



Process evaluation:

Hepatitis A immunisation program for
Aboriginal and Torres Strait Islander Children
in the Northern Territory, Queensland, South
Australia and Western Australia

REPORT

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Executive summary

In November 2005, the targeted national hepatitis A immunisation program for Aboriginal and Torres Strait Islander children commenced in the Northern Territory, Queensland, South Australia and Western Australia. The aim of this process evaluation was to describe the current status of the program, particularly implementation issues with a targeted Indigenous program and identify strengths and challenges including access issues encountered by Aboriginal and Torres Strait Islander people. A mixed methods approach was used. Key stakeholders from each of the four jurisdictions involved participated in a structured online survey and a semi-structured telephone interview.

The hepatitis A immunisation program was seen in a positive light by many stakeholders as it had become integrated into the routine National Immunisation Program schedule and was well accepted by parents and communities as a safe and effective vaccine. The targeted aspect of the program was seen as a challenge by some key stakeholders. Several jurisdictional stakeholders reported that coverage of all vaccines for Aboriginal children is lower in urban areas than remote areas and that delivering a targeted program is often easier in remote locations than urban areas. The perceived impact on disease burden and mortality made it easy to introduce a targeted immunisation program as providers and parents were very accepting of the program. However, Indigenous identification and recording issues were identified by stakeholders as a challenge in implementation of the program.

Sociocultural factors and access to immunisation services were the key challenges identified in this evaluation. The main cultural barriers to the uptake of the hepatitis A vaccine discussed by stakeholders were the reluctance of parents of Aboriginal and Torres Strait Islander children to use mainstream health services and the limited availability of alternative culturally appropriate services, particularly in some urban areas. Geographical challenges such as transport services, and follow-up of transient families in urban locations and mobile families in remote locations were cited as barriers to the uptake of the hepatitis A vaccine for Aboriginal and Torres Strait Islander children.

Staff commitment was a strength mentioned by several respondents. Aboriginal healthcare workers and community nurses' knowledge of their community helped establish and maintain the hepatitis A immunisation program.

Overall, the hepatitis A immunisation program was generally perceived as an effective program.

Introduction

Hepatitis A is a viral infection that causes acute hepatitis and is easily transmitted, predominantly by the faecal–oral route.^{1,2} Hepatitis A is highly infectious for 1 week before the symptoms present and remains infectious for another 2 weeks following symptom onset.^{2,3} Hepatitis A can present either as an asymptomatic or symptomatic infection. Symptomatic infection can vary from mild anicteric illness to fulminant hepatic failure. Symptoms include fever, anorexia, malaise, nausea and abdominal discomfort, followed by jaundice and dark urine. The clinical severity of disease increases with age although the case fatality rate is usually low (0.1%–0.3%).²⁻⁴

Australia and other developed countries have low endemicity of hepatitis A infection and cases occur sporadically with epidemic peaks associated with outbreaks.^{3,5} Hepatitis A infection is associated with low levels of personal hygiene and sanitation.^{6,7} High-risk groups in developed countries include household contacts of infected individuals, men who have sex with men, sewage workers, injecting drug users, children attending child care centres, homeless individuals and Indigenous peoples.^{8,9}

In Australia, the epidemiology of hepatitis A historically differed significantly for the Indigenous population compared to the non-Indigenous population. Hospitalisation and notification rates were higher among Indigenous Australians, with rates in Indigenous children aged <5 years over 20 times higher than those in non-Indigenous children in the same age group.^{3,10} This greater disease burden in Indigenous children was most prominent in more remote areas, particularly in northern Australia.^{7,8,11}

Hepatitis A immunisation in Australia

During the 1990s there was a high burden of hepatitis A in Indigenous people in northern Australia.¹² A jurisdictionally funded hepatitis A immunisation program for Indigenous children began in north Queensland in 1999.¹² In the years following the introduction of this program, substantial decreases in disease rates in both Indigenous and non-Indigenous children in north Queensland were observed, suggesting a substantial herd immunity effect.¹³

In late 2005, hepatitis A vaccine was funded under the National Immunisation Program (NIP) for Aboriginal and Torres Strait Islander children in the Northern Territory (NT), Queensland (QLD), South Australia (SA) and Western Australia (WA).^{3,6,14,15} Hepatitis A vaccination is also recommended, but not funded, for certain at-risk groups, including travellers to endemic areas, those whose lifestyle or occupation may put them at risk of acquiring hepatitis A,

people with intellectual disabilities, those chronically infected with either hepatitis B or hepatitis C virus and those with chronic liver disease.¹

Hepatitis A vaccines have a very high protective efficacy, approaching 100%^{1,13,16}, although the duration of protection following vaccination is not certain. However, vaccine-induced antibodies persist for many years and there is no current evidence that booster doses are required in healthy individuals.¹ Adverse events following hepatitis A vaccination are most commonly mild local events of a short duration.¹

The vaccine used in all jurisdictions for the hepatitis A immunisation program is the monovalent vaccine VAQTA[®] (paediatric/adolescent formulation, bioCSL).¹⁷ This is an inactivated hepatitis A virus vaccine which is administered intramuscularly. Two doses of vaccine, a minimum of 6 months apart, are recommended for children under the program.¹

Scheduling of the vaccine initially varied by jurisdiction, with NT and WA offering the vaccine at 12 and 18 months of age, and QLD and SA offering it at 18 and 24 months of age.¹² From 1 July 2013, the schedule changed so that dose 1 is offered to Aboriginal and Torres Strait Islander children at 12 months of age, and dose 2 at 18 months of age, in all four jurisdictions.¹⁸

Aims

To describe the current status of the national hepatitis A immunisation program, particularly implementation issues with a targeted Indigenous program, and identify strengths and challenges including access issues encountered by Aboriginal and Torres Strait Islander people.

