School-based HPV Immunisation Programs: The WA Experience

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WA School Based HPV Immunisation Program

- Program established in 2007
- 2007-2012 – year 7 males & females
- 2013 – year 8, 9, 10 males HPV only, & catch-ups
- 2014 onward – year 8 males & females
  (HPV and dTpa - diphtheria, tetanus, and pertussis)
- Statewide database established 2009
Parents shun HPV vaccine for daughters

By: Vince Ferri

Citing concerns about safety, an increasing number of parents are refusing to have their teen daughters vaccinated against the virus that can
WA School Based HPV Immunisation Program

The school vaccination database was established to assist in programme implementation -

- Track vaccination status of students who move between schools
- Facilitate calculation of coverage rates
- Identify areas needing improvement
- Assess program changes
- Feedback info to schools and providers
- Transfer data to the National HPV Vaccination Program Register
WA School Based HPV Immunisation Program

- At the beginning of each school year, the Education Department provides basic demographic data for electronic uploading into the database:
  - name
  - date of birth
  - gender
  - school

- Equivalent data from Catholic and Independent schools are provided by individual schools
WA School Based HPV Immunisation Program

- Database is internet-accessible to all school-based vaccination program providers (DOH nurses) with individual pass code.

- Nurses are required to enter consent and vaccination data on every student enrolled in schools under their responsibility.
What can we learn from this data?
Data analysis for 2014 - Consent

- What proportion of students do not return a consent form?
- What proportion of students return a consent form but decline HPV vaccination?
- What proportion of students consent to HPV vaccination?
- Does this differ by the gender of the student?
Proportion of children by consent status for HPV vaccination at school, by gender, 2014

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
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<tbody>
<tr>
<td>14,874</td>
<td>30,508</td>
</tr>
<tr>
<td>15,634</td>
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</tbody>
</table>
Data analysis for 2014

- How does the consent rate for HPV vaccination compare to that for dTpa?
Proportion of children with consent to receive HPV and dTpa vaccination, 2014, by gender

85.8% 84.0%

Female Male

85.8% 84.0%

Female Male
Data analysis for 2014

- Is the consent rate for HPV vaccination at school similar for Aboriginal and non-Aboriginal students?
Proportion of children with consent to receive HPV vaccination, 2014, by Aboriginality

Note:
28% of records have missing data regarding Aboriginal status.
3.3% of all records indicate the student is Aboriginal.
Data analysis for 2014

- Is the consent rate for HPV vaccination at school similar for students attending Government, Catholic, and Independent schools?
Proportion of children with consent to receive HPV vaccination, 2014, by school type

Government: 83.3%
Catholic: 20%
Independent: 20%
Data analysis for 2014

- Is the consent rate for HPV vaccination at school similar across urban and rural areas of WA?
Student Consent for HPV vaccination, by area, 2014

- Perth Metro
- Rural WA
Data analysis for 2014 – Jabs in Arms

- What is the actual vaccination rate for HPV vaccine among WA students?
- Does uptake differ by gender of the student?
- What is the drop-off in coverage across the 3-dose HPV series?
72,347 doses of HPV vaccine in total.
97.6% provided in school and 2.4% at GP offices.
Data analysis for 2014 – Jabs in Arms

- Does the drop-off in coverage across the 3 dose HPV series vary by school type?
Proportion of children to receive HPV doses, 2014, by school type

Government: Dose 1 82.3%, Dose 2 78.1%, Dose 3 68.0%
Catholic: Dose 1 87.8%, Dose 2 85.4%, Dose 3 80.4%
Independent: Dose 1 85.4%, Dose 2 83.1%, Dose 3 76.1%
Data analysis for 2014 – Jabs in Arms

- Does the drop-off in coverage across the 3-dose HPV series vary by Aboriginality?
Proportion of children to receive HPV doses, 2014, by Aborginality

- Aboriginal: 90.8%
- Non-Aboriginal: 90.4%

Legend:
- Dose 1
- Dose 2
- Dose 3
Data analysis for 2012 – Socio Economic Indexes for Areas (SEIFA)

- Does the drop-off in coverage across the 3 dose HPV series vary by SEIFA score?
The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area, including both relative advantage and disadvantage measures.

