



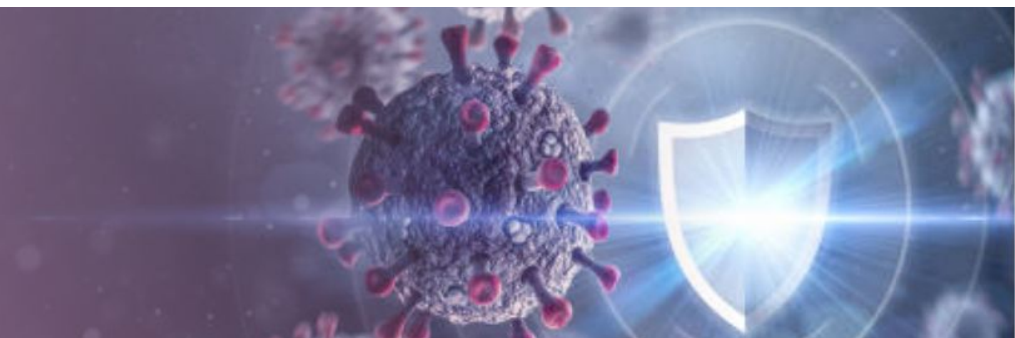
3:10 pm

## Digital & AI strategies to increase vaccination: best practice primary care

Dr Lisa Beecham MBBS FRACGP GAICD

Chair GCPHN

Chair Primary Sense Clinical Advisory Group



# SPEAKER DECLARATIONS



Received Honorarium GSK for immunisation education sessions

# Learning Objectives

- Know how to identify population groups missing vaccinations using data tools to instigate recalls
- Understand how the use of real time vaccine prompts improve vaccination rates for at risk populations , promoting uptake of such tools will increase immunisation coverage

# CASE STUDY

Young 1<sup>st</sup> time pregnant female

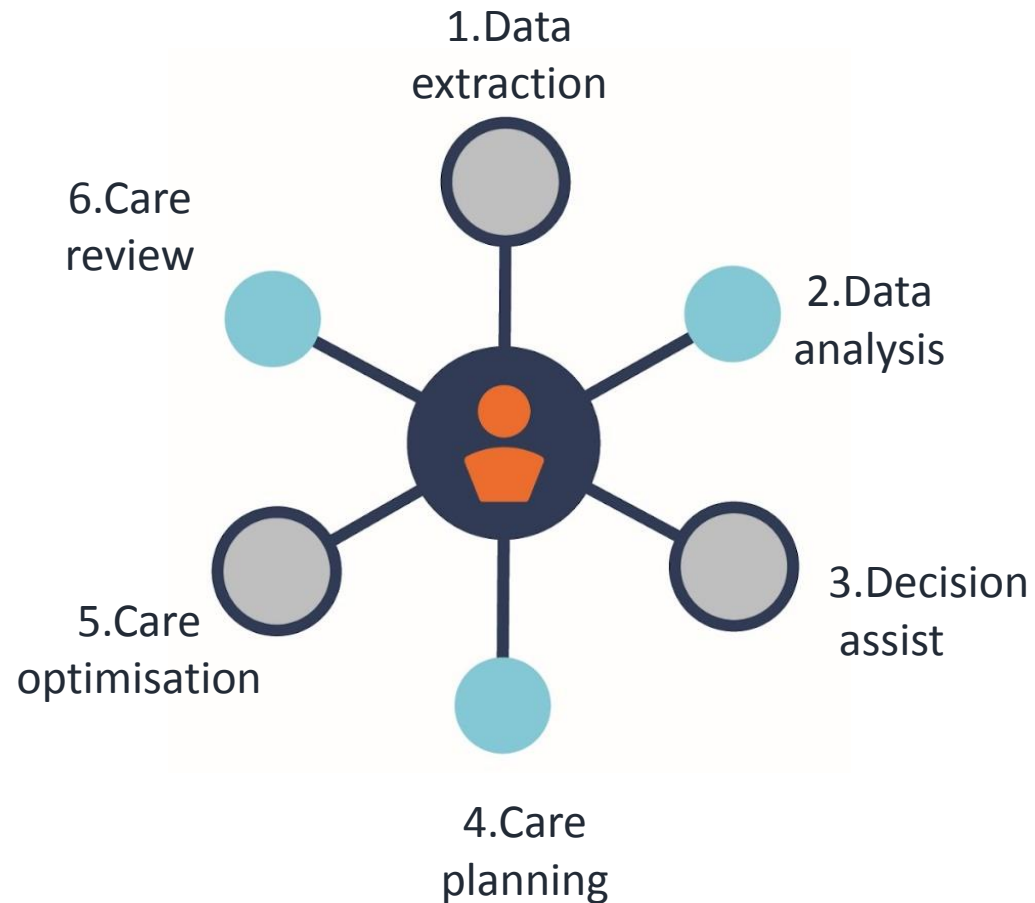
AODS issue referred next day counselling

Cancer diagnosed on first visit multiple surgeries required

Primary Sense Antenatal Immunisation Prompt reminded me pertussis immunisation due on next visit at 29 weeks



