

PneumoSmart

Navigating pneumococcal vaccination recommendations with ease!

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Abstract

Pneumococcal vaccination pathways are complex and difficult for providers to navigate. To assist immunisation providers to offer appropriate pneumococcal vaccination to individuals identified to be at highest or increased risk of pneumococcal disease, the Immunisation Coalition has developed an online algorithm – the PneumoSmart Vaccination Tool (PVT).

This practical, easy-to-use tool utilises an algorithm that incorporates the Australian Immunisation Handbook recommendations, expert opinion and the National Health (Immunisation Program – Designated Vaccines) Determination 2014 (No.1) document.

PneumoSmart Vaccination Tool

The PVT will provide immunisation providers with clear pneumococcal vaccination pathways for individuals over 5 years of age with specific medical conditions identified in the Australian Immunisation Handbook. The PVT will give confidence to immunisation providers, ensuring stricter adherence to vaccination recommendations and guidelines, resulting in a reduction of potentially fatal complications from pneumococcal disease in ‘at risk’ individuals.

Endorsement of the PVT by State and Commonwealth Health Departments and other peak bodies will assist in increasing PVT use by providers.

The PneumoSmart Vaccination Tool is computer-based. Operators input information about the individual via a short series of easy-to-understand questions.

The multiple-choice format means answering is simple and straightforward with the questions covering:

- Indigenous status
- Age
- Category A medical conditions (including immune deficiency, solid organ transplant, chronic renal failure etc.)
- Category B conditions (including alcoholism, Down syndrome chronic cardiac disease etc.)
- Previous pneumococcal vaccine history

When appropriate, “Important Information” notices will appear on screen.

When all the information has been input, the PVT provides a printable history summary and an individualised immunisation schedule.

3 Category A Conditions
Does the patient have one or more of the following conditions? (Please tick all that apply - or none of the above to continue)

- Functional or anatomical asplenia, including: Sickle cell disease or other haemoglobinopathies or congenital or acquired asplenia (e.g. splenectomy), splenic dysfunction
- Congenital or acquired immune deficiency, including symptomatic IgD subclass or IgA deficiency (NOTE: children who require monthly immunoglobulin infusion are unlikely to benefit from vaccination)
- Immunosuppressive therapy (including corticosteroid therapy >2mg/kg per day of prednisone or equivalent for more than 1 week) or radiation therapy, where there is sufficient immune reconstitution for vaccine response to be expected
- Haematological or other malignancies
- Solid organ transplant
- Haemopoietic stem cell transplant (HSCT)
- HIV infection (including AIDS)
- Chronic renal failure, or relapsing or persistent nephrotic syndrome
- Proven or presumptive cerebrospinal fluid (CSF) leak

2 VACCINATION SUMMARY

If the patient has no documented evidence of previous pneumococcal vaccination (after 5 years of age):