A low score indicates relatively greater disadvantage and a lack of advantage in general. For example, an area could have a low score if there are (among other things):
- many households with low incomes, or many people in unskilled occupations
AND
- few households with high incomes, or few people in skilled occupations

A high score indicates a relative lack of disadvantage and greater advantage in general. For example, an area may have a high score if there are (among other things):
- many households with high incomes, or many people in skilled occupations
AND
- few households with low incomes, or few people in unskilled occupations
HPV1 and DTP: Total Consent Rates by SEIFA IRSAD Decile

2012 data

Delivering a Healthy WA
HPV1 and DTP: Total Vaccination Rates by SEIFA IRSAD Decile

2012 data
WA Vaccine Safety Surveillance

- Launched in 2011
- Available to healthcare professionals and the public to report adverse events following immunisation (AEFIs)
- Reports can be made via website, phone, fax or mail
- Reported AEFIs are monitored by a nurse
  - Those determined to be more severe will have clinical follow-up at PMH or SCGH
The West Australian Vaccine Safety Surveillance system (WAVSS) is the central reporting service in WA for any significant adverse events following immunisation (AEFI). We provide expert immunisation safety advice to reporters and health-care workers, and can provide clinical services for children and adults who have experienced an adverse event following immunisation. All significant events also have de-identified details forwarded to the national medical safety monitoring system.

Existing Users

Email: *
Password: *
Forgotten password?

Sign In

New Users

Email: *
Password: *
Confirm password: *
Your password must be at least 8 characters long and contain at least one letter (a-z) and one number (0-9)
Title:
First Name: *
Surname: *
Type of reporter: *
-- Please select --
Address: *
Suburb: *
State: *
-- Please select --

Medical Advice

If the side effects after vaccination seem severe or persist, or if you have any concerns:

- See your doctor, immunisation provider or an After Hours GP
- Call healthdirect Australia for health advice 24 hours a day on 1800 022 222
- For emergency or life-threatening conditions, visit an Emergency Department or call triple zero (000) for ambulance

Government of Western Australia
Department of Health
Public Health
Adverse Events Following HPV Immunisation

- 2011-2014 – 79 possible AEFI reported
- Almost all local reactions, syncope, HA, rash

Rate of reported AEFI per 10,000 doses

- Female
- Male

<table>
<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Male</th>
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<tbody>
<tr>
<td>2011</td>
<td>4.85</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>3.67</td>
<td></td>
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<td>2013</td>
<td>2.72</td>
<td>2.73</td>
</tr>
<tr>
<td>2014</td>
<td>2.24</td>
<td>2.73</td>
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What are the HPV-vaccine uptake trends over time?

Proportion of females who provided consent for HPV vaccination, 2009 - 2014
Take Home Messages:

- Consent form return exceeds 90%
- About 85% of students in Year 8 start the HPV series
- No difference by gender
- Equivalent to dTpa
- Catholic schools do best
Take Home Messages - II:

- Overall 4% drop off between HPV1 and HPV2
- Overall 12% drop off between HPV1 and HPV3
- Aboriginal students consent for HPV vaccination at slightly higher rate
- But drop between HPV1 and HPV3 is 40% for Aboriginal students
- Program not adequately meeting needs of most disenfranchised students
Going forward:

- Strategies to improve consent form return should be investigated in areas with low consent return rate.
- Resending the consent form/information package to non-responders significantly associated with increased return rates in WA.
- Telephoning non-responders to request a completed form or obtaining verbal consent frequently led to a 100% response rate.
Need strategies to address drop off over 3-dose HPV series

- Student absenteeism likely a major factor
- Active follow up of missed doses should be pursued
- Additional clinic days in high-drop off schools
- Send SMS reminders to parents prior to clinic and for missed doses
- Catch-up at GP/AMS/Community Health Clinics should be encouraged
Thank you.

Questions?