Methods

A mixed methods approach was used in this process evaluation. This included a review of published peer-reviewed literature, online documents and stories in the Australian media, and an online survey and in-depth interviews with key stakeholders involved in the implementation of the hepatitis A immunisation program. Key stakeholders from each of the four jurisdictions involved participated in a structured online survey and a semi-structured telephone interview, all conducted in 2014.

Stakeholders included jurisdictional immunisation program managers from NT, QLD, SA and WA; public health physicians with expertise in Aboriginal and Torres Strait Islander health; representatives from Aboriginal Community Controlled Health Services (ACCHSs); state/territory peak bodies for ACCHSs; Medicare Local immunisation coordinators from QLD, SA and WA; and nurses in local council and general practice settings.

Document review

Jurisdictions were asked to supply copies of any documentation and information resources around the hepatitis A program, for example, fact sheets, posters and information for immunisation providers.

Each jurisdiction's health department website was searched for any web pages with information and resources relating to hepatitis A, in particular information for Indigenous people.

Additional searches were also made on a selection of Medicare Local websites for any information on hepatitis A for Indigenous people.

Ethics

Ethics approval to interview stakeholders from ACCHSs was obtained from the Northern Territory Department of Health Human Research Ethics Committee (HREC), the Menzies School of Health Research HREC, and the Aboriginal Health Research Ethics Committee of South Australia.

Endorsement of the evaluation was sought from all jurisdictional peak bodies for ACCHSs. Formal letters of support for the evaluation were received from the Aboriginal Health Council of South Australia, the Aboriginal Medical Services Alliance Northern Territory and the Central Australian Aboriginal Congress Health Service. The Queensland Aboriginal and Islander Health Council and the Aboriginal Health Council of Western Australia gave implicit consent when providing the nominations from ACCHSs of potential participants in the evaluation.

Results

Key stakeholders

Nineteen key stakeholders undertook an in-depth telephone interview. Stakeholders included four jurisdictional immunisation program managers, one each from NT, QLD, SA and WA; two public health physicians with expertise in Aboriginal and Torres Strait Islander health; seven representatives from the ACCHS sector, three of whom were from state or territory peak bodies; three Medicare Local immunisation coordinators, one each from QLD, SA and WA; a community health immunisation nurse and a general practice nurse from QLD; and a local council nurse from SA.

Fifteen of these stakeholders also completed additional questions in an online survey.

Program planning and funding

Across the participating jurisdictions the hepatitis A vaccine was funded as part of the NIP; no additional funding was provided to the jurisdictions by the Australian Government for the rollout of the hepatitis A immunisation program.

One jurisdiction (WA) funded a position of immunisation coordinator at the ACCHS peak body, to support all Aboriginal immunisation.

Stakeholders from ACCHSs and peak bodies were asked if their organisation had received funding specifically for implementing the hepatitis A immunisation program. Each of the respondents for the ACCHS peak bodies in the NT, SA and QLD either reported no funding or was unaware of any specific funding for planning and implementing the hepatitis A program within the ACCHS sector. This lack of funding was seen as a limitation by one respondent.

Education

Stakeholders recalled that any education provided for the hepatitis A program was included as part of their routine immunisation updates. Among stakeholders from ACCHSs there was little recollection of any historical or recent education specific to hepatitis A immunisation, but all respondents were aware that it was part of their standard immunisation program even if there were variations in how well it was implemented.

Collaboration

Four stakeholders from the ACCHS sector said that they were in contact with jurisdictional health departments, either through collaboration between Department of Health immunisation nurses assisting remote ACCHSs with information sharing about NIP vaccines or requesting the hepatitis A vaccine for non-Indigenous children in risk areas.

I think we do work with the early childhood nurses who support and provide [hepatitis A vaccine] along with other immunisation!

Stakeholders reported different levels of collaboration between Medicare Locals and ACCHS. One ACCHS respondent noted that the closure of the Medicare Local, to be replaced by a Primary Health Network, presented a significant challenge as the Medicare Local collaborated on community events or information sharing and these links would be lost when the Medicare Local was disbanded. Another ACCHS respondent said that there was limited collaboration with their Medicare Local beyond the supply of some information resources.

Communication and resources

Many stakeholders indicated that a lot of communication and promotion of immunisation with Aboriginal and Torres Strait Islander parents and community was at the local level, by word-of-mouth, at outreach clinics and community centres, and personal follow-up by post, phone, email, home visits or dropping reminders in letterboxes. These personal approaches were considered most effective in reaching Aboriginal and Torres Strait Islander parents.

Representatives of the three ACCHS peak bodies who were interviewed described their peak body's role in immunisation as essentially information sharing. However, two of these representatives indicated that most communication and information regarding immunisation went directly to providers from the relevant jurisdictional health department rather than from the peak body.

A number of information resources related to hepatitis A or the Aboriginal and Torres Strait Islander immunisation schedule were identified through web searches and from the online surveys and interviews with jurisdictional program managers, representatives from Medicare Locals, ACCHS representatives and immunisation nurses. Examples of communication resources produced by jurisdictions and other organisations are listed in **Table 1**.

All respondents who completed the on-line survey had referred to *The Australian Immunisation Handbook* for advice on hepatitis A immunisation. A majority of respondents (9/15) had also read the *Hepatitis A national guidelines for public health units* and any fact sheets produced by their jurisdictions (9/15).

The jurisdictional health departments distributed the *Hepatitis A national guidelines for public health units* and their own fact sheets. Two of the Medicare Local representatives reported distributing the *Hepatitis A national guidelines for public health units*. Three stakeholders mentioned the lack of specific information resources promoting the hepatitis A program for Aboriginal and Torres Strait Islander children and lack of education of providers.

