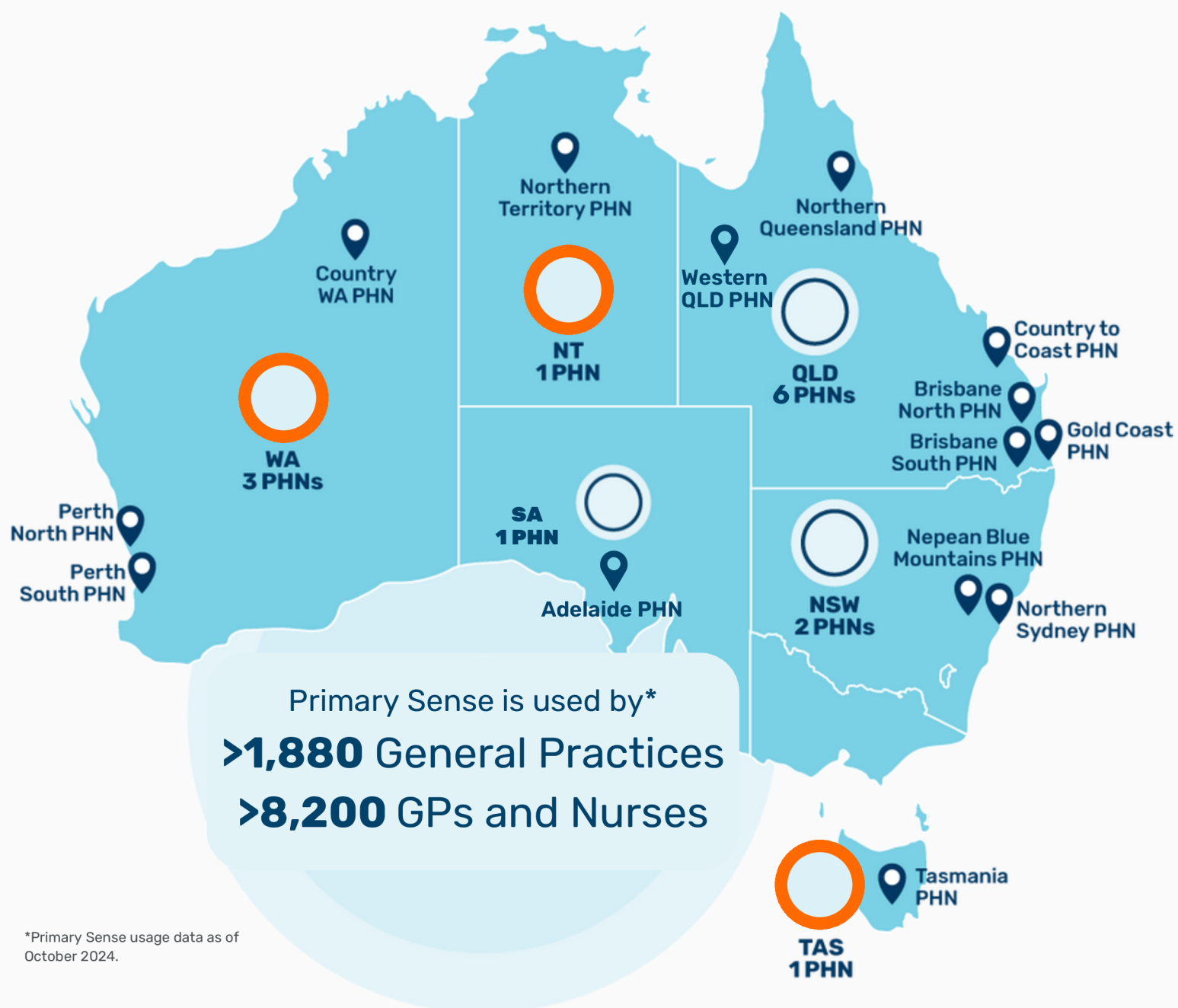


Primary Sense is the most widely used non-commercial clinical decision support tool in Australia.

It is used by 14 Primary Health Networks (PHNs) and over 1,850 general practices to help treat nearly 14 million people annually. Primary Sense helps general practitioners and nurses to identify and target their most high-risk patients and assists them by providing timely information to inform in-person interventions.



Co-designed to be scalable and fit for purpose

Gold Coast PHN as the original developer, and WA Primary Health Alliance (WAPHA) as the lead PHN to scale up the solution, worked closely with general practices, universities and primary care industry peak bodies to deliver Primary Sense as a product suitable for use by PHNs across Australia.

