



Implementing a province-wide mandatory vaccinate-or-mask policy at healthcare facilities in British Columbia, Canada [☆]



Alexandra Nunn ^a, Audrey C. Campbell ^b, Monika Naus ^{a,b}, Jeffrey C. Kwong ^c, David Puddicombe ^a, Susan Quach ^d, Bonnie Henry ^{b,e,*}

^a Immunization Programs and Vaccine Preventable Diseases Service, British Columbia Centre for Disease Control, Vancouver, British Columbia, Canada

^b School of Population and Public Health, University of British Columbia, Vancouver, British Columbia, Canada

^c Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada

^d Public Health Ontario, Toronto, Ontario, Canada

^e Office of the Provincial Health Officer, Ministry of Health, Victoria, British Columbia, Canada

ARTICLE INFO

Article history:

Received 12 June 2017

Received in revised form 25 November 2017

Accepted 27 November 2017

Available online 6 December 2017

Keywords:

Influenza vaccines
Organizational policy
Public health

ABSTRACT

Objectives: In 2012, British Columbia (BC) became the first Canadian province to implement an influenza prevention policy requiring healthcare workers (HCW) to either be vaccinated annually against influenza or wear a mask in patient care areas during the influenza season. This study describes an evaluation of influenza policy implementation processes and identifies supports and challenges related to successful policy implementation at the level of healthcare facilities, during the second policy year (2013/14).

Methods: Implementation leaders from 262 long-term care (LTC) and acute care facilities, mostly in three of BC's five regional Health Authorities, were invited to participate in an online survey following the 2013/14 influenza season. Descriptive quantitative and qualitative analyses identified common and effective strategies for improving vaccination coverage and policy compliance.

Results: A total of 127 respondents completed the survey on behalf of 33 acute care and 99 LTC facilities, representing 36% of acute care and 27% of LTC facilities in BC. Respondents agreed that the policy was successfully implemented at 89% of facilities, and implementation was reported to be easy at 52% of facilities. The findings elaborate on communication and leadership strategies, campaign logistics and enforcement approaches involved in policy implementation.

Conclusion: Implementation of a vaccinate-or-mask influenza policy is complex. This study provides insight for other jurisdictions considering implementing such a policy and offers practical recommendations for facilities and health authorities.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

Vaccinate-or-mask (VOM) influenza prevention policies for healthcare workers (HCW) are supported by evidence that increased HCW influenza vaccination coverage is associated with better patient outcomes [1–4], and that mask-wearing can prevent influenza transmission [5], despite controversy about the magnitude of the benefits [6,7]. Canada's National Advisory Committee on Immunization recommends that all HCW be vaccinated annually against influenza, yet vaccination among HCW is suboptimal in most provinces and remains below the national target of 80%

[8]. British Columbia (BC) was the first province in Canada to implement a province-wide VOM policy, requiring HCW and anyone entering patient care areas (including visitors) to either receive the seasonal influenza vaccine or wear a mask while in patient care areas during the influenza season.

Healthcare worker influenza immunization campaigns that achieved highest coverage involved policies with legislative or regulatory components such as declination forms or requiring mask-wearing for unvaccinated HCW [9,10]. In the United States, healthcare organizations have achieved HCW vaccination rates as high as 98.4% by requiring that HCW receive the vaccine or request a medical exemption, with the consequence of termination of employment for non-compliance [11]. Although much has been documented about the success of these policies at improving vaccination coverage, less has been published about the processes for implementing such policies [12].

* The research findings have been presented as an oral presentation at a conference: Public Health 2015, Vancouver, British Columbia, Canada.

* Corresponding author at: Office of the PHO, Ministry of Health, 4th floor, 1515 Blanshard St, PO Box 9648, STN PROV GOVT, Victoria, BC V8W 9P4, Canada.

E-mail address: Bonnie.henry@gov.bc.ca (B. Henry).

The BC Centre for Disease Control (BCCDC) monitors HCW influenza vaccination at the provincial level. Following implementation of the VOM policy, HCW vaccine coverage increased from 40% to 74% for acute care staff and from 57% to 75% for long-term care (LTC) staff from 2011/12 (prior to introduction of the policy) to 2013/14 [13,14].

This study examines the experience of implementing the policy in BC from the perspective of facility directors and managers, in 2013/14, the first season in which the policy was enforced with disciplinary measures. We identified common successes and challenges related to the process of implementing the policy at the facility level, activities that supported influenza campaigns for HCW, and supports and challenges related to policy enforcement and compliance. Results were compared between acute care and LTC facilities.

2. Methods

The online survey questionnaire was developed in consultation with influenza policy leaders across Canada. Most questions were multiple-choice (single or multiple categorical responses). Free text boxes were included in the questionnaire for additional comments.