## What is the digital tool called Primary Sense?



11/31 PHN

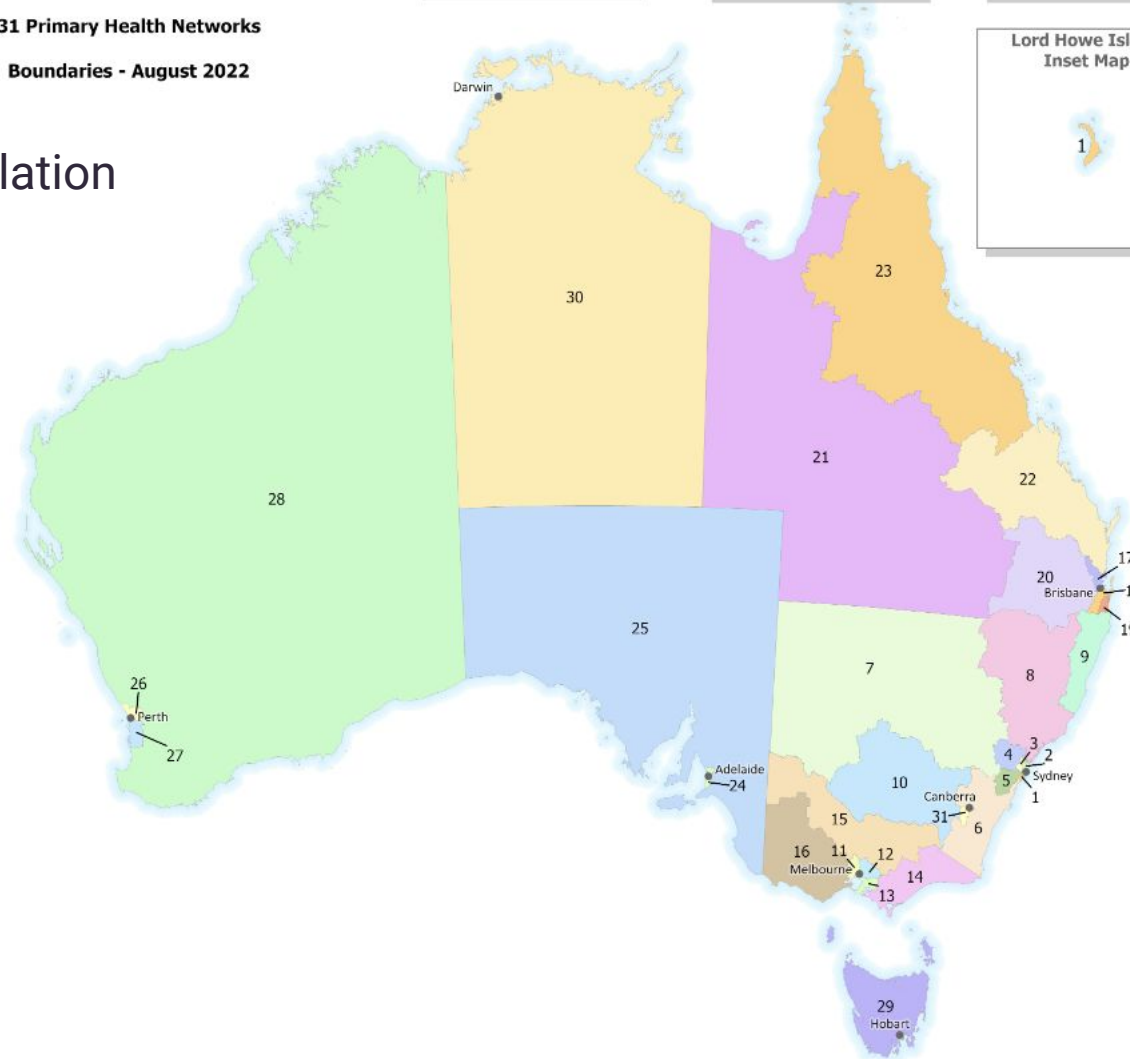
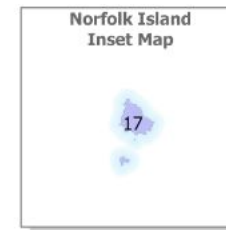
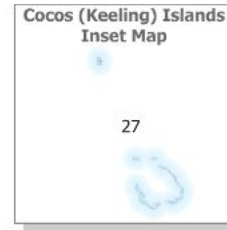