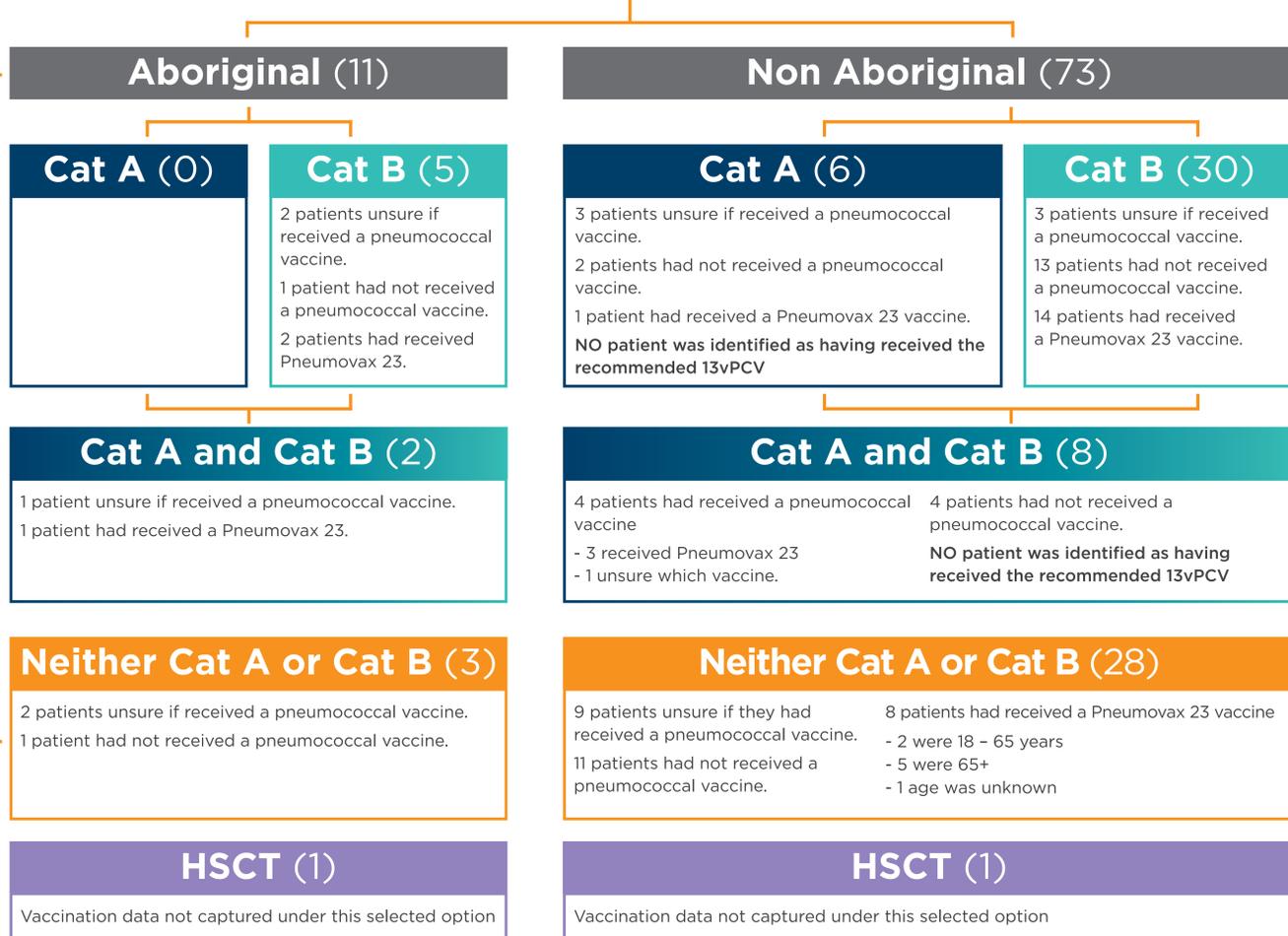
Interval	13vPCV	23vPPV	Comment	Funded
Now	Give			Not Funded
2 months		Give	Minimum interval of 2 months since the last 13vPCV dose	PBS
5 - 10 years		Give	Minimum interval of 5 years since the last 23vPPV dose	PBS
5 years or at 65 years of age (whichever is later)		Give	Minimum interval of 5 years since the last 23vPPV dose	NIP

Data

A small number of providers have used the PVT to identify if their patients have received the recommended pneumococcal vaccines.

The PVT has been used for 84 patients from mid-February to end-May 2017.

84 People



Conclusion

PVT data indicates many individuals are not receiving the recommended pneumococcal vaccines and that patient recall of past vaccination history is not optimal.

Pneumococcal vaccination pathways remain complex for certain individuals. Providers who have utilised the PVT, have reported it is easy to use, makes the vaccine pathway recommendations clear and easy to decipher and assists them to advise patients of funding criteria.

Further promotion of the PVT leading to increased use by providers will ensure patients receive the recommended vaccines at the recommended time and with the recommended intervals between doses.

Due to poor patient recall and visits to multiple providers, it is essential all pneumococcal vaccination data is submitted to the Australian Immunisation Register (AIR).