Two types of institutions, acute care and LTC facilities, were chosen for this study because HCW influenza vaccine coverage data are routinely collected from these facilities. In total, representatives from 58% (262 of 449) of acute and LTC facilities in BC were invited to participate. The sampling frame was the list of 449 facilities included in the 2012/13 HCW influenza coverage reports published by BCCDC [15,16]. All eligible facilities in BC (including privately funded LTC facilities) were initially invited to participate in the survey following the 2013/14 influenza season, however two of the most populous BC health authorities declined participation after data collection had started. Therefore, the majority of facilities included were from three of BC's five regional health authorities. Survey respondents were identified as the individuals at each facility who were most responsible for coordinating the implementation of the policy at their facility during the 2013/14 influenza season. The survey length was 15–20 min, respondents were offered a \$5 gift card for participating, and responses were collected from June 2014 to December 2014. Facilities were contacted at least twice by phone or email before being considered non-respondents.

This study was approved by Behavioural Research Ethics Boards at University of British Columbia and University of Toronto.

2.1. Data analysis

We used R 3.2.2 Software (R Core Team, Vienna) for descriptive statistics, chi-square, t-tests, and Wilcoxon rank-sum tests [17]. One researcher (AN) analyzed free text responses using thematic content analysis methodology [18].

3. Results

A total of 127 respondents completed the survey on behalf of acute care or LTC facilities. Two respondents responded on behalf of both an acute and LTC facility and one respondent responded on behalf of 4 LTC facilities. In these cases, the respondents' answers were duplicated so that each facility for which they oversaw policy implementation carried equal weight in descriptive analyses. Therefore, we received survey responses on behalf of a total of 132 of 262 (50%) surveyed LTC and acute care facilities, comprising 36% (33/91) of all acute and 27% (99/362) of all LTC facilities in BC in 2014 [13,14].

The acute care and LTC facilities that responded to the survey ranged in size from 3 beds to 750 beds (median: 66). The responding acute facilities had a median HCW vaccination coverage of 73.7%. For acute facilities, the coverage and number of HCW employees (median: 176) were not significantly different from non-responding facilities (Table 1). Responding LTC facilities had a median HCW vaccination coverage of 75.8%, which was significantly lower than the non-responding LTC facilities' coverage (86.1%). The responding LTC facilities also had significantly larger numbers of HCW employees (median: 121) compared to the non-responding LTC facilities (median: 87). (Table 1).

3.1. Perceived policy implementation supports and challenges

The most commonly reported factors that supported the policy implementation experience were clear guidance from the health authority (84%), clear guidance from the BC Ministry of Health (61%) and having an adequate number of staff to deliver and coordinate vaccinations (61%) (Table 2). Only 36% of facilities reported having adequate financial resources to support policy implementation.

Employees were informed and reminded about the policy through communications from both the health authority and their facility leadership. The four most common communication methods were email (used at 93% of facilities), posters (92%), internal newsletters (79%) and websites (66%). Face-to-face meetings to communicate about the policy were used by 50% of acute care and 71% of LTC facilities. Several respondents noted the importance of using a variety of communication strategies (including "informal hallway conversations" and communications from unions) in advance of the policy application period to ensure that individuals who were not included in internal communications, including large numbers of contracted staff and visitors, were aware of the policy. One-on-one counselling with staff by clinical nurse educators, "flu champions" and managers (85%) was the most frequently used mechanism to deal with employees' questions or issues about the policy, followed by the use of a specific email address at 60% of acute and 29% of LTC facilities. Managers received training to address issues about the policy at 72% of facilities, most commonly by webinar (33%). The resources developed to support the policy were reported to be useful at 74% of facilities, but respondents reported a lack of clarity about how to respond to non-compliance.

Table 1
Representativeness of Acute and Long-term Care (LTC) Facility Survey Respondents Compared to Non-Respondent Facilities in British Columbia, 2013/14.

Facility type	Indicator	Respondent Facilities		Non-respondent Facilities		p-value
		Mean	Median	Mean	Median	
Acute	No. of HCW employees	482	176	919	325	.051
	HCW vaccine coverage (%)	73.2	73.7	73.0	76.3	.594
LTC	No. of HCW employees	123	121	99	87	.009
	HCW vaccine coverage (%)	73.0	75.8	81.5	86.1	<.001

Note: This analysis of representativeness included 33 acute and 83 LTC respondent facilities, and 58 and 222 non-respondent facilities, based on availability of 2014 data. P-values are the result of Wilcoxon rank-sum tests.

Download English Version:

<https://daneshyari.com/en/article/8486204>

Download Persian Version:

<https://daneshyari.com/article/8486204>

[Daneshyari.com](https://daneshyari.com)