Australian Government  
Department of Health  
and Aged Care

31 Primary Health Networks  
Boundaries - August 2022

1 in SA coming

13 007 613 , = 48 % population

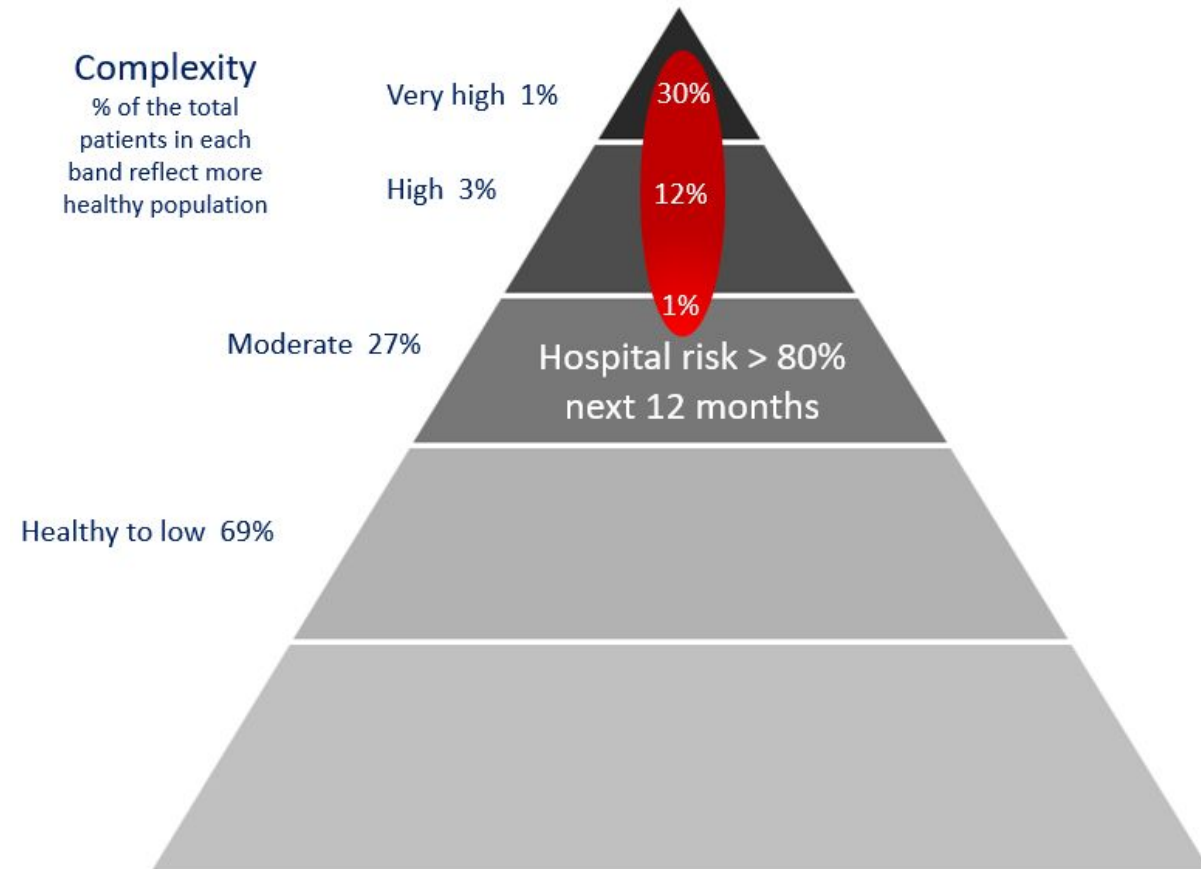


IMMUNISATION  
COALITION

# System level – Risk stratification

Incorporating the Johns Hopkins ACG® tool - 20 years of refinement across 30 countries

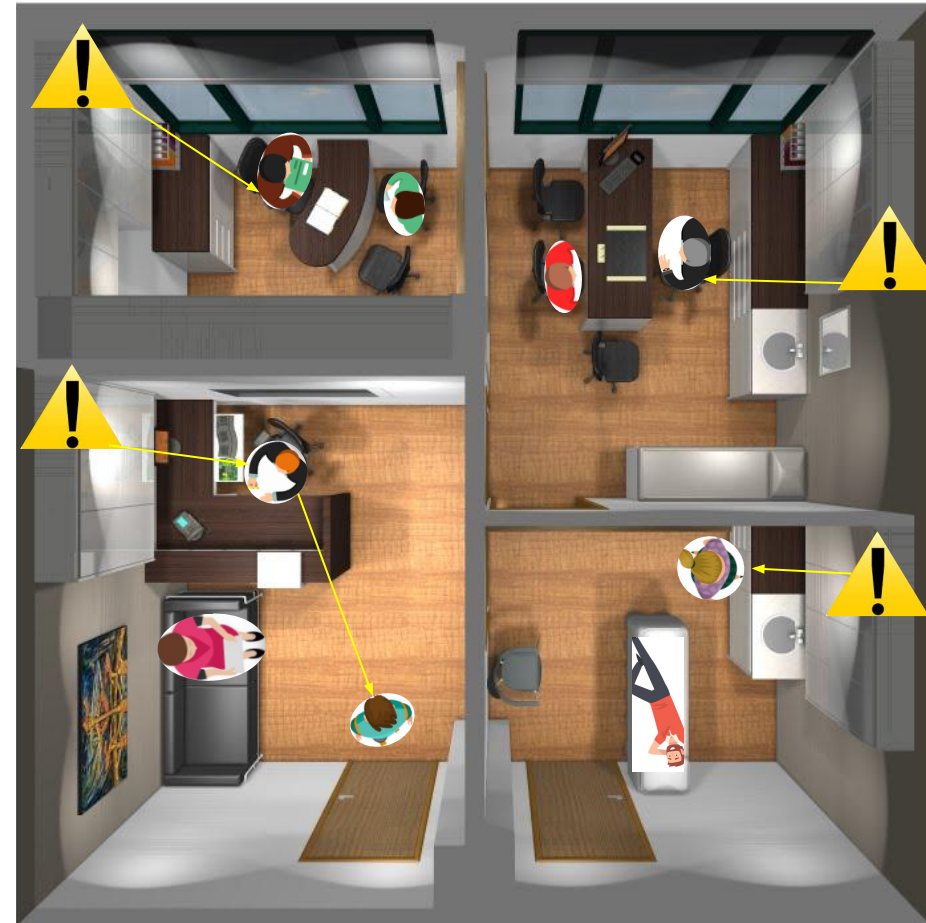
- Takes routine clinical data and generates complexity scores of 0-5 (5 highest), hospitals risk scores and frailty flags for all attending patients
- Enables targeting the most at risk with the right interventions
- Results can be used Primary and Secondary care for planning