Table 1: Information resources related to hepatitis A immunisation and prevention for Aboriginal and Torres Strait Islander children

Jurisdiction/organisation	Communication resources/strategies
Northern Territory	<p>Best Practice Communiqué 05-14 hepatitis A;</p> <p>Childhood schedule poster with Aboriginal funded vaccines;</p> <p>CDC-Northern Territory Disease Control Bulletin 'Nearing elimination of hepatitis A in Northern Territory following immunisation of infants' and 'Schedule changes – what's happening?', Nov 2005;</p> <p>Hepatitis A fact sheet;</p> <p>'No Germs on Me' media campaign for hand washing hygiene;</p> <p>Aboriginal and Torres Strait Islander schedule pack for use by immunisation providers in the north.</p>
Queensland	<p>Aboriginal and Torres Strait Islander specific hepatitis A brochure;</p> <p>'Bubba Jabbed' poster of Aboriginal and Torres Strait Islander childhood schedule.</p>
South Australia	<p>'Good health starts with clean hands' poster;</p> <p>'Immunisation: what you need to know before you consent' – additional vaccines for Aboriginal infants 12 and 18 months;</p> <p>'Hepatitis A infection and the South Australian immunisation program' fact sheet;</p> <p><i>Sharp and to the Point</i> South Australian immunisation newsletter – Hepatitis A article, Issue 41, Nov 2013;</p> <p>'Wash your hands' school program poster.</p>
Western Australia	<p>Western Australia Hepatitis fact sheet on all types of hepatitis;</p> <p>WA Health is working with the ACCHS sector to develop Aboriginal specific resources for general immunisation.</p>
Divisions of General Practice/Medicare Locals	<p>General Practice Network Northern Territory (GPNNT) 'Immunisation for all' resource to assist immunisation providers working with remote Aboriginal clients (no longer available online);</p> <p>Northern Territory Medicare Local poster 'The right age for baby needles'.</p>

Some jurisdictions produced promotional resources specifically related to the hepatitis A immunisation program. Other jurisdictions took a broader view and promoted all vaccines on the schedule for Aboriginal and Torres Strait Islander children. Another approach taken by NT and SA was to run hygiene and prevention campaigns aimed at Aboriginal and Torres Strait Islander children and adolescents.

Representatives from ACCHSs and ACCHS peak bodies reported that ACCHS organisations did not develop any of their own immunisation communication materials for either targeted or standard immunisation programs. One ACCHS representative attributed lack of materials to a lack of funding. Two others said that they relied on the communications provided by their jurisdictional departments of health as the jurisdiction already produced targeted health promotion/program fact sheets and there was no reason to duplicate.

I didn't feel it was necessary to duplicate something that was already working.

One representative from an ACCHS peak body stated that the ACCHS sector should be involved in developing promotional material aimed at Aboriginal and Torres Strait Islander people and the peak body would like to be more involved in future health promotion if possible.

None of the stakeholders recalled receiving or using any promotional material related to the hepatitis A vaccine from the pharmaceutical industry.

Service delivery

Hepatitis A immunisation as a targeted Indigenous program

Survey respondents were asked to indicate their level of agreement to a series of statements on implementing a program targeted at Aboriginal and Torres Strait Islander children (**Figure 1**). A minority of respondents (3/15) agreed that a targeted program added extra difficulty to the distribution of information resources and one-third of the respondents (5/15) agreed that the targeted program made it difficult to achieve appropriate culturally competent skills for immunisation providers (outside ACCHSs) compared with universal programs.

Seven stakeholders emphasised that although the hepatitis A immunisation program was a targeted program it was run as part of the routine NIP schedule.

We have the hepatitis A universal or Aboriginal rollout which started in 2005. So we're actually 9 years into it. So it's completely integrated into our NIP program.

Several stakeholders noted that the priority was to raise immunisation rates for all vaccines for Indigenous children rather than focus on single vaccines.

I mean my point of view is that we have so much work to do in Indigenous vaccinations ... generally that we're not singling out single antigens or vaccines for special attention; we're trying to raise immunisation across the board.

Raising coverage across the full immunisation schedule was seen as an important preventive health measure for Aboriginal and Torres Strait Islander children.

For the Indigenous children, there's been a lot of work over the last year promoting immunisation as the most full preventative program that you could wish to have to keep children healthy.

The profile of the hepatitis A immunisation program varied between states and regions. Stakeholders from QLD, for example, perceived that immunisation providers in north QLD were generally aware of the hepatitis A vaccine on the NIP, due to the long-standing program in that region, although awareness might be waning due to falling hepatitis A infection rates.

My summary would be that in our area it's going well, and it's a credit – I think it's a good effort and it is going well.

A number of stakeholders in other jurisdictions, however, observed that the hepatitis A vaccine has a low profile on the NIP and that the vaccine is overlooked by some immunisation providers. As a result some Aboriginal and Torres Strait Islander children miss out on receiving the vaccine.

I think [hepatitis A] is probably the weakest program of all the programs on the schedule.

Representatives from ACCHSs observed that it is easier for ACCHSs to deliver a targeted vaccination program than general practice, since ACCHSs can ensure culturally appropriate services and identification of Indigenous children is not an issue. One Medicare Local representative noted that immunisation providers in general practice were good with the universal NIP schedule but tended to forget the hepatitis A vaccine.

But certainly not much of a focus on the hepatitis A because we are finding that many of these kids have got beautiful histories, beautifully immunised but with NIP vaccines and not with hepatitis A.

