

School Based Immunisation – Exploratory Research

Qualitative Research Report

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1. BACKGROUND

1.1 Need for research

Prior to this work, limited research had been undertaken by the Department to determine the information needs of adolescents and their parents in relation to school-based vaccinations.

To fill this gap, the following research needs were identified:

- Building understanding of:
 - communication needs, attitudes, intentions of adolescents and their parents in relation to school-based vaccinations and the ongoing catch-up program for individuals up to 19 years of age.
 - their experience of the vaccination process including consent and participation
- Determining their existing knowledge base in relation to school-based vaccinations and the ongoing catch-up program for individuals up to 19 years of age.

This exploratory research will help to inform communications to support school-based and adolescent catch-up vaccinations.

1.2 Overview of school-based vaccination program

School-based vaccination

Vaccination of adolescents aims to maximise protection against future disease risk, to boost existing but waning immunity, or to catch-up those who may not have been adequately vaccinated as children.

School-based vaccination is the primary method to deliver vaccines funded under the National Immunisation Program (NIP) to adolescents. These programs operate at a state and territory level and offer NIP vaccines to adolescents in specific school grades using local teams of trained vaccine providers.

For adolescents who miss vaccines delivered in early childhood or through school based programs, catch up vaccines are available for free aged up to 19 years.

The current school-based vaccinations on the NIP are:

Diphtheria, tetanus and whooping cough (pertussis) booster

A booster dose of diphtheria-tetanus-whooping cough (pertussis) delivered in school-based vaccination programs to children in years 7 and 8 at age 12-13 years. A booster is an extra dose of a vaccine that you have had before. It 'boosts' the immune system.

HPV (human papillomavirus)

The human papillomavirus (HPV) vaccine has been part of the NIP since 2007 for females and males since 2013. The vaccine is provided to males and females in high school (year 7 and 8) at age 12–13 years.

From 2018, the nine valent HPV vaccine (Gardasil9) replaced the quadrivalent HPV vaccine (Gardasil) on the NIP. This vaccine is provided in a routine two-dose schedule that covers 9 types of HPV which cause around 90% of cervical cancers in women (and the majority of other HPV related cancers in women), 95% of all HPV-related cancers in men and 90% of genital warts. Those who are aged 15 years or older at the time of first dose, or are significantly immunocompromised, require three doses of the vaccine for full protection.

Meningococcal disease

Meningococcal disease is a very serious infection that can cause severe scarring, loss of limbs, brain damage and death. There are five main types of meningococcal disease – A, B, C, W and Y.

From April 2019, a meningococcal ACWY vaccine will also be offered through the NIP via a school-based program for adolescents in Year 10 (14 to 16 years) and a catch up program through GPs for those aged 15 to 19 years.

Benefits of school-based vaccination

Provision of vaccines through schools has the potential to reach the majority of adolescents in Australia, as school attendance is mandatory until mid to late adolescence and attendance rates are high, particularly in lower school grades. School-based vaccination is popular with parents and has achieved higher levels of coverage compared with vaccinating adolescents in the primary care settings.

In addition, school-based vaccination largely overcomes the issue of cost and access to vaccines for adolescents, as they are not required to make a specific appointment with a doctor, there is no consultation fee and the vaccines are free.

Challenges of school-based vaccinations

This approach to adolescent vaccination is not without its challenges. Some barriers to the vaccination of adolescents are similar to those of vaccinating younger children (e.g. vaccine refusal and low awareness). However, there are additional challenges unique to this group, such as obtaining appropriate and valid parental consent in the light of the increasingly autonomous decision making capacity of adolescents. Market research conducted in Queensland suggests almost one in five adolescents in a particular region missed out on vaccinations due to parents simply not seeing the consent form¹.

Communications about school-based vaccinations

Each jurisdiction develops their own information materials that are primarily targeted at parents and/or guardians and delivered as part of, or along with, consent forms. In general, written parental consent is required for all vaccines delivered through school-based vaccination programs in Australia. Written information about the operational aspects of the program and the vaccines offered is provided to school teachers and/or principals in some states and territories.

National communication activities are undertaken to:

- support states and territories in the roll-out of school-based programs;
- provide GPs and other vaccination providers administering catch-up or additional doses with information; and
- promote adolescent vaccination to consumers, particularly the parents of adolescents.