# Integrated into the practice workflow

Improving care can happen throughout the day, every day, involving the whole team as part of their workflow and business model and deliver sustainability in health system

GP gets medication safety alerts at the time of prescribing eg if egfr drops



Antenatal report shows this patient is eligible pertussis , booked to come back next week for nurse and dr appt

GP gets Prompts on missing immunisations when the clinical record is opened

Winter Wellness report shows this patient hasn't had a flu/covid / pneumonia immunisation



# EVIDENCE DIGITAL



POI  
CAF  
PRC  
WOI

Table 2. Prompts: January 2021 to June 2021

Prompts listed according to priority	Occasions (n)	Interventions done (n)	%
Due influenza vaccination: Complexity 4 or 5 or pregnant	3,105	2,234	72
Due pertussis vaccination in pregnancy after 20 weeks	355	167	47
Due meningococcal vaccination: Aboriginal and Torres Strait Islander children	98	10	10
Due hepatitis A vaccination: Aboriginal and Torres Strait Islander children	165	16	10
Consider haemochromatosis testing for raised ferritins x2 or raised saturated transferrin	1,949	198	10
Missing CV risk medication (statin and antihypertensive) when CV score is >15%	1,803	825	46
Due Heart Health Check when CV risk is >15% and statin and antihypertensive are missing	1,556	32	2
Due Aboriginal and Torres Strait Islander health assessment when CV risk score >10% and statin or antihypertensive missing	60	17	28
Due annual microalbumin pathology in diabetes or CKD	4,187	490	12
Due care plan: Complexity 4 or 5 (or 3 if hospital risk is >80%)	8,011	1,265	16
Due mental health care plan with 2 or more mental health conditions	796	172	22
Due medication review when there are 7 or more current medications	2,587	18	1

CKD, chronic kidney disease; CV, cardiovascular

<https://www1.racgp.org.au/ajgp/2022/november/response-rates-to-computer-decision-support>

Covid vaccinations start rolling out 22/2/21

## Supporting quality and safety in general practice

Response rates to computer decision support

**Derek Davis, Mark Meyer, Carl de Wit**

**Background and objective**  
Primary Health Networks (PHNs) are tasked with increasing quality and effectiveness of medical services for patients, particularly those at risk of poor health outcomes, and improving the coordination of care to ensure patients receive the right care in the right place at the right time. To achieve these objectives, PHNs typically work with general practices in their regions on data-driven continuous quality improvement (CQI) activities aligned to the collaborative model, which the Australian Commission on Safety and Quality in Health Care describes as implementing change during defined, rapid quality improvement cycles, characterised by measurable targets, with the aim of sustained care performance.<sup>1</sup> However, the practical experience of these PHNs is that sustainable, measurable improvements in general practice care are challenging to achieve.

The relative lack of formal CQI activities and inconsistency in clinician participation can lead to significant variation in patient care.<sup>2</sup> There are well-known barriers to CQI, including time to participate, organisational culture, and a growing evidence base that supports continuing practice support, training and financial incentives are required to overcome these barriers.<sup>3</sup> However,

research on the best approaches to increase clinician participation in CQI is often subject to significant limitations, such as non-standardised and non-tailored interventions, and the findings might not therefore be generalisable.

For some general practitioners (GPs) who are supported by their PHN, not being able to access quality improvement could be in part due to the free-for-service environment of general practice, where ring-fenced time for GPs to engage in such activities is not funded through Medicare. Furthermore, the for service might incentivise excessive services and unnecessary or inappropriate care, directly affecting the quality of care.<sup>4</sup>

From a PHN perspective, there is an expectation that their practice support must be more efficient and cost-effective, as highlighted by the Australian Department of Health, which recommends that the traditional approach to CQI of no-fee meetings between PHN practice support team members and general practice staff might be at least partly replaced through increased use of technology, including automated decision support.

Clinical decision support systems need to be built into the clinician's workflow to have impact and increase efficiency.<sup>5</sup> Low response rates to decision support could be due to the type of content, with clinicians more likely to respond

**GP acted 20 %  
Due influenza  
Risk band 4/5 /  
pregnancy 72%  
AN Pertussis 47%**

# Desk top view



Mr Robin Town

File Open Request Clinical View Utilities My Health Record Help

Family members: Mr Robin Town Jump Open

Name: Robin Town D.O.B.: 12/10/2022 Age: 20 mths Birth Sex: Male 0m 25s Finalise visit My Health Record Data notes

Address: 12 Robina Drive Robina 4226 Phone: (h) 075554455 Email: Gender: Gender diverse Pronouns: He/Him/His

Medicare No.: 4177445912 - 0 02/2000 Record No.: Pension No.: Comment: due for SIP

