FACT SHEET | MARCH 2019
[*Translated and adapted from ORS PACA]

EVIDENCE-BASED INTERVENTIONS TO ENHANCE VACCINATION RATES

Interventions to enhance access to vaccine services

Home visits

LEVEL OF EVIDENCE
Strong evidence of effectiveness in increasing vaccination rates
Moderate evidence of effectiveness in increasing vaccination rates
Insufficient evidence of effectiveness in increasing vaccination rates
Strong evidence of ineffectiveness in increasing vaccination rates

In the field of vaccination, "home visit" interventions involve providing face-to-face services to clients in their homes. Services can include information and education on vaccination in general or on specific vaccines, assessment of vaccine status, referral or in some cases, provision of vaccinations (Community Preventive Services Task Force, 2016). Home visits can focus specifically on vaccination or focus more broadly on health, prevention, parenthood, etc. and address vaccination (Community Preventive Services Task Force, 2016; Harvey et al. 2015).

Providers may be health professionals (such as nurses), or non-professional providers who have undergone specific training as part of the intervention (health mediators, volunteer mothers, etc., grouped under the term "Lay Health Workers" in the scientific literature) (Community Preventive Services Task Force, 2016; Lewin et al. 2010).

Expected impact

Increase in vaccination rates.

Other possible impacts

There is not enough information on this question in the literature.

Review of evidence

Overview

Several systematic literature reviews suggest that home visits can be effective in increasing vaccination rates (Dubé et al. 2015; Briss et al. 2000; Glenton et al. 2011; Lewin et al. 2010; Thomas & Lorenzetti 2014; Community Preventive Services Task Force 2016; Whittaker 2002). Among these reviews, however, there are several that mention that the evidence is of moderate quality, based on a restricted number of studies and/or on studies with different methodological issues (Glenton et al. 2011; Lewin et al. 2010; Thomas & Lorenzetti 2014).

Effectiveness according to population subsets and vaccines

Most studies conducted in developed countries have shown that home visits were carried out by non-professional providers ("Lay Health Workers") and were conducted with parents of young children living in urban impoverished socioeconomic environments (Harvey et al. 2015; Glenton et al. 2011; Lewin et al. 2010; Whittaker 2002; Pati et al. 2015).

A systematic review also suggests that home visits can be effective in increasing influenza vaccination rates for the elderly, although this evidence is of moderate quality (Thomas & Lornzetti 2014).

Effectiveness according to means of intervention

Home visits for childhood vaccination could be more effective in increasing vaccination rates than visits centred around general child health or parenting, although evidence is limited (Harvey et al. 2015). Another systematic review showed no significant impact of home visits on vaccination rates for children. These results were consistent for different types of providers (professional or not), or the number of visits (Kendrick et al. 2000). Data from the literature is insufficient to indicate whether home visits were more effective when vaccination was offered during the visit.

Cost-effectiveness questions

Home visits may require significant resources, compared to other interventions aimed at increasing vaccination rates (Briss et al. 2000). A systematic review has shown that home visits were among the most costly interventions in terms of cost per additional vaccinated person, even with the reduction of the proportion charged to parents (Jacob et al. 2016). The cost-effectiveness ratio of home visits may nonetheless be improved if visits are performed in conjunction with other vaccine-oriented interventions (reminders for patients and/or professionals for example), as part of multicomponent interventions aimed more specifically at hard-to-reach groups (Crocker-Buque et al. 2017).

Impact on inequalities

A systematic review based primarily on data from the United States suggests that home visits may be effective in reducing social inequalities in vaccination among children, in particular when they are combined with other types of interventions (recalls to parents, actions to educate or inform…) (Crocker-Buque et al. 2017).

Example

In the United States, the State of Connecticut implemented a Plan of Action that aimed to increase vaccination rates for young children ("Immunization Action Plan"). This program was adapted to the local level with the help of local coordinators and the people responsible for meeting with the parents of children who are either not vaccinated or who are behind on their vaccinations (phone calls, home visits…). This program has shown its effectiveness in increasing vaccination rates and reducing social inequalities in vaccination (Kattan et al. 2014).

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This vaccination-themed fact sheet was written by the l'Observatoire Régional de la Santé Provence-Alpes-Côte d'Azur (ORS Paca) as part of a study conducted in 2016-2017, thanks to financial support from l'Agence Régionale de Santé Provence-Alpes-Côte d'Azur (ARS Paca). The original version is available here: http://www.sirsepaca.org/territoires-actions-probantes/.

This study's objectives were to help actors and decision-makers identify their territory's strengths and weaknesses with the help of synthetic indicators on the state of health and its determinants (available in SIRSéPACA) and to go from observation to action, through guiding them in the choice of actions to put in place. This study built on the American experience, *County Health Rankings and Roadmaps* (**www.countyhealthrankings.org**).

On the choice of actions to implement, bibliographic research was undertaken using different databases (Cochrane Library, Health Evidence, The Community Guide, Medline…). This permitted the identification of three main types of interventions (interventions to increase community demand for vaccination, to enhance access to vaccine services or provider-based interventions). The effectiveness of these interventions was evaluated in accordance with the number, type and methodological quality of studies available, as well as the breadth and coherence of the results (Briss P et al. *Developing an evidence-based Guide to Community Preventive Services-methods*. Am J Prev Med 2000;18(1S):35-43).

Ten themed fact sheets oriented to the principal types of interventions in the field of vaccination were written. All documents are available on the website of the System of Regional Health Information PACA (www.sirsepaca.org).

TYPE OF INTERVENTIONS	FACT SHEETS
Interventions to increase community demand for vaccination	Client-based written education interventions when used alone Person-to-person interactions Mass media campaigns Multicomponent interventions with at least one education / information component Client incentives and rewards Reminder and recall systems for clients
Interventions to enhance access to vaccine services	**Home visits**
Provider-based interventions	Reminder and recall systems for providers Audit and feedback Standing orders

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