At least \$53.2 million in potential annual savings for the Australian healthcare system

These potential savings were identified by examining just four aspects of Primary Sense use over the past 12 months. They are **only possible by providing real time prompts and alerts to GPs during patient consultations**. This is a 17x return on an annual spend on Primary Sense of ~\$3 million by the 14 PHNs.



\$21.4 million

Savings possible by avoiding CV disease related hospitalisations

Real time Primary Sense care prompts enabled GPs to initiate medication for 2,380 patients with a high cardiovascular (CV) disease risk over the next 5 years. Proper management of CV disease is essential for avoiding preventable hospitalisation.

Potential annual savings: 2,380 patients x \$9,000 per CV disease related hospital admission cost = \$21.4 million.

Reference: aihw.gov.au/reports/heart-stroke-vascular-diseases/hsvd-facts/contents/impacts/expenditure-cvd



\$12.1 million

Savings possible by avoiding dialysis due to deterioration of kidney function

While writing a prescription for 740 patients with poor renal function, GPs acted on Primary Sense medication alerts about the serious implications of the medication being prescribed.

This timely change of medication avoided further deterioration of their renal function that could require dialysis.

Potential annual savings: If just 25% of these patients avoided dialysis: 25% of 740 patients x \$65,000 per patient dialysis cost = \$12.1 million

Reference: <https://assets.kidney.org.au/resources/budget-submission-february-2016-tasmania.pdf>



\$6.8 million

Savings possible by avoiding adverse drug event related hospitalisations

In total, GPs changed the medication 22,900 times after seeing a Primary Sense medication alert while writing a prescription. This potentially avoided adverse drug events which account for 2-3% of all hospital admissions.

Potential annual savings: If just 5% of these patients avoided a serious ADE: 5% of 22,900 patients x \$6,000 per hospital admission cost = \$6.8 million

Reference: Roughhead, L., Semple, S., & Rosenfeld, E. (2013). Literature Review: *Medication Safety in Australia. Australian Commission on Safety and Quality in Health Care.* (Adjusted for inflation)



\$13.0 million

Savings possible by avoiding whooping cough related hospitalisation of the newborn

On receiving a Primary Sense prompt, GPs vaccinated 2,415 pregnant women on the same day with dTpa vaccine as per the *Immunisation handbook*¹, providing their children with a level of protection to whooping cough at birth.

Potential annual savings: If 90% of 2,415 babies avoided hospitalisation x \$6,000 per hospital admission cost = \$13.0 million

References: 1. <https://immunisationhandbook.health.gov.au/recommendations/pregnant-women-are-recommended-to-receive-a-single-dose-of-pertussis-containing-vaccine-in-each-pregnancy>. 2. <https://compareclub.com.au/health-insurance/the-cost-of-staying-in-hospital-in-australia/>



13% less time

required per patient visit

Primary Sense prompts provide patient information so GPs can save approximately 2 minutes per patient searching for it during a consultation.

Annual time savings: If an average consultation time is 15 minutes and GPs save 2 minutes per patient: 2 minutes saved per patient ÷ 15 minutes per visit = 13% less time.

Reference: <https://www.racgp.org.au/getattachment/5a62c0cf-63bc-485f-bc41-3bd57d66966b/attachment.aspx>

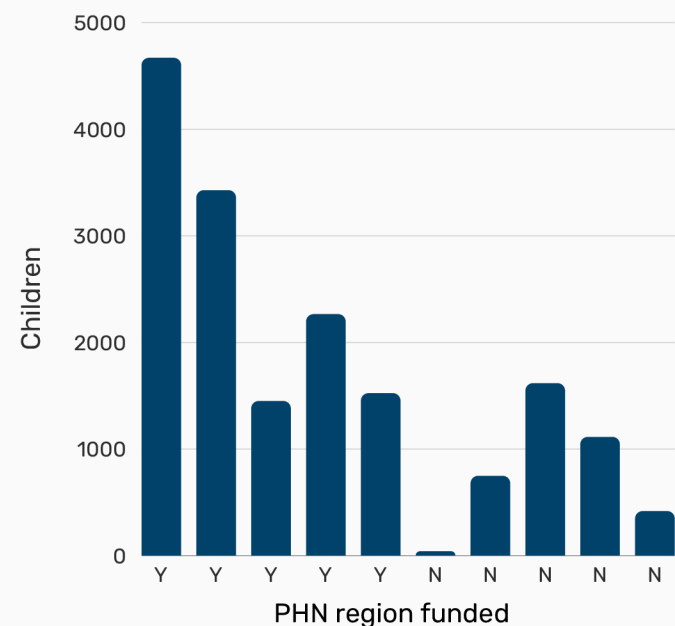
National Insights

Primary Sense enables understanding of national trends by analysing data across PHNs.