Occupation: Dummy Patient Tobacco: Smokes 10 cigarettes/day Alcohol: Moderate Elite sports: Yes Ethnicity: Torres Strait Islander

Blood Group: Advance Health Directive:

Allergies / Adverse Drug Reactions: Reactions Notifications:

Item	Reaction	Severity	Type	Due	Reason
Iodine Antiseptics			Outstanding requests	30/08/2023	There are 5 outstanding requests for this patient!
Maxolon (Tablets)	O.G. Crisis		Preventive health	13/06/2024	Influenza vaccination is due!
Nifedipine And Related Pnrrash			Preventive health	13/06/2024	Vaccination against pneumococcus should be considered!
			Preventive health	13/06/2024	Smoking cessation should be considered!
			Preventive health	13/06/2024	A Diabetes Cycle of Care is overdue for completion!

Expand Collapse

Seen by: Dr Lisa BEECHAM Visit type: Surgery Reason for visit

Visit date: 13/06/2024 Visit time: 1:47:36 PM Confidential

Anal 10

Mr Robin Town

- Today's notes
- Past visits
- Current Rx
  - Actonel EC Once-a-Week 35mg Tablet
  - Astrix 100 100mg Capsule take one dai
  - Azathioprine 50mg Tablet 1 Daily.
  - Elquis 5mg Tablet 1 Daily.
  - Epiduo 0.1%;2.5% Gel Apply Before bec
  - Semaglutide Injection compounded.
  - Seroquel 100mg Tablet 1 Daily.
- Past history
  - Active
    - Diabetes Mellitus, Type 1
    - Myocardial infarction, posterior
    - Chronic Kidney Disease, Stage 1
    - 11/12/2006 Arthritis, acute
    - 03/10/2017 Depression
    - 11/10/2022 Inflammatory bowel d
  - Inactive
- Immunisations
- Investigation reports
- Correspondence In
- Correspondence Out
- Past prescriptions
- Observations

Diagnosis Procedure Reason for Visit Review Autofill Past visits Last visit

Primary Sense™ Prompt

Robin Town, 1y/o, Lisa BEECHAM

Complexity Score 1/5 Chronic Conditions 0 Hospital Risk Score N

Please indicate your actions:

Consider Meningococcal Vaccination

Last not available.

Agree - Action Agree - Override Next Time Wrong Dismiss

Due Microalbumin Pathology

Last not available.

Agree - Action Agree - Override Next Time Wrong More Info

Comment (optional)

⚠ Prompt not meant for me Submit Comment

🕒 Give me more time Close

# Primary Sense reports/ audits / QPIP

## Primary Sense™ Reports

GPs - Important clinical information about your patients are in most of these reports.  
Select a report

Clinical Audit Queries

- Pregnant and Vaccinations  
Due influenza and/or pertussis
- Patients with Moderate Complexity (level 3)  
Eligible or due care planning items
- Chronic Lung Disease and Asthma  
Associated modifiable risk factors
- Patients with High Complexity (5 and 4)  
Eligible or due care planning items
- Diabetes Mellitus  
Diagnosed and undiagnosed
- Winter Wellness  
High risk patients at risk of seasonal respiratory infect...
- Hypertension Management  
Hypertension, no active ACR reading in last 12 months
- Cardiovascular Disease Management  
CVD, missing interventions and risk factors
- Health Assessments  
Eligible or due
- Benzodiazepine in substance misuse  
High risk patients
- Haemochromatosis  
Associated risk indicators
- Cardiovascular Disease Risk Factors  
Modifiable risk factors
- Frailty Care Management  
Patients with Frailty risk factors
- Bowel and Breast Cancer Screening  
Patients eligible
- Child Immunisations  
Report of immunisations that can be given for childre...
- Voluntary Patient Registration  
Report of patients who are likely to meet the criteria f...

Keyword filter:

- Cancer
- Care Plan
- Cervical
- Chest Infection
- Cholesterol
- Chronic Disease Risk
- Coded Conditions
- Complexity Bands
- COPD
- COVID-19
- CV Risk
- CVD
- Data Quality
- Diabetes
- Ethnicity
- Fasting Glucose
- Ferritin
- Flu
- Fluvax
- Frailty
- GP
- GPMP

Practice/PHN Reports

- Characteristics of the Practice Patient Population  
For comparison to the PHN version
- Accreditation  
% compliance
- Summary Report of Practice Improvements  
Monitors changes
- Characteristics of the PHN patient population  
As an average for comparison

PIP QI

- PIP QI report - 10 measures  
% compliance
- Patients missing PIP QI or accreditation Measures  
All patients missing measures
- Patients booked in with missing PIP QI measures  
With appointments in the next 2 weeks

# Pregnancy Vaccination report : Primary Sense can use CPD audits



## Pregnant and Vaccinations

Robina Town Medical Centre and Robina Town Medical Centre @ Easy T

13 June 2024 14:28

Which patients are included in this report?