According to one jurisdictional immunisation program manager, the timing of the introduction of the hepatitis A vaccine also contributed to its low profile on the immunisation schedule. When hepatitis A was introduced onto the NIP in November 2005 there had already been a number of changes to the immunisation schedule that year. These multiple changes, including recommendations for unfunded vaccines, may have confused providers and overshadowed the promotion of the hepatitis A vaccine.

Another reported disadvantage of the targeted hepatitis A immunisation program was the perceived inequity for non-Indigenous children, especially those living in more remote communities. Some stakeholders were concerned at the start of the program that non-Indigenous parents might object to their children missing out on the vaccine. This issue was resolved in many cases by offering the vaccine to all children, Indigenous and non-Indigenous, who were living in remote locations with a high-risk of hepatitis A. This strategy was supported by stakeholders as it protected all children at risk and could be seen as equitable.

We also offered it to non-Indigenous people who were living in Indigenous communities. Because we were saying that you know, this is because of the environment where you are in.

Providers expressed a need for clear guidelines from their jurisdiction on providing the hepatitis A vaccine to non-Indigenous children living in remote communities.

Several stakeholders were concerned that a targeted hepatitis A immunisation program might lead to Aboriginal and Torres Strait Islander families and communities being stigmatised around issues of hygiene. However, many stakeholders considered that most non-Indigenous people were not aware of the extra hepatitis A vaccine on the schedule for Aboriginal and Torres Strait Islander children.

I don't know, they haven't sort of been picked out as being different, you know what I mean, everyone gets vaccinations, they get an extra one but no one would really notice.

Some Aboriginal and Torres Strait Islander families did not believe they were at increased risk for hepatitis A infection and needed to be convinced of the relevance of the vaccine for their children. Providers encouraged hesitant Aboriginal and Torres Strait Islander parents to immunise their children by promoting the vaccine as an opportunity to reduce one more risk to their child's health, or a chance to have a free 'travel' vaccine.

Several ACCHS stakeholders discussed the issues created by having a program that is state-specific. Eligible children who cross state borders may miss out on the vaccine.

So there are issues with kids who are in New South Wales who don't have that on their schedule but who are spending a lot of time here in Queensland maybe not being aware that that's a vaccine that they're eligible for.

Providers may be unsure of what schedule to apply to transient families.

Yeah so children transient interstate, coming over here and not having the same schedule made it quite challenging for a lot of our providers.

Although many stakeholders supported universal programs in principle as a better way to achieve good uptake of a vaccine, in the case of the hepatitis A immunisation program respondents perceived there were some strengths in having a program targeting Aboriginal and Torres Strait Islander children in specific regions. Stakeholders supported the targeted program for the hepatitis A vaccine because the risk of hepatitis A was high for Aboriginal and Torres Strait Islander children in some areas and generally very low for non-Indigenous children. Furthermore the uptake of the vaccine appeared to have been sufficient to eliminate cases of hepatitis A among children in most high-risk areas. Therefore, respondents did not see the need for the hepatitis A immunisation program to be made universal, with one respondent stating that a universal program would be '*wasteful and unnecessary*'.

Acceptance of the hepatitis A immunisation program

Most survey respondents (11/15) agreed or strongly agreed that a targeted program for hepatitis A vaccine was well accepted by Aboriginal and Torres Strait Islander communities and parents (**Figure 2**).

The main reasons stakeholders gave for the acceptance of the vaccine were: the high burden of disease in some communities at the start of the program; the vaccine is safe and effective; and the high level of support for the whole immunisation schedule by Aboriginal and Torres Strait Islander people. In addition, changing from an 18 month and 24 month schedule to a 12 and 18 month schedule was well received by stakeholders in QLD and SA as there were other vaccines given at these schedule points and it was hoped that moving the second dose to 18 months of age might improve uptake.

The NIP schedule meant that Aboriginal and Torres Strait Islander children received three or four needles at 12 and 18 months of age which was sometimes difficult for the child and provider. The hepatitis A vaccine was the most likely vaccine to be delayed to reduce the number of needles given at the one clinic visit.

About half of survey respondents (7/15) agreed or strongly agreed with the statement that the uptake of the second dose of the hepatitis A vaccine was more difficult to achieve than for other vaccines on the NIP. Five respondents, however, disagreed that uptake of the second dose was particularly difficult to achieve. When interviewed, eight stakeholders identified some challenges with delivering the second dose of hepatitis A vaccine. The main issue was timeliness, with the second dose often administered late. Two stakeholders also

noted that the 6-month gap between dose 1 and dose 2 was a short interval, especially for transient families who were particularly difficult to find and recall.

I think the only challenge would be, and again I guess speaking from working in general practice is, it's just reaching those families that are quite transient. And the big concern needs to be the 6 months between the two doses. Sometimes that can be quite challenging recalling families to come back for the second dose.

One stakeholder perceived that many parents were unaware of the second dose.

We're just reminding parents that it is a 2-dose schedule. Some of the histories that we look at, dose 1 was given perhaps back in 2010 and when we've sort of questioned Mum about the second dose she said, "I didn't know there was a second dose".

Four stakeholders cited the reduced support from the Department of Human Services, which manages the Australian Childhood Immunisation Register (ACIR), for the follow-up of overdue children and the withdrawal of general practice immunisation incentives as contributors to the lower uptake of the hepatitis A vaccine, particularly the second dose.

Three stakeholders said that follow-up of the second dose was better when an Aboriginal Health Worker (AHW) was involved.

One immunisation provider raised the issue of whether the second dose was in fact needed. Another suggested that timeliness of the second dose was not critical as the first dose provides effective protection and the second dose mainly acts as a booster and can be delayed until 4 years of age.