Facilitating uptake of national immunisation programs

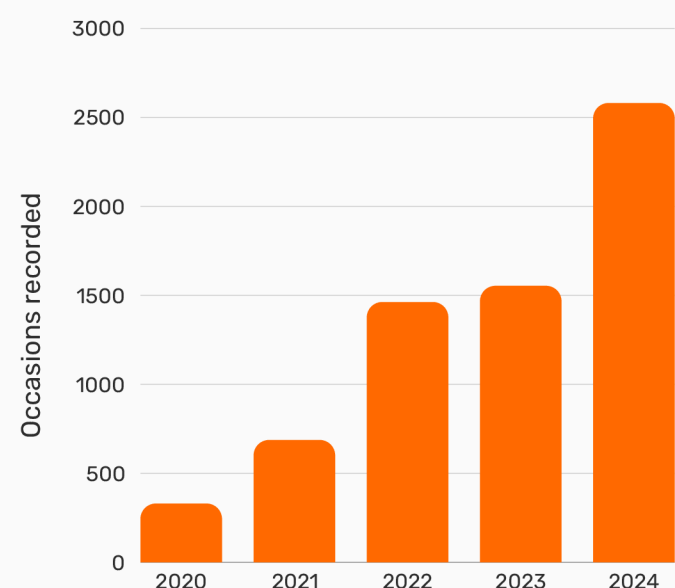
When **Meningococcal B vaccine** was funded in Queensland, Primary Sense prompted GPs there to consider it for 69,500 children under 5.

Where the vaccination was funded, 13,300 children received the free vaccine. Where it was not funded, only 3,900 received the vaccine in regions using Primary Sense.



Monitoring and promoting adoption of public health policy changes

Respiratory Syncytial Virus (RSV) vaccination will be a part of the national immunisation program. Primary Sense can monitor the changes in infection rates nationally and provide opportunities for timely interventions via real time care prompts.



Boosting vaccination rates that are declining nationally

At least 13,000 children aged 5 years and under have been vaccinated within 30 days of their practice receiving a new Primary Sense prompt introduced in August 2024. Primary Sense boosted vaccinations by providing these real time reminders to practice nurses when children visited the practice.

Supporting primary health care programs in general practice

Primary Sense supports program planning, practice participation selections and evidence-based quality improvement e.g. Chronic Heart Failure Program, Greater Choices for At Home Palliative Care Program, Healthy Weight Program, Community Physio Program and clinical care coordination for patients with schizophrenia.

Data linkage between general practices and hospitals

WAPHA is currently undertaking a proof-of-concept data linkage project between general practices and hospitals in Western Australia. This will enable the mapping of patient journeys between primary and acute care, better understanding the impact of public health policy and programs such as those funded through PHNs.

Primary Sense benefits



Real time clinical decision support

Timely interventions by Primary Sense care prompts and medication safety alerts can potentially avoid hospitalisations and improve patient health outcomes.



In-built risk stratification software

Primary Sense segments patients into high, medium or low risk groups to help practices identify and target their most at-risk cohort.



Collaborative health planning

Better understanding of current and trending population health needs to guide the commissioning of services across the country.



Privacy and Security

Data is de-identified, privacy protected, securely stored in Primary Health Insights (also led by WAPHA) and managed in Australia. Extracted patient data has no identifying information – such as name, date of birth, address, Medicare number etc. Primary Sense data is not sold or commercialised.



No cost to practices, cost effective for PHNs

Primary Sense is provided at no cost to general practices. PHNs leverage the existing infrastructure of Primary Health Insights at no extra cost for data ingestion, analysis and reporting.



Population health insights

Collation of PHN data with practice data enables broader population health insights. Primary Sense reports can be used to proactively plan care by practice managers, GPs and nurses.



Standardised National Reporting

Streamlined and efficient Practice Incentives Program Quality Improvement (PIPQI) reporting delivers standardisation in reporting processes and tools for PHNs.