate.



People whose first language is not English

- There is some evidence from 3 studies evaluating multicomponent interventions that education as well as additional support such as reminders, outreach or patient navigation may improve completion rates of immunisation programmes involving multiple injections.
- Non-clinical trusted community settings are potential locations to implement interventions in at-risk populations.



People with learning disabilities

- We identified 3 studies that evaluated variations of a screening tool, known as a health check.
- There was some support for the use of health checks as an approach to improve vaccination uptake in people with learning disabilities.
- A recent report called for the development of a national health screening programme for people with learning disabilities to be considered.



Gypsy/Traveller communities

- Evidence for interventions to engage Gypsy/Traveller communities in immunisation programmes was limited to 3 studies.
- Outreach programmes and dedicated services have been reported in 2 studies but robust evaluation is lacking.
- A qualitative study proposed a number of ways to potentially increase vaccination uptake, but there is a need for formal evaluation to gather evidence on their effectiveness.



Conclusions

- The evidence base is more developed for some underserved populations than others.
- A range of approaches have been adopted to improve engagement with immunisation programmes, which have been tailored to suit the local needs and contexts of the underserved populations.



Conclusions

- There is some evidence to suggest that effective interventions may be complex and multifaceted, and include components which can:
 - change participant behaviour
 - increase awareness and knowledge through education
 - improve access through changes to the environment.
- Identifying facilitators of immunisation are important.
 - A community-based participatory approach may be a useful approach when developing community-specific interventions.



Link to published reports

- <http://www.healthscotland.scot/publications/interventions-to-improve-engagement-with-immunisation-programmes-in-selected-underserved-populations>



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