Perceived impact on disease burden and vaccine coverage

Several stakeholders thought that the drop in hepatitis A rates since the introduction of the vaccine had also contributed to the relative lack of visibility of the hepatitis A immunisation program. However, the drop in cases was very welcome and there was evidence of herd immunity for non-Indigenous children as well.

Since that vaccine came on board we haven't had a case of hepatitis A in an Aboriginal child for several years, which is fantastic. Obviously it's spinning off, because even in non-Aboriginal children, very rarely do we see a child with hepatitis A now.

The coverage of hepatitis A vaccine has increased in WA as a result of the approach to improving timeliness for all vaccines for Aboriginal and Torres Strait Islander children.

So we are seeing inroads – well there’s no doubt about it, our immunisations in all outer regions where you’ve got an Indigenous population have gone between 90 and 95%, so really had a good 6 months.

Several jurisdictions reported that coverage of all vaccines in Aboriginal and Torres Strait Islander children is lower in urban areas than more remote areas. Stakeholders reported that delivering a targeted program is often easier in remote locations than in urban areas. There was better access to ACCHSs and community health centres in remote locations, whereas in metropolitan areas most vaccinations are given in general practice.

One stakeholder said that the high burden of disease made it easy to introduce the targeted program as parents understood how unpleasant the disease was and therefore had a high acceptance of the vaccine. Similarly, other respondents noted that herd immunity had been sufficient to eliminate hepatitis A, especially in remote locations where non-Indigenous children were also receiving the vaccine.

Indigenous identification and recording

Most survey respondents did not think that identification of eligible Aboriginal and Torres Strait Islander children or communication with Aboriginal and Torres Strait Islander communities had been enhanced by the targeted hepatitis A immunisation program. Only 3 of 15 survey respondents agreed that the identification of Aboriginal and Torres Strait Islander children was better than for other non-targeted national programs and only 4 of 15 agreed that communication with the Indigenous community was more effective for the hepatitis A program than for other programs (**Figure 1**).

Five stakeholders discussed the perception that providers in private practice do not identify Aboriginal and Torres Strait Islander children well. Reasons discussed included: the small numbers of Aboriginal and Torres Strait Islander children in many practices; reluctance by GPs to ask patients about Aboriginal and Torres Strait Islander identity; and a lack of awareness of the Indigenous schedule, particularly by practice nurses who are administering vaccines. Four respondents thought that most of the challenges of the hepatitis A program were the same as for other vaccines on the NIP, such as needing to find and follow up Indigenous children.

Medicare Locals reported promoting identification of Aboriginal and Torres Strait Islander children in general practices. Activities included educating GPs on identifying children, placing Indigenous identification stickers on immunisation booklets, and asking mothers of Aboriginal and Torres Strait Islander children what approaches to identification are most comfortable for them.

Sociocultural factors

Most survey respondents (10/15) agreed or strongly agreed that targeting Indigenous children for hepatitis A vaccination presented cultural issues for providers (**Figure 3**).

Respondents were divided over the importance of other cultural issues to the program. Forty per cent (6/15) agreed or strongly agreed that facilitating access to immunisation services for Indigenous people was difficult. Similarly, 40% (6/15) also agreed or strongly agreed that targeting Indigenous children for hepatitis A vaccination presented cultural issues for parents and the community.

Only three survey respondents agreed or strongly agreed that the hepatitis A immunisation program had successfully addressed cultural barriers (**Figure 3**).

The main cultural barriers to the uptake of the hepatitis A vaccine discussed by stakeholders were the reluctance of some parents of Aboriginal and Torres Strait Islander children to use mainstream health services and the limited availability of alternative culturally appropriate services such as ACCHSs, particularly in some urban areas. One respondent noted that ACCHSs do not always have staff on site who are accredited to vaccinate and therefore children may miss out on due vaccines. Two other respondents felt strongly that the lack of accreditation for AHWs to vaccinate was a barrier to providing timely and culturally appropriate immunisation services. More than half of survey respondents (8/15), however, disagreed or strongly disagreed that these cultural issues or barriers had adversely affected the uptake of the hepatitis A immunisation program (**Figure 3**).

Access to immunisation services

Access to immunisation services, transport to services, and follow-up of transient families in urban locations and mobile families in remote locations were cited as barriers to the uptake of the hepatitis A vaccine for Aboriginal and Torres Strait Islander children. Geographical challenges were raised by one respondent who said that for vaccine to travel to one region it went by two planes, a boat and then by road. Flooding was also a big logistic challenge for this respondent.

Providing outreach clinics in both remote and urban locations and providing transport to health services were common strategies used to overcome some of the physical barriers to accessing immunisation. Vaccinating during home visits was generally not a preferred strategy; however, some immunisation providers reported they will vaccinate during home visits if needed.

Medicare Locals were active in remote WA regions in providing support for immunisations. Medicare Locals had also collaborated with Public Health Units (PHUs) and ACCHSs to

develop strategies for reaching Aboriginal and Torres Strait Islander populations with low immunisation rates in metropolitan areas.

Staff commitment and engagement

Staff commitment was mentioned as a strength of the hepatitis A immunisation program by several stakeholders. The support of ACCHSs by jurisdictional staff, commitment of PHU managers to immunisation, knowledge of local communities by AHWs and immunisation nurses, and the rapport maintained between some GPs and Aboriginal and Torres Strait Islander families were all important factors contributing to an effective hepatitis A immunisation program.

The vaccine

Stakeholders generally perceived the hepatitis A vaccine to be safe, effective and easy to manage and administer. Respondents did not report any major supply or cold chain issues. Procedures for ordering of doses differed between jurisdictions; some respondents noted that restrictions by their jurisdiction on the number of vaccines that providers could order hindered opportunistic vaccination.