¹ Brotherton J et al. 2013. Human papillomavirus vaccine coverage among female Australian adolescents: success of the school-based approach. *MJA*; 199:614–617. doi: 10.5694/mja13.10272.

2. RESEARCH OBJECTIVES

The overarching objective of the research was to understand the knowledge base for adolescents and their parents around school-based vaccinations and the ongoing catch up program for individuals up to 19 years of age.

The specific objectives of the research were as follows:

Knowledge and attitudes:

- > examine current knowledge and attitudes around vaccinations administered at school;
- > determine information sources (especially, sources of misinformation); and
- > identify any information gaps.

Consent and participation:

- > explore levels of comfort with the process of school-based vaccination generally;
- > identify drivers of providing/withholding consent (amongst parents);
- > understand drivers to seeking privately administered vaccination instead of school-based;
- > determine differences between vaccination in early high school vs late high school (from all perspectives: parent/student/health professional/school staff);
- > examine barriers to participation amongst those who would otherwise consent to the vaccination (e.g. child scared of needles, not sure if allergic, etc);
- > explore preferences for receiving information / consent forms.

Experience of the process:

- > identify experiential differences in the administering of vaccination at school – e.g., around comfort, privacy, clarity of communication to students receiving the vaccine and their understanding of what it is for, advice and support in managing side-effects.

3. RESEARCH APPROACH

3.1 Overview

This program of exploratory research included:

- > 6 x group discussions with young people in Years 7, 9 and 10;
- > 5 x group discussions with parents of young people aged 11-16 years;
- > 2 x group discussions with young people aged 17-19 years who were eligible for catch-up vaccinations;
- > 1 x group discussion with nurses with first-hand experience of school-based vaccination; and
- > 1 x group discussion with teachers with first-hand experience of school-based vaccination.

All groups included between 6-8 participants and ran for approximately 1 ¾ hours.

3.2 Qualitative research sample

The sample was as follows:

Grp	Audience	Specification	Gender	Location	State
1	School Students	Year 7	Female	Parramatta	NSW
2	School Students	Year 7	Male	Mackay	QLD
3	School Students	Year 10	Female	Adelaide	SA
4	School Students	Year 10	Male	North Sydney	NSW
5	School Students	Year 9	Female	Coffs Harbour	NSW
6	School Students	Year 9	Male	Brisbane	QLD
7	Adolescents (catch up)	17-19	Female	Melbourne	VIC
8	Adolescents (catch up)	17-19	Male	Mackay	QLD
9	Parents	On the fence	Mix	Parramatta	NSW
10	Parents	On the fence	Mix	Melbourne	VIC
11	Parents	Acceptors	Mix	Coffs Harbour	NSW
12	Parents	Acceptors	Mix	Mackay	QLD
13	Parents	Acceptors	Mix	North Sydney	NSW
14	Nurses	N/A	Mix	Adelaide	SA
15	Teachers	N/A	Mix	Brisbane	QLD

3.3 Sample criteria

School students

School vaccines are given in Year 7/8 and Year 10. Each of these two groups of young people were likely to be significantly different in terms of their views about the program and their levels of self-determination versus the wishes of their parents, among many other things – so the research included both groups separately.

Previous research had been conducted with young people in Year 7, but not those in Year 10. For this reason, the sample was loaded toward this older group. The research also included students on either side of the vaccination period – those students in Year 9 who would soon be facing the prospect of school-based vaccines, versus those in Year 10 who would likely have completed the program by the time the research was conducted.

Friendship pairs

All school students were recruited as friendship pairs to ensure their greater comfort with the research process.

Adolescents (catch up)

The researchers were aware that the Department was particularly interested in those eligible for catch-up programs. The approach taken was to initially strive to recruit those who had not received their immunisations at school and were therefore truly eligible for the catch-up program. Beyond that, the researchers used a fall-back position of recruiting young people who fitted the age specifications but perhaps did not strictly meet eligibility for the catch-up program.

Gender for school students and adolescents

The research split the groups with students and adolescents by gender, to ensure maximum levels of comfort when talking about sensitive topics such as immunisation.

Parents

The research included parents of children across the age spans in a single group. Groups were mixed gender. Quotas were used to ensure roughly even representation of parents with children in Year 7/8 and Years 9/10.

