

FACT SHEET | MARCH 2019

[\*Translated and adapted from ORS PACA]

# EVIDENCE-BASED INTERVENTIONS TO ENHANCE VACCINATION RATES

## Provider-based interventions

### Standing orders

LEVEL OF EVIDENCE	
<b>Strong evidence of effectiveness in increasing vaccination rates</b>	
Moderate evidence of effectiveness in increasing vaccination rates	
Insufficient evidence of effectiveness in increasing vaccination rates	
Strong evidence of ineffectiveness in increasing vaccination rates	

Standing orders refers to interventions in which non-physician personnel (pharmacists, nurses) undergo specific training in order to perform vaccination themselves, without the intervention or supervision of a doctor. Vaccination may take place in different settings (pharmacies, nursing clinics, hospitals...). Most interventions based on standing orders have taken place in rural areas.

### Expected impact

Increase in vaccination rates.

### Other possible impacts

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

## Review of evidence

### Overview

There is strong scientific evidence to assess the effectiveness of standing orders in increasing vaccination rates. This evidence comes from several systematic reviews and meta-analyses (Baroy et al. 2016; Isenor et al. 2016a; Briss et al. 2000; Dubé et al. 2015), as well as recent studies (Marra et al. 2014; Pennant et al. 2015; Warner et al. 2013; Isenor et al. 2016b).

The literature review undertaken by the Community Preventive Services Task Force (27 studies included) shows an average increase in vaccine coverage of 24 percentage points (Community Preventive Services Task Force 2015). A meta-analysis published in 2016 and including 14 studies on vaccination programs in pharmacies (Isenor et al. 2016a) show that people who have had the benefit of this intervention are three times as likely to be vaccinated as compared to others, and this was the case for different vaccines.

### Effectiveness according to population subsets and vaccines

The effectiveness of standing orders has been demonstrated for different population groups (adults, senior citizens), for different vaccines (influenza, pneumococcal...), and in different settings (pharmacies, private clinics, hospitals...) (Briss et al. 2000; Isenor et al. 2016a; Community Preventive Services Task Force 2015).

### Effectiveness according to means of intervention

Interventions involving standing orders are effective in increasing vaccination rates, regardless of whether the vaccines are administered by pharmacists or by nurses (Briss et al. 2000; Community Preventive Services Task Force 2015).

This type of intervention is just as effective alone and when combined with other types of interventions (Briss et al. 2000; Community Preventive Services Task Force 2015; Warner et al. 2013; Pennant et al. 2015).

An experiment undertaken in British Columbia, Canada, has shown that the presentation of the intervention in the local newspaper and the distribution of a personalized letter signed by the pharmacist have increased the participation of the population in vaccination programs in pharmacies (Marra et al. 2014).

### Cost-effectiveness questions

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

### Promising interventions

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

### Impact on inequalities

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

### Example

A vaccination program in pharmacies was developed on the Isle of Wight, U.K. in 2010 (Warner et al. 2013) when the Isle was faced with the fact that the vaccination rates in the region were much lower than the national average. The population was informed of the experiment before it started, with pamphlets and posters in pharmacies.

Eighteen pharmacies (out of the 30 in the Isle) participated in the experiment on a voluntary basis and received specific training. Vaccination was offered during normal opening hours, without an appointment.

The results indicate that 2,837 persons were vaccinated during this vaccination campaign, including 69.3% of them during the 6 first weeks. This intervention contributed to increasing vaccination rates in the population and the number of patients vaccinated for the first time. The satisfaction survey showed that the program was very well received by the public, and the practical aspect of the intervention was particularly appreciated.

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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.sirsepac.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](http://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.sirsepac.org](http://www.sirsepac.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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