Data

Stakeholders did not report any major issues with recording hepatitis A doses on ACIR with doses being automatically uploaded from practice software to jurisdictional databases or ACIR. Because hepatitis A was a targeted program, some respondents reported that the reporting of coverage data for the vaccine from ACIR was often inadequate. The level of reporting was often not detailed enough for use in the local area.

Stakeholder recommendations

Stakeholders were asked to give any recommendations for improving the hepatitis A immunisation program specifically or Indigenous immunisation programs more generally. Recommendations fell into a number of broad categories, summarised below.

Specific to the hepatitis A immunisation program

- While less visible disease has lowered the profile of hepatitis A, it is important to keep funding and promoting the program to control hepatitis A in remote communities.
- ACCHSs and other organisations need to promote the hepatitis A vaccine to Aboriginal and Torres Strait Islander children.
- Any general information on hepatitis A (e.g. around travel vaccination) should also promote the availability of the vaccine for eligible Aboriginal and Torres Strait Islander children.

- Timely availability of hepatitis A vaccine coverage data is needed at the local level.

Development of promotional material

- It would be useful to have more promotional materials about the hepatitis A vaccine targeting Indigenous children produced by the Australian Government. Aboriginal people can be mobile, so national materials would provide a uniform message across jurisdictions and locations.
- It is important to produce Indigenous language resources to increase informed consent by Aboriginal and Torres Strait Islander people.
- Indigenous-specific resources should have input from Aboriginal and Torres Strait Islander communities. This would increase a sense of ownership and lend more weight to the messages.
- ACCHS peak bodies need more funding to develop Indigenous-specific resources for immunisation.
- Resources produced for Aboriginal and Torres Strait Islander communities need to be brief, fun and eye-catching.

Immunisation of Aboriginal and Torres Strait Islander people

- The focus needs to be on improving the uptake of all vaccines (including hepatitis A vaccine) by Aboriginal and Torres Strait Islander people.
- Timely immunisation should be a priority in the routine healthcare of Aboriginal and Torres Strait Islander children.
- Each ACCHS peak body needs an immunisation coordinator to improve immunisation uptake and timeliness for Aboriginal and Torres Strait Islander children and adults.
- Specific Aboriginal and Torres Strait Islander immunisation days and clinics would provide greater cultural safety and increase uptake in metropolitan areas.
- There is a need for more cultural safety education for providers, with Aboriginal and Torres Strait Islander parents having a say on what they need to feel culturally safe.
- Funding is needed for transport to bring children into clinics for vaccinations.
- Accreditation of AHWs to vaccinate would improve uptake of vaccines by Aboriginal and Torres Strait Islander people.

General recommendations

- Ensure that the incoming Primary Health Networks maintain the promotion of immunisation in general practice.

- There is a need to replace the Medicare Local immunisation coordinator position with an equivalent in the Primary Health Networks to provide support around immunisation.
- Greater use should be made of social media to promote immunisation programs.

Conclusion

In eligible jurisdictions, the national hepatitis A immunisation program for Aboriginal and Torres Strait Islander children has now been well incorporated as part of the wider NIP. Initially, however, the introduction of the program in 2005 was not widely promoted. Queensland had already been immunising Aboriginal and Torres Strait Islander children since 1999 and other changes to the NIP in 2005 overshadowed the start of the national hepatitis A program.

For most jurisdictions, the hepatitis A vaccine was and continues to be part of a broader strategy targeting Aboriginal and Torres Strait Islander children for timely immunisation with all vaccines on the NIP schedule. Key stakeholders supported the strategy of targeting Aboriginal and Torres Strait Islander children in high-risk locations, as a universal program was considered unnecessary for children outside these areas. Although not advocating a universal program, stakeholders thought it was important to extend the program to include non-Indigenous children who live in remote communities, in order to protect all children in locations where there is a high risk of hepatitis A. Geographical targeting of populations in high-risk areas can effectively reduce incidence of disease in remote locations. However, targeted programs may be less effective for reaching urban populations and this seems to be the experience reported by stakeholders working in urban areas.

Promotion of the hepatitis A immunisation program had been generally low-key and not many information resources were developed specific to the hepatitis A vaccine. A number of jurisdictions and other organisations developed materials for all vaccines on the Aboriginal and Torres Strait Islander schedule and campaigns for prevention of hepatitis A through better hygiene. Stakeholders also adopted various face-to-face, word-of-mouth and other localised methods to promote the vaccine and these approaches were considered effective for reaching Aboriginal and Torres Strait Islander communities. More high profile promotion strategies, specific to immunisation for hepatitis A, may be required in urban areas where uptake is low and face-to-face and word-of-mouth communication may not be as effective.

Perceptions of uptake of the hepatitis A vaccine varied substantially between jurisdictions and localities. There were some regions such as Far North Queensland and the Northern

Territory where stakeholders considered that the program was going well and providers were remembering to deliver the vaccine to eligible children.

Many stakeholders perceived that Aboriginal and Torres Strait Islander children in urban areas in particular were missing out on the vaccine. Stakeholders also perceived that identification of eligible Aboriginal and Torres Strait Islander children in general practice was generally poor.

