



ELSEVIER

Contents lists available at ScienceDirect

American Journal of Infection Control

journal homepage: www.ajicjournal.org

Major article

Healthcare worker influenza declination form program



Sherri L. LaVela PhD, MPH, MBA^{a,b,*}, Jennifer N. Hill MA^a, Bridget M. Smith PhD^{a,c},
 Charlesnika T. Evans PhD, MPH^{a,d}, Barry Goldstein MD, PhD^{a,e,f},
 Richard Martinello MD^{g,h,i}

^a Department of Veterans Affairs, Spinal Cord Injury Quality Enhancement Research Initiative, Edward Hines Jr. VA Hospital, Hines, IL

^b Center for Healthcare Studies, General Internal Medicine and Geriatrics, Institute for Public Health and Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL

^c Department of Pediatrics, Feinberg School of Medicine, Northwestern University, Chicago, IL

^d Center for Healthcare Studies, Department of Preventive Medicine Institute for Public Health and Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL

^e VA Spinal Cord Injury and Disorders Services, Puget Sound Health Care System, Seattle, WA

^f Department of Rehabilitation Medicine, University of Washington, Seattle, WA

^g VA Office of Public Health, Clinical Infectious Diseases, Washington, DC

^h Department of Internal Medicine, Yale School of Medicine, New Haven, CT

ⁱ Department of Pediatrics, Yale School of Medicine, New Haven, CT

Key Words:

Health care workers
 Declination forms
 Influenza vaccination
 Implementation science

Background: Health care worker (HCW) vaccination rates have been low for many years (approximately 50%). Our goal was to implement an influenza declination form program (DFP) to assess feasibility, participation, HCW vaccination, and costs.

Methods: This was a prospective interventional pilot study using mixed methods to evaluate the DFP implementation processes and outcomes. We conducted a formative evaluation and interviews; data were transcribed and coded into themes. Secondary outcomes included self-reported HCW influenza vaccine uptake (pre-/postsurvey) and program costs; data were evaluated using descriptive and bivariate analyses.

Results: The DFP was compatible with ongoing strategies and unit culture. Barriers included multiple hospital shifts and competing demands. Facilitators included complementary ongoing strategies and leadership engagement. HCW vaccination rates were higher post- versus preimplementation (77.4% vs 53.5%, $P = .01$). To implement the DFP at site 1, using a mobile flu cart, 100% of declination forms were completed in 42.5 staff hours over <2 months. At site 2, using a vaccination table on all staff meeting days, 49% of forms were completed in 26.5 staff hours over 4.5 months. Average cost of staff time was \$2,093 per site.

Conclusion: DFP implementation required limited resources and resulted in increased HCW influenza vaccine rates; this may have positive clinical implications for influenza infection control/prevention.

Published by Elsevier Inc. on behalf of the Association for Professionals in Infection Control and Epidemiology, Inc.

Individuals with spinal cord injuries and disorders (SCIs/Ds) are at high risk of respiratory complications that occur from contracting influenza and influenza-like illnesses.¹ The most effective way

to prevent influenza and its complications is through vaccination to decrease transmission of influenza to patients and the staff that care for them.² Influenza vaccination rates for health care workers (HCWs) caring for individuals with SCIs/Ds within Veterans Affairs (VA) facilities has remained low (approximately 50%) for multiple consecutive years.^{3,4}

Our early research included educational strategies targeted at HCWs to address common reasons for vaccination refusal.³ We found that although vaccination rates improved after educational efforts, the improvements were not sustainable. One evidence-based strategy for improving HCW influenza vaccination is a declination form program (DFP). The intent of a DFP is to ensure that HCWs are informed of the rationale for influenza vaccination,

* Address correspondence to Sherri L. LaVela, PhD, MPH, MBA, Edward J. Hines, Jr. VA Hospital (151H), 5000 S 5th Ave, Office D312, Hines, IL 60141.

E-mail address: Sherri.LaVela@va.gov (S.L. LaVela).

Funding/Support: This work was supported by the Department of Veterans Affairs, Office of Research and Development, Health Services Research and Development Service, Quality Enhancement Research Initiative (QUERI) Rapid Response Project (no. 12-515).

Disclaimer: The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs.

Conflicts of interest: None to report.

dispel misconceptions, and promote the message of patient safety and HCW responsibility. DFPs have been reported as one of the most effective techniques for increasing HCW influenza vaccination rates.⁵ The magnitude of improvement in rates is dependent on the approach used to execute the DFP, including the content of the forms, timing of form completion, and requirements for signature. Institutions have seen highly promising results after DFP implementation (used alone or to complement various other influenza vaccine uptake strategies already in place), with improvement in HCW vaccination of 12%,⁶ 17%,^{5,7} 20%,⁸ and as high as 22%.⁹ Our aim was to implement a pilot DFP for influenza vaccination of HCWs working at 2 VA spinal cord injury (SCI) centers. For our study, the declination forms were completed in person and at the time of vaccination offering. HCWs were required to complete a form to indicate either receipt or refusal of influenza vaccination. If refused, the HCW had to indicate the reason for refusal and sign a statement of acknowledgement of risks to others because of nonreceipt. Our primary outcome was to understand the implementation process, barriers, and facilitators and to examine program participation and the impact of the DFP on secondary outcomes: influenza vaccination rates and costs.

