
Evaluation of Pharmacist administered Influenza Vaccination in high-risk Hospital Outpatients (EPIVHO)

Initiative Type

Service Improvement

Status

Close

Added

09 February 2020

Last updated

28 June 2021

URL

<https://test.clinicalexcclence.qld.gov.au/improvement-exchange/evaluation-pharmacist-administered-influenza-vaccination-high-risk-hospital>

Summary

Influenza outbreaks place a significant annual burden on the Australian healthcare system. There is well documented evidence that increasing rates of influenza vaccination, especially amongst high risk

patients will decrease the number of confirmed cases of influenza, reduce hospital admissions, associated costs and death. Despite this, under usage of immunisation programs continues to be a significant public health concern with inadequate time to attend a venue for vaccination being identified as a significant contributor to less than ideal vaccination rates. The Royal Brisbane and Women's Hospital pharmacy service has input into ambulatory outpatient services, making it ideal for providing opportunistic vaccinations to patients in a hospital outpatient setting. The aim was to investigate the impact of such a service on increasing access for high-risk patients to receive their annual influenza vaccination.

Key dates

Feb 2020

Feb 2020

Implementation sites

Hospital outpatient clinics across the Royal Brisbane and Women's Hospital and Nundah, Stafford and Northlakes Health precincts

Partnerships

Queensland University of Technology (QUT), Department of Infectious Diseases (ID), RBWH Allied Health Profession's Office of Queensland (AHPOQ)

Key Contacts

Kim Ta

2722

william.vanheerden.ced

Senior Pharmacist

Royal Brisbane and Women's Hospital

Aim

To assess the feasibility, acceptability and potential benefits of suitably trained pharmacists administering influenza vaccinations during routine hospital outpatient appointments, with a view to increasing access for high-risk patients to receive their annual flu vaccination.

Benefits

One of the significant contributors to less than ideal vaccination rates is inadequate time to attend a suitable venue to obtain the vaccine. Opportunistic immunisation of patients attending hospital outpatient clinics by suitably trained pharmacists, offers convenience for high-risk patients and for the wider community, improved vaccination rates which contribute to a reduction in disease and the associated healthcare costs including a reduction in flu related hospitalisations for Metro North Hospital and Health Service. This model of care would be transferable to other hospital settings, potentially both outpatient and inpatient, creating new opportunities for vaccination of high-risk patients on a sustainable basis.

Background

The Royal Brisbane and Women's Hospital pharmacy service has input into ambulatory outpatient services, making it ideal for providing opportunistic vaccinations to patients in a hospital outpatient setting. The aim was to investigate the impact of such a service on increasing access for high-risk patients to receive their annual influenza vaccination. All patients who were booked for a routine pharmacy review were assessed for suitability to receive the influenza vaccine during their clinic visit.

Solutions Implemented

- Significant consultation was undertaken at a hospital executive and service line level for communication of the proposal and approval of the new scope of practice.
- Legislative changes to the Queensland Pharmacist Vaccination Standard (QPV standard)

were realised through meeting with the Chief Health Officer for Queensland, to allow this in scope activity for pharmacists to include administration within a health facility where previously it was restricted to a community pharmacy premise.

- Training was arranged with funding from Allied Health Profession's Office of Queensland (AHPOQ) and undertaken through Pharmaceutical Society of Australia (PSA) for 16 pharmacists to be suitably trained to administer influenza vaccines.
- Existing pharmacist outpatient clinics in maternity, pre-admission clinic, spinal physiotherapy screening clinic, renal dialysis, rheumatology, cancer care, infectious diseases, cardiology and specialist nutrition were set up to meet the requirements of the QPV standard, to allow for safe and effective vaccine administration of high-risk outpatients.
- All patients who were booked for a routine pharmacy review were assessed for suitability to receive the influenza vaccine during their clinic visit. For suitable patients, the pharmacist provided written and verbal information on the risks and benefits of immunisation and obtained the patient's consent to be vaccinated. Administration of the vaccination was documented in the patient's medical records and communicated to the Australian Immunisation Register (AIR) and the patients nominated GP if requested. Study participants completed a questionnaire about their vaccination experience.

Evaluation and Results

Pharmacists administered influenza vaccinations to 30 patients during the study period, of which 44% had never received an influenza vaccination before, and 41% would not have been vaccinated this year if this service had not been available. Nearly half of all vaccines administered were given in Maternity Outpatients (46.7%), followed by Surgery and Preadmission clinics (33.3%) and Renal and dialysis Outpatients (13.3%). Patient satisfaction of the immunisation service was very high with 100% of patients reporting they were completely satisfied with the overall vaccination experience, felt the facilities were adequate, and advised they would be happy to receive the flu vaccination at the clinic in the future. Convenience was most frequently cited as the main reason for receiving the influenza vaccination at the clinic which is in keeping with findings from several studies that identified access to a suitable venue for vaccination as a significant barrier to immunisation.

Lessons Learnt

Patients who had not already been vaccinated by June, and were unlikely to have been vaccinated, received an influenza vaccine administered by the first hospital pharmacy in Queensland to offer this service. This demonstrates the feasibility and impact of this opportunistic model of care in improving access and uptake of vaccinations for high-risk patients. Outpatient Clinics which provided the greatest return on time and investment will be scoped for expansion of the service which includes potentially administration of other vaccines.

References

References:

1. WHO influenza fact sheet no 211. At: <http://www.who.int/mediacentre/factsheets/fs211/en/>
2. Hattingh et al. Evaluation of the first pharmacist-administered vaccinations in Western Australia: a mixed-methods study. *BMJ Open* 2016; 6:e011948. Do1:10.1136/bmjopen-2016-011948
3. Isenor JE et al. Impact of pharmacists as immunizers on vaccination rates: A systematic review and meta-analysis. *Vaccine* 34 (2016). 5708-5723
4. Santoli JM et al. Barriers to immunization and missed opportunities. *Paediatric Ann* 1998; 27:366-74.
5. Steyer T et al. The role of pharmacists in the delivery of influenza vaccinations. *Vaccine* 22 (2004). 1001-1006
6. Grabenstein JD et al. Pharmacists as vaccine advocates: roles in community pharmacists, nursing homes and hospitals. *Vaccine* 1998; 18:1705-10
7. Nissen L et al. 2015. Queensland pharmacist immunisation pilot phase 1 pharmacist vaccination - Influenza final report. <https://eprints.qut.edu.au/91903/>

PDF saved 10/05/2025