Figure 1: Respondents' agreement with statements on the program being targeted at Indigenous children only

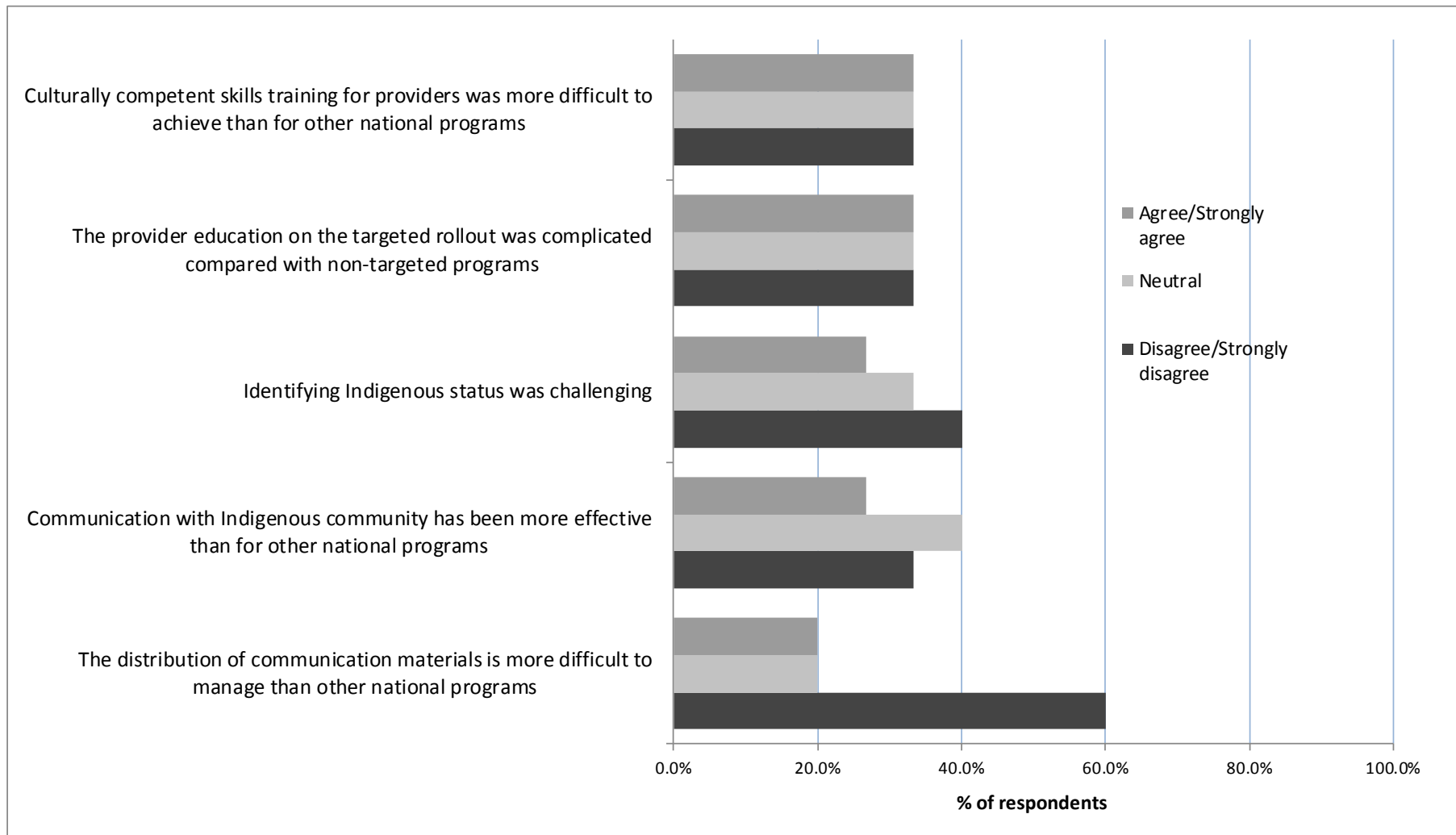


Figure 2: Acceptance of the targeted hepatitis A immunisation program

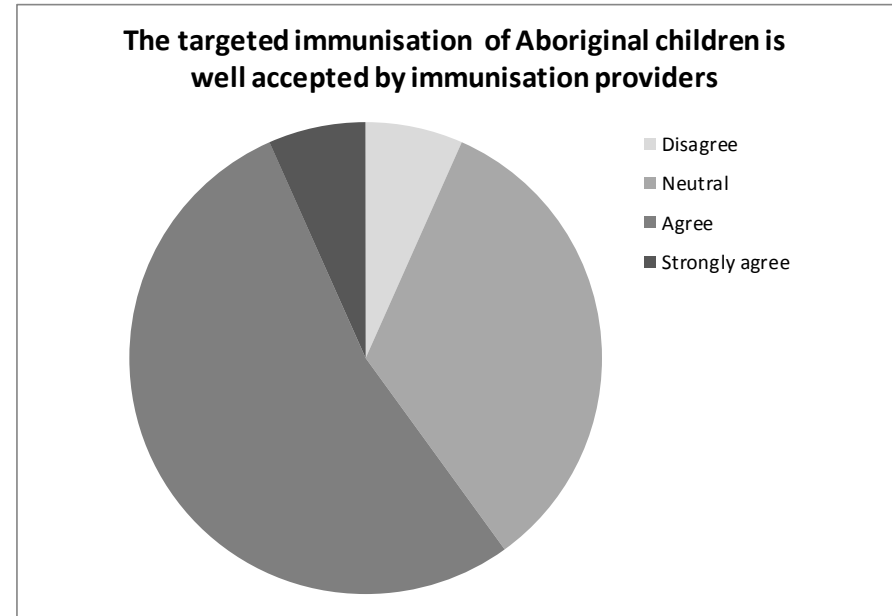