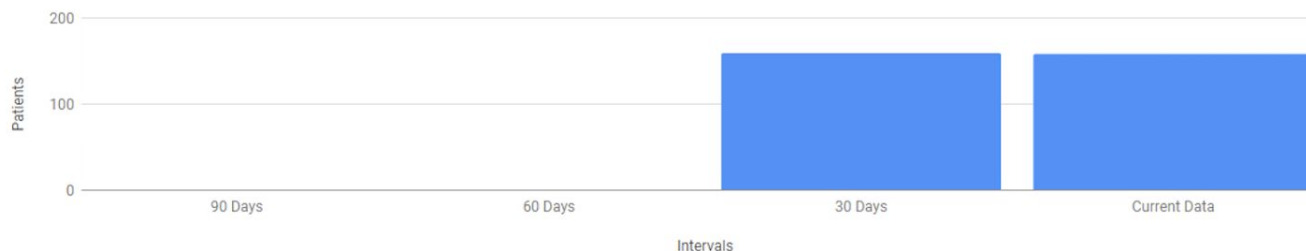
What data is in this report?

How do we use this report?

What are ACG patient complexity levels?

### Report Synopsis

Number of pregnant Patients across 30 day intervals



Note: Empty interval columns will populate over time.

Patients

All Doctors

View As Columns

#### Report-Related Data:

Patients With Fluvax (Last 40 weeks): 1071

Patients With Pertussis (Last 40 weeks): 319

### Pregnant women without a record of vaccination for pertussis and/or influenza during this pregnancy.

Information about this table

Show

25

patients per page

Export To Excel

Export To CSV

Export To CSV (SMS)

Search:

Mark Patient Name Patient Phone Last Visit Existing Appt GP Name Clinic Age Fluvax Date Pertussis Date Weeks Pregnant Estimated Due Date Source

# Winter Wellness immunisations due



IMMUNISATION  
COALITION



## Winter Wellness

Robina Town Medical Centre and Robina Town Medical Centre @ Easy T

13 June 2024 14:21

What are ACG patient complexity levels?

### Vulnerable patients over 5 years old who may be eligible for seasonal vaccinations

Vulnerable patients are those who are generally older, with multi-morbidity, frailty, certain diseases or immunosuppressed. Conditions are identified by diagnosis and/or medications used to treat the conditions (Rx) - patients with high complexity scores are also included for your consideration. Please note the fluvax is only shown if it was given in the past 15 months, covid vaccination and pneumovax is the last date given. Count of Covid vaccinations is where it is recorded in your system. The date of the last COVID infection recorded is provided if documented. Please click on Information about this table for more explanation. EDS is a discharge summary where received from the hospital.

Information about this table

Show

25

patients per page

Export To Excel

Export To CSV

Export To CSV (SMS)

Search:

beecham

Remove	ACG Score	Patient Name	Patient Phone	Last Visit	Existing Appt	GP Name	Clinic	Age	ATSI	Frail	Indicated By Dx/Rx	Last EDS	Last Fluvax Vaccination	Last Pneumovax Vaccination	Covid Vaccine Count	Last Covid Vaccination	Last Covid Infection
--------	-----------	--------------	---------------	------------	---------------	---------	--------	-----	------	-------	--------------------	----------	-------------------------	----------------------------	---------------------	------------------------	----------------------

Remove	4	[REDACTED]	[REDACTED]	2024-04	2024-30	Lisa BEECHAM	Robina Town Medical Centre	72			Cancer, Cardiovascular Disease, Diabetes, insulin (human), metformin, metformin and empagliflozin	Nil	2024-04-05	Nil	6	2024-04-23	2022-11-18
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Microsoft Excel ribbon showing various toolbars: Paste, Font (Calibri, 11), Paragraph, Wrap Text, General, Conditional Formatting, Format as Table, Cell Styles, Insert, Delete, Format, Sort & Filter, Find & Select, and Analyse Data.

