

Implementation of an Immunisation Pharmacist during a nation-wide influenza vaccine shortage



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Background

- Influenza is the most common disease of the respiratory tract and can affect people of all ages.¹
- Vaccination to protect against influenza is recommended annually for all people aged older than 6 months.¹
- In 2018, the Victorian government funded children aged from 6 months to <5 years to receive the influenza vaccine.²
- The Immunisation Centre at The Royal Children's Hospital (RCH) offers a Drop-In Centre (DIC) for complex, high risk paediatric patients and their families, including the influenza vaccine.



- The Immunisation Centre also offers a telephone advice line for immunisation specific information.
- The Immunisation Pharmacist position in the DIC began in April 2018.
- Pharmacists who have completed a recognised 'Immuniser program of study' are able to administer particular vaccines to specific population groups in approved locations.³
- As of September 2018, vaccines that could be administered by Pharmacist Immunisers in Victoria are those indicated for the protection of influenza and/or pertussis.³
- From May 7 2018 supply of the influenza vaccine was affected and prioritisation of stock was required.

Aim

To evaluate the impact of a nationwide shortage of influenza vaccine on the RCH Immunisation Centre and the role of the immunisation pharmacist in support of this.

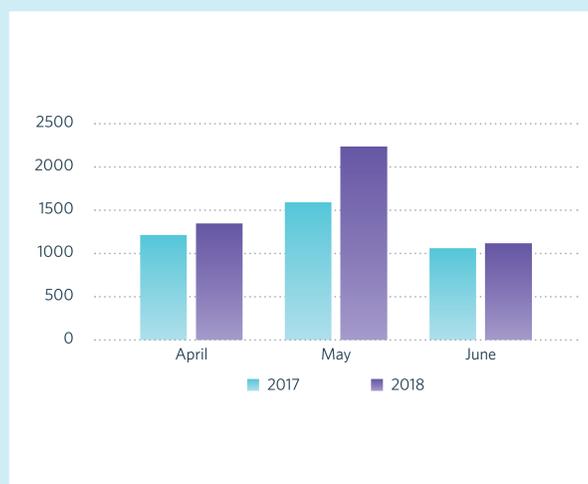
Methods

The number of patients seen each day in the immunisation centre and the number of influenza vaccines administered is recorded in the RCH Electronic Medical Record (EMR). This data was calculated using SlicerDicer. Phone calls received through the telephone advice line are recorded daily using a phone log. More specifically, the number of calls regarding influenza are also recorded. This data was compared for the months of April, May and June, in 2017 and 2018.

Results

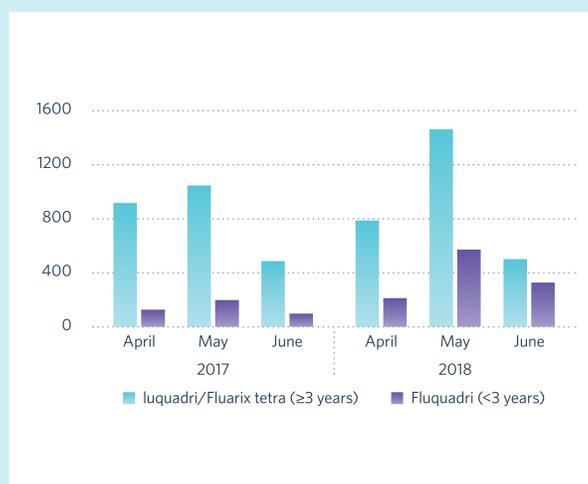
Over the three month period there was a 21% increase in patients seen in the DIC in 2018 when compared to 2017 (Figure 1).

Figure 1. Number of patients seen in the RCH Immunisation Drop-In Centre



The amount of influenza vaccine administered in 2018 increased by 34% compared to 2017. The analysis of age-specific influenza vaccine is displayed below (Figure 2).

Figure 2. Influenza vaccines administered at the RCH



Phone calls received through the telephone advice line increased by 56% in 2018 compared to 2017. In May 2018, 1771 phone enquiries were answered, in comparison to 1089 enquiries in May 2017 (Figure 3).

Figure 3. Phone calls received through the RCH DIC telephone advice line



Of these phone enquiries, 31% were related to the influenza vaccine.

Discussion

- From May 7 2018, supply of influenza vaccine from the Department of Health and Human Services was affected. This coincided with an increased promotion of vaccine.
- The Immunisation Pharmacist met regularly with nursing and medical staff from Immunisation, Infection Control, and the RCH Executive to prioritise stock. The Immunisation Pharmacist also liaised with Pharmacy Purchasing Officers to assist procurement.
- Influenza vaccine for inpatients and outpatients presenting to the DIC was prioritised according to patient risk. Patients who were identified as high risk were eligible to receive the vaccine from RCH. This included those with underlying respiratory, cardiac, or neurological medical conditions or those who were immune suppressed.
- Patients who did not meet criteria of high risk, were encouraged to access the influenza vaccine through local medical clinics or council services.
- Despite the shortage, uptake of influenza vaccine across this time period increased, particularly amongst children aged 6 months to 3 years. This can be attributed to the government funding for this age group.
- Overall activity in the DIC decreased in June 2018 when compared to May. This may be attributable to the vaccine shortage, a reduced promotion and few identified cases of influenza.
- The Immunisation Pharmacist also administered influenza vaccine to patients over 18 years while private vaccine was available. This supply was exhausted by May 14 2018 and there was no influenza vaccine available for purchase after this time.
- Supply of influenza vaccine returned by July 19, 2018 and all eligible patients were able to receive funded influenza vaccine, regardless of their risk classification.

Conclusion

The RCH Immunisation Drop-In Centre had an increase in activity in April, May and June 2018 compared to 2017, despite a nation-wide shortage of influenza vaccine. The increased demand on the Immunisation Centre during this time was successfully supported by the Immunisation Pharmacist.

References

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2. State Government of Victoria, Department of Health & Human Services. Seasonal influenza vaccine. Accessed on October 18, 2018, <https://www2.health.vic.gov.au/public-health/immunisation/immunisation-provider-information/seasonal-flu-vaccine>
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