Parent typologies

The study recruited parents against the typologies identified in previous research. Broadly, typologies were grouped into 'Acceptors' and those 'On the fence', as follows:

- > 'Acceptors': Strong Advocates, Active Acceptors and Passive Acceptors
- > 'On the Fence': Cautious Considerers, Worriers and Naturalists.

A series of statements was used to allow potential participants to self-classify into the different typologies.

Socio-economic status

Across the sample a broad representation of socio-economic groupings (SEG) was included.

People from culturally and linguistically diverse backgrounds and Aboriginal and Torres Strait Islander people

These audiences fell out naturally as part of the sampling overall.

Location

The research was conducted in four states – New South Wales (NSW), Victoria (VIC), Queensland (QLD) and South Australia (SA), in both metropolitan and regional locations.

3.4 Recruitment of participants

Participants were recruited using experienced, accredited specialist recruitment agencies with whom the research team has long-standing relationships.

A recruitment screening questionnaire was developed in consultation with the Department, which was used by recruiters to determine the suitability of participants. This questionnaire included demographic questions, as well as a range of questions to ensure the sampling criteria outlined above was met.

4. DETAILED FINDINGS

4.1 Perceptions of the school-based program

Overall, the school-based program appears to work very well. Very few participants identify any significant issues with the program. The vast majority are happy to comply and claim to feel quite positive about the program. When questioned whether any issues with the program exist, few are identified. It appears that for most, simply following the program is a given, something that is done almost automatically.

"I don't really think about it, it's just something I do"

All appreciate the program for its 'catch-all' approach, particularly given there is a widespread belief that most school children are vaccinated through the program. Many also claim to appreciate the fact that school-based vaccines are done at the same time and in the same place and that as a result, there is no need to rely on individuals to arrange the vaccinations themselves. For most, the program is felt to help normalise vaccines in communities overall, helping to develop herd immunity.

"It's great that we all get done together, it means we're all covered together"

Parents and school students have two quite different perspectives on school-based vaccination. Students tend to be most likely to be thinking about the experience of the needle and the vaccine itself. Conversely, parents tend to be predominantly thinking about their role in providing consent and the fact that they have to provide it.

Parents are often straightforward and pragmatic about their role. Most tend to recognise that their role is to simply sign and return the consent form. Some parents claim to inform themselves to ensure they know about the different vaccines by searching the Internet or consulting with health professionals. This generally involves those on the fence who are naturally more curious and in need of greater information than others. Overall, however, the key focus from a parental point of view tends to be about returning the consent forms by the required date.

For some students, the overall topic of school-based vaccination can be complex and fraught with emotion. Many students - especially those with less experience of school-based vaccination - are clearly feeling nervous and anxious about the prospect of having a vaccine at school, for a range of reasons. It may be that they are frightened of needles, that they are concerned about the fact they will receive the vaccine in front of their peers, that they are worried that something might go wrong, or are fearful of being embarrassed in front of their friends. This perspective is clearly quite different to that of parents.

It is clear that very few parents or students think about the school-based vaccination program until they are prompted to do so. While there is latent knowledge that the program exists and that at some point both students and parents need to interact with it, there is no evidence whatsoever that parents or students actively think about the program in advance in any way. Rather, all claim to simply react to vaccination program-based materials they receive and use them as prompts to think about the vaccines or take action.

"It doesn't cross my mind until I get the form, or they bring it home"

"It's not until you know they are coming up that you even think about it"

4.2 Awareness of the vaccines

Awareness of the school-based vaccines is extremely patchy. Most students spontaneously claim to have no idea what they have been vaccinated against in the past - and many parents clearly struggle to remember which vaccines they have given consent for.

When prompted, some students think in a little more detail about the school-based program and claim they have received 'the cervical cancer vaccine for girls', 'the meningococcal vaccine' or 'booster vaccines from childhood' (tetanus, rubella, chickenpox), but this tends to be extremely vague.

It seems that most parents and students simply defer to 'the system', especially when it comes to knowing which vaccines are appropriate and when they should be given. Certainly, very few have gone out of their way to inform themselves about the program or feel that it is important that they do. Almost unanimously, there is a level of trust in the health system and the experts behind it to get things right.

"They are the doctors, not me"

"It is a system that works"

"Why do I need to get bogged down in the detail?"

In this context, some parents and students claim to latently feel they ought to know more. When asked which vaccines are covered by the school-based program, there is evidence of some sense that parents and students ought to at least know what vaccines their children / they have had. However, this feeling tends to be relatively passive and is by no means a strong, immediate need. At this point, it seems unlikely to spontaneously prompt any genuine action.