L30

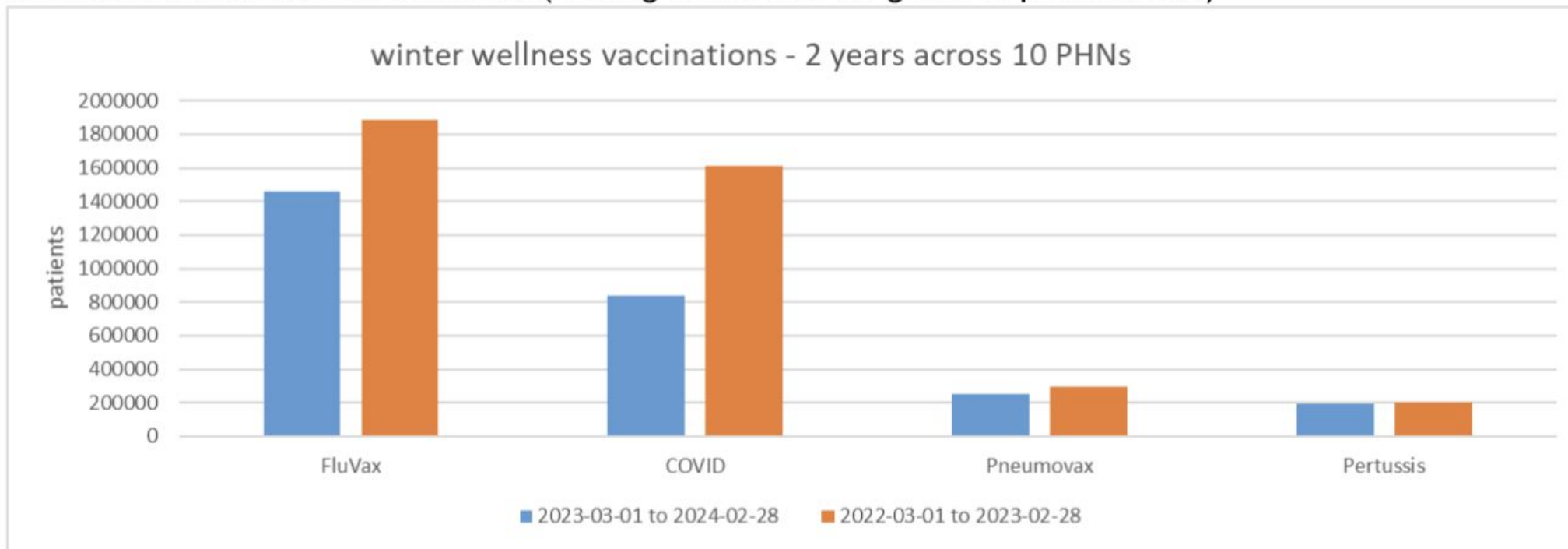
Primary Sense Patients with High Complexity (5 and 4)																	
Patient Name	Patient Phone	Last Visit	Existing Appt	GP Name	Clinic	Age	ATSI	Hospital Risk %	Current A	Current Medications	Last Medication Review	GPMP	GPMP Review	TCA	TCA Review	PN (10997)	PN (10987)
White, U	0401 234 567	2021-09-27	Nil	Dr W Martin	Surgery	89			0	11 Nil		Due		Due			
Nguyen, S	0401 234 567	2022-09-24	Nil	Dr W Martin	Surgery	64 Y		86	0	14 2022-09-24		Due		Due			0/10
Lee, D	0401 234 567	2022-09-24	Nil	Dr W Martin	Surgery	62 Y			0	8 Nil		Due		Due			0/10
Walker, I	0401 234 567	2022-09-24	Nil	Dr W Martin	Surgery	66			0	14 Nil		Due				0/5	
King, C	0401 234 567	2021-09-22	Nil	Dr W Martin	Surgery	65			0	9 Nil		Due		Due			
Walker, K	0401 234 567	2021-09-22	Nil	Dr W Martin	Surgery	77		99	0	15 Nil		Due		Due	Due	0/5	
Kelly, I	0401 234 567	2021-09-22	Nil	Dr W Martin	Surgery	68			0	10 Nil		Due		Due			
Walker, S	0401 234 567	2021-09-22	Nil	Dr W Martin	Surgery	52			0	8 Nil		Due		Due			
Robinson, D	0401 234 567	2022-07-24	Nil	Dr W Martin	Surgery	51 Y		99	0	18 Nil		Due		Due			0/10
Walker, Q	0401 234 567	2022-07-24	Nil	Dr W Martin	Surgery	65 Y			0	13 Nil		Due		Due			0/10
King, C	0401 234 567	2021-08-28	Nil	Dr W Martin	Surgery	74		98	0	10 Nil		Due		Due			

Mac OS taskbar showing 'Sheet1' and 'Sheet2' tabs, system tray with 'Ready' and 'Accessibility: Investigate', and a dock with various application icons including Safari, Chrome, Messages, Mail, Photos, Video, Calendar, Word, PowerPoint, Excel, and others.

# Vaccine Fatigue: data from 10 PHN 2022 vs 2023

## Immunisations

A look at vaccination changes and the potential impact of ‘vaccine fatigue’<sup>1</sup> A significant drop in influenza and COVID vaccines ( noting some can be given in pharmacies)



# New Childhood immunisation report now out, prompt soon!



## Child Immunisations

Robina Town Medical Centre and Robina Town Medical Centre @ Easy T

13 June 2024 14:12

### Important

This report does not check patients for allergies to medication. Please check for any allergies before administering any vaccinations.

The report shows due dates in colours representing the timeframe of the vaccination.

- **N/A** = Vaccination is not required or no longer eligible
- **Green** = Vaccination has been given
- **Blue** = Vaccination is currently due now
- **Red** = Vaccination was due more than 2 months ago and has not been given yet
- **Grey** = Vaccination date is upcoming, but not currently due

Due dates are **guidelines only** based on recommendations from the Department of Health and Aged Care.

Some vaccinations include an allowance for a catch-up schedule, recommended guidelines for these can be found here - [Catch-up vaccination](#).

Which patients are included in this report?

What data is in this report?

How do we use this report?

### What data is in this report?

- Age of patients.
- Aboriginal or Torres Strait Islander status.
- Record of last vaccination (if any) for each relevant disease.
- Date for when the next vaccination was due for each relevant disease based on age of the patient.
- 'Last Visit' displays the last visit that was billed (excludes administration and normal after care entries in patient record).
- "Existing appt" will display the next booked appointment.
- The data are up-to-date with the time stamp on this report.