MATERIALS AND METHODS

Setting

The DFP was implemented at 2 VA SCI centers. VA SCI centers serve the complex medical, functional, and psychosocial problems of persons with SCI/D throughout their lifetime in inpatient, outpatient, and home care settings.

Study design

This was a prospective interventional pilot study using mixed methods to evaluate the processes and outcomes of implementing a DFP, including participation, lessons learned, barriers, and facilitators. We implemented a DFP that included a declination form to be completed in person and at the time the vaccination was offered. The form asked HCWs to identify a reason for declining vaccination^{10,11} and required a signature acknowledging personal risks and risks to patients because of the HCW declining vaccination.¹²

Semistructured postimplementation interviews with key informants (3–4 at each of the 2 pilot facilities) were conducted, transcribed, coded, and analyzed to gain insight into what influenced DFP implementation. Secondary outcomes included influenza vaccination rates and program costs. Self-reported HCW vaccination rates were obtained via a mailed survey (with 4-week follow-up for nonrespondents) of staff at the 2 pilot VA SCI facilities. For the cost analysis, we collected information on staff time and resource use for program implementation and facilitation from the implementation team members.

Preimplementation and implementation phases

Because the impact of a DFP varies by content of the declination form (eg, including wording that highlights risks to others by refusing vaccine, requiring a reason for declining vaccine, requiring face-to-face encounter at time of refusal, requiring a signature), we worked with key stakeholders and VA leaders (SCI providers and infection control practitioners) to define the components and format of the declination form and to identify the steps needed to pilot a program in the VA SCI centers. Key leaders from national program offices (SCI/D services and Office of Public Health) helped conceptualize and facilitate our efforts. We held a facilitation

workgroup in July 2013 with local leaders at each pilot site to review the components and format of the initial declination form (and modify for local needs, if necessary) and to outline program logistics (eg, speaking with local union representatives). After facility-level implementation teams were identified, in August 2013, the research team met with the teams face-to-face and worked with them to identify a facility implementation plan and strategies for facilitating implementation of the DFP at their facility. At each site, kick-off efforts included local informational sessions for HCWs, in which the study principal investigator (LaVela) and implementation coordinator (Hill), along with local leadership, met with SCI/D staff to describe the DFP and encourage participation. National leadership and chief consultants of SCI/D services and Office of Public Health also expressed their support of the program through an introductory media message delivered in their own voices while we launched the program at each facility. Implementation of the DFP began in September 2013.

Formative evaluation

A multicomponent formative evaluation was conducted to assess factors influencing DFP implementation. After implementation efforts began, the research team used monthly phone calls with the implementation team in the early stages to monitor implementation progress. Calls tapered to an as-needed basis (ie, if the implementation team had a question) as DFP implementation neared completion and the vaccination season came to an end. A phone call template was used to track call content, including barriers and facilitators encountered and resources used during the implementation process.

As a final step of our formative evaluation, in early 2014, we conducted semistructured interviews with 3–4 key members of the implementation team at each facility to understand their perceptions of the DFP overall, the difficulties experienced with use and understanding of the program, support for the program, and the availability (or not) of resources to support the program. We also evaluated overall support for the DFP relative to other strategies used to increase HCW vaccination and the compatibility of the DFP with local values and needs of HCWs and leadership.

Qualitative analyses

Qualitative data analysis was performed by 2 researchers with expertise in qualitative methods. All qualitative analyses (eg, meeting notes from phone call templates and semistructured interviews) followed a grounded theory approach,¹³ which includes systematic, iterative, and inductive procedures to generate insights grounded in the views of participants and facilitate meaningful categorization of participant responses.¹⁴

The 2 coders coded all transcripts independently. The coders met to discuss transcripts to reach consensus on emerging topics, address discrepancies, collapse similar topics, and reach final consensus.^{13,14} The constant comparative method^{13,14} was used to refine the thematic codes, apply them consistently, and expand them as necessary. The final code structure was applied to all transcripts; Nvivo 9 qualitative analysis software (QSR International, Melbourne, Australia) was used to facilitate data storage, organization, and retrieval. The conceptual expertise of the entire team was drawn on to ensure that the categorical framework and interpretation of responses were consistent with and representative of participant viewpoints, and practically meaningful.

Secondary outcomes

Our evaluation also included important secondary outcomes.

Download English Version:

<https://daneshyari.com/en/article/5866682>

Download Persian Version:

<https://daneshyari.com/article/5866682>

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