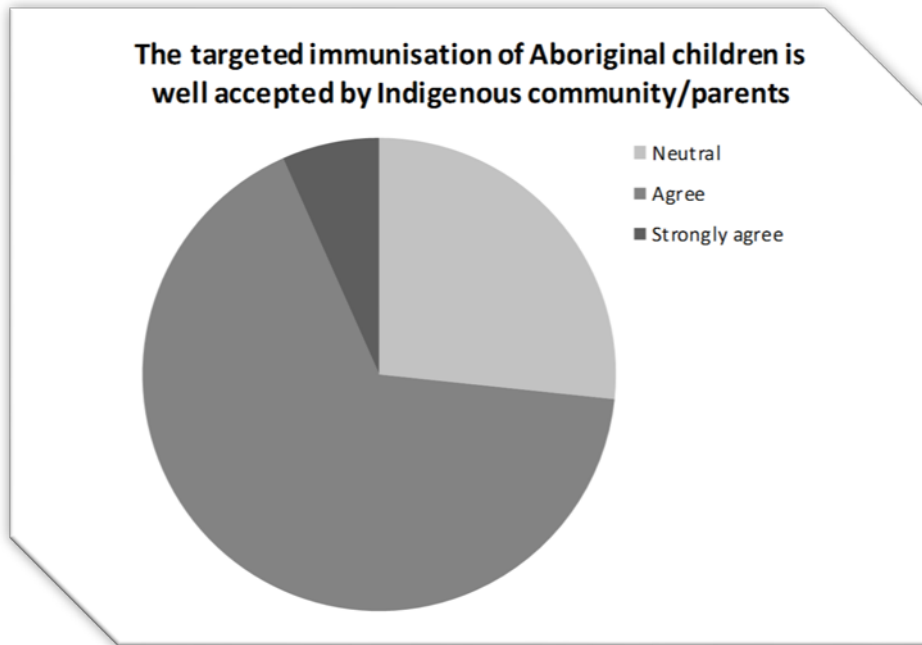
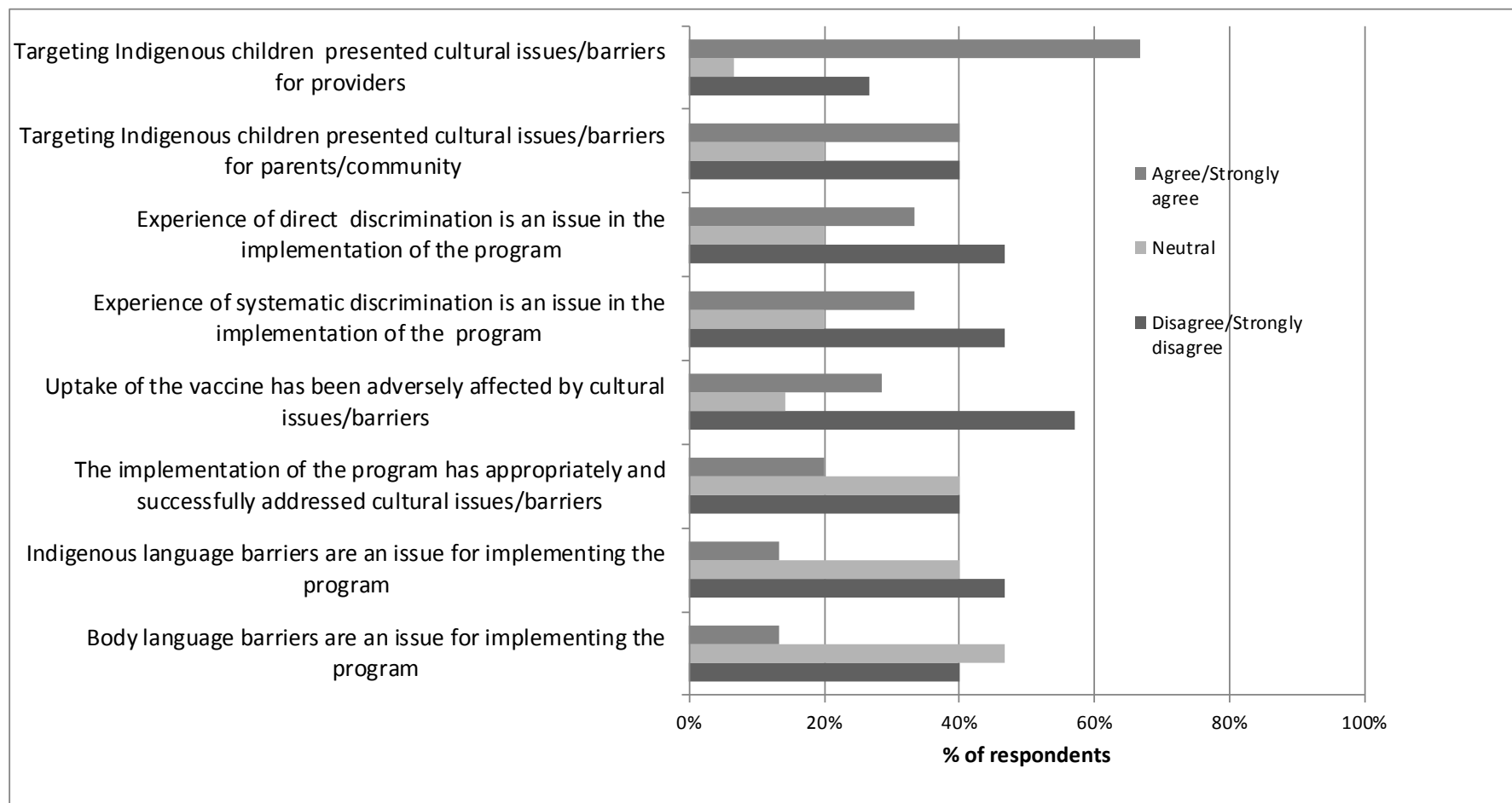


Figure 3: Sociocultural factors associated with the hepatitis A immunisation program



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