4.3 Information sources and needs

The single most referred to sources of information are the 'packs', containing information about the school-based program and consent form(s). For the vast majority of parents, these packs are felt to have more than enough information to help them give consent for school-based vaccination. While many parents outwardly claim to read the information in the packs, few seem to retain what they have consumed. In reality, most appear to skim read it and simply sign the form. There is very little evidence of parents actively looking for information about the program beyond these packs. Rather, almost all seem very happy with the information they receive.

There seems to be almost no social media chatter about the program. None of the parents or students in our sample believe they have seen or heard any social media 'noise' about it. Rather, the role that social media plays seems to be about immunisation more broadly (and most believe that anti-vaxxers are particularly vocal on social media). Any significant role social media plays among parents appears to be in feeding the concerns of on-the-fence parents (who often confirm this is the case and claim that their concerns about vaccination had largely arisen as a result of reading social media posts).

Students hear about the program from a wide range of sources. Unlike parents, there is no single source of information that students go to. Rather, information tends to almost be absorbed by osmosis, through observation, gossip with friends and interactions with parents and teachers - much of which can serve to exacerbate students' anxiety and apprehension around the experience itself, especially as they often know little about the program overall.

"You hear about it when it's coming up. The older students often tease us about it but no one really says a lot"

Some students in the research suggest it would be of benefit to receive more formalised information to demystify the process of the program overall. While there appears to be no burning need for this information, information materials may help in two key ways. Firstly, providing an overview of vaccines and the diseases they protect against could work to unveil, or reinforce, the benefits of school-based vaccination for students overall. Secondly, this information could cut through the clutter and increase a sense of rationality around the program overall - thereby reducing the potential for emotionality around the process of the vaccinations themselves.

Suggestions from students for information delivery include a series of videos explaining vaccines and the process or perhaps Q & A sessions with nurses on the day of vaccinations (but certainly not written information).

“Yeah, if they could just let us know what’s going to happen and clear it up a bit, it might be less scary”

4.4 The consent process

The consent process is widely felt to work well, with few hitches. Many acknowledge that if there is a weak point in the process, it could be in students not taking information packs home to their parents, although this is felt to rarely happen. In almost every case, schools are believed to have strong contingencies in place such as email and phone call follow-ups, reminders via school portals and students themselves.

‘On-the-fence’ parents are far less fraught when their kids are older and are therefore less concerned overall about the school-based vaccination program than the childhood immunisation program. The fact that their child is older, bigger and is perceived to have a more developed immune system (than a baby) can help to ease parents’ levels of anxiety. Throughout their child’s life, parents have already negotiated a wide variety of risks and potential issues and problems. Ultimately, parents have greater experience and confidence by the time their children are in high school. That said, the consent process is slightly more ‘active’ for ‘on-the-fence’ parents, who tend to be more interested in the specific vaccines than others. In some cases they may choose to provide consent for their child to have some vaccines and not others (for example if a child has already had chicken pox). They also often have more questions about things like vaccine safety and potential side effects than other parents.

Currently available information is widely believed to meet the needs of ‘on-the-fence’ parents, most of whom claim to read the information in the packs in some level of detail and then - for the most part - sign their consent. Some claim to have previously called numbers listed in packs to ask questions. For them, often the act of being listened to is felt to be enough to have reassured them and alleviated their concerns. These parents also tend to appreciate the availability of external links in packs which give them the chance to go and find out more information if they want to.

“I had a query about the HPV one for my daughter. I called the number on the information I was sent and spoke to someone who was able to answer my query”

In terms of the consent forms and information, factual information that is easily digestible is highly appreciated by parents. Offering the ‘basics’ of vaccines via FAQs is appreciated by many. Striking a good balance between the use of visuals and text (such as the Department of Health’s HPV brochure) works well with a sense of accessibility. The use of colours to help signify information about different diseases also helps to make information packs and consent forms more user-friendly. Conversely, an impression of too much information or too many pages to read can feel a little off-putting. In addition, some consent forms can feel easier to complete than

others. For example, sections for completion on paper are felt to be easier to complete if boxes (i.e., to separate letters for legibility) are tonally indicated rather than outlined.

4.5 Motivators and barriers to participation in school-based vaccination

There seem to be few motivations to school-based vaccination beyond a desire to protect health. The default position for many parents is that school-based vaccinations are grounded in a sense of 'doing the right thing' by the community. For students, core motivations are about protecting their own health.

However, there are clear and different benefits to the program for both parents and students. The single biggest benefit for parents is the convenience of the program and the fact that there is no need for them to think about it, no need to make appointments or to take their children anywhere, and ultimately, no need for them to remember anything to keep their child up to date with the vaccination schedule. As mentioned at *Awareness of Vaccines* (4.2) this benefit is based on a high degree of trust in the system behind the NIP. For students the single biggest benefit is felt to be the strength and reassurance in numbers that the scenario provides – the fact that they are all in it together and that they can support each other through the process. In addition, the vaccination nurses are generally felt to be kind and to distract students from the needles. There are also some secondary positives frequently mentioned by students. Most are given some kind of lolly when they are vaccinated, and many report that they appreciate getting out of class for a while, sometimes to the point that the whole school day can feel like 'a bit of a write-off'.

Any barriers that exist focus on the sensitivities of students to the process of vaccination. These include a strong fear of needles, a tendency to faint or vomit, a fear around any potential side effects, a need or desire for greater privacy during the process and generally feeling unwell or sick.

The only significant issue is heightened anxiety levels among younger students. Younger female students in particular talk about large numbers of students winding each other up in anticipation of the needle itself, almost whipped into a frenzy prior to receiving vaccines. This can be exacerbated and amplified by having to wait around, watching others 'go in' and seeing how others react. At its worst, this experience can feel traumatic, especially for Year 7 girls who may not have had a vaccination for many years since early childhood. Some boys claim that it is common to be punched in the arm by other boys after vaccinations, which can cause some anxiety. Ultimately, anything which can reduce this high emotion by focusing on the rational benefits of vaccinations could help to mitigate the negativity of the experience.

Often students and parents don't know the specific day on which vaccines will be administered at schools. It is clear that some schools purposely don't tell students about specific vaccination days in advance, to minimise anxiety levels and to avoid absenteeism. Both students and parents tend to accept this, especially as consent has usually been given in advance and most rationally understand why schools do this.

"I get it, it would just make me more nervous if I think about it in advance"

4.6 Brief responses to potential messages

To further investigate responses to school-based vaccination, students and parents were shown a range of potential message territories that were developed by the research team. The message territories were broad, and used as 'conversation starters' rather than tested as messages per se. For example, these included prompts around convenience, herd immunity and protection, amongst others.

Responses to these potential messages indicated that parents and students tended to welcome messages that reaffirm vaccine benefits. Overall, messages around ease and convenience, protection, safety and effectiveness, catch-up vaccines and consent are well received.

For the most part they reflect back to the target audiences many of the benefits they spontaneously highlight in relation to the school-based vaccination program. The idea that the program is easy, convenient and removes the need to go to the doctor is exactly how parents articulate the core benefit of the program.

Of all the messages, one relating to the 'catch up' program² gets most attention. Many students and parents are unaware that free catch up vaccines are available up to the age of 19. For those in a 'state of limbo', this is highly appreciated as it is felt to give them a second chance if they have not already been vaccinated.

However, many question how they would know if they needed a catch-up vaccination and would appreciate some kind of proactive communication to tell them what to do (e.g. a letter). There is no evidence in this study to suggest that parents or school students would defer getting a vaccination as a result of learning about the availability of catch-up.

²*If vaccines are missed, young people can get catch up vaccines until the age of 19'*

5. RECOMMENDATIONS

- > The school-based vaccination program in its current form is clearly working well for both students and parents. There is little need for above the line communications given that parents and students across the board are comfortable with the level and format of information they receive.
- > Consider developing information materials such as videos that focus on the rational benefits of vaccines and diseases they protect against - ideally to be shown to students on vaccination day.
- > In doing so, aim to help reduce high levels of anxiety that can be generated - particularly among younger students - in anticipation of the needles themselves.
- > If possible, provide proactive information to those requiring catch-up vaccines, informing them that catch-up vaccines are free up until the age of 19.
- > Consider tools to help schools follow up on missing consent forms to increase vaccination rates – although given this already appears to be working well, it is by no means essential.
- > Consider providing feedback to States and Territories around updating consent forms based on those that are preferred and working most effectively.