# New Childhood immunisation report now out, prompt soon!



## Patients 18 months vaccinations

Show

25

patients per page

Export To Excel

Export To CSV

Export To CSV (SMS)

Search:

Remove	Patient Name	Patient Phone	Last Visit	Existing Appt	GP Name	Clinic	Age	ATSI	Hexavalent Last Dose	Hexavalent Due Date	MMR Last Dose	MMR Due Date	Childhood HIB Last Dose	Childhood HIB Due Date	Hepatitis A Last Dose	Hepatitis A Due Date
<a href="#">Remove</a>	Town, Robin		2022-02-02	Nil	Lisa BEECHAM		1	Y		2022-11-23		2023-10-12		2024-04-12		2024-04-12 (Consider)

# New Meningococcal B prompt

Meningococcal B prompt for all under 3yr olds as of 9<sup>th</sup> Jan 2024 to 13 May 2024 – a look at SEQLD PHNs

	PHN1	PHN2	PHN3
All under 3yr with visit to GP	21195	25891	33260
All under 3yrs with bexsero	1780	5506	6676
<b>as %</b>	<b>17%</b>	<b>21%</b>	<b>20%</b>
All under 3yrs <b>prompt</b> for jab	4151	6278	6558
All under 3yrs with bexsero	912	1762	1852
<b>as %</b>	<b>22%</b>	<b>28%</b>	<b>28%</b>

Where there isn't a GP prompt vaccinations occurred 17-21% of the time

Where there was a GP prompt it increased to 22-28% of the time

# Using incentives to increase immunisation rates: Primary Sense CQI, QPIP, CPD audits/performance reviews/ measuring outcomes/ business models



IMMUNISATION  
COALITION



## Continuous Quality Improvement (CQI)

### Influenza Immunisation using Primary Sense™

Where xxxx appears this is for the practice to complete

Ask-Do-Describe	
Why do we want to change?	
Gap	High risk patients missing vaccinations including high complexity patients and pregnant women
Benefits	Annual vaccination is the most important measure to prevent influenza and its complications and is recommended for all people with medical conditions and from vulnerable groups which increase the risk of influenza complications.
Evidence	Vaccinations are a safe and effective way to protect from serious disease caused by influenza. Influenza immunisation across our communities also protects other people, especially people who are ineligible for vaccination. The more people vaccinated in communities, the less likely the disease will spread ( <a href="#">Department of Health</a> ).
What do we want to change?	
Topic	<p>Ensure that our high-risk patients do not slip through the gaps and miss getting their annual influenza vaccination. We will do this through</p> <ul style="list-style-type: none"> <li>Promoting use of the Primary Sense desktop for GPs so they get prompts to vaccinate at the point of care for high complexity or pregnant patients</li> <li>Use reports to find patients booked in without a vaccination</li> <li>Use reports to find patients not booked in without a vaccination</li> <li>Use reports to find patients that haven't visited for a long time and decide whether to inactivate them</li> </ul> <p>The best reports to find most of at risk is the winter wellness and pregnancy. Other reports showing influenza vaccinations are below, but the same patients may appear across them. You could choose to use other reports, and to avoid double counting, export names from each via excel and count once</p> <ul style="list-style-type: none"> <li>Patients booked in with missing PIP QI measures</li> <li>Patients missing PIP QI or accreditation Measures</li> <li>Chronic Lung Disease and Asthma</li> <li>Frailty Care Management</li> </ul>
How much do we want to change?	
Baseline	<p>Count the number of patients on the winter wellness report and count those without an influenza vaccination (blank date) (the last influenza vaccine will only show if within the past 15 months)</p> <p>Count the number of patients on the pregnancy report and count those without an influenza vaccination (blank date) <u>=(The last vaccine date will be in brackets if before the pregnancy started and very close to the start date)</u></p>

	<p>» This PC » Documents » Primary Sense » Reports</p> <p>Entries at the bottom of the table is the number of patients on the reports – noting baseline will change if new patients come on reports and some patients are on reports for factors other than influenza vaccinations</p> <p>Remove Williams, A</p> <p>Showing 1 to 25 of 49 entries</p>
Target	<ul style="list-style-type: none"> <li>Our practice aims to reduce the number of patients on the winter wellness report requiring influenza vaccinations by .....each week</li> <li>Our practice aims to reduce the number of patients on the pregnancy report requiring influenza vaccinations by .....each week</li> <li>Our practice aims to increase the number of GPs with a desktop app to.....</li> </ul>
Who are involved in the change?	
Contributors	<p>QI Team lead/QI team members .....</p> <p>Practice Manager.....<u>xxxx</u></p> <p>GPs/Practice Nurses/Receptionists .....</p> <p>PHN Support Officer.....</p>
When are we making the change?	
Deadlines	<p>Baseline data report generated (date).....</p> <p>Implementation between (date range).....</p> <p>Review meeting (date).....</p>
How are we going to change?	
Potential solutions	<p><i>Delete as required</i></p> <ul style="list-style-type: none"> <li>Identify eligible patients through Primary Sense</li> <li>Promote influenza vaccination via SMS alerts, phone messages, posters and pamphlets</li> <li>Review current appointment systems</li> <li>Consider designated <a href="#">immunisation</a> clinics for at risk and vulnerable groups (allocate appropriate times when the risk of potentially infectious patients being onsite is <a href="#">minimised</a>)</li> <li>Flag eligible patients and book with GP/RN</li> <li>Opportunistic influenza vaccinations for patients with current booked appointments</li> <li>Ensure consistent use of the 'not given here' option in clinical software and entering the date the patient provides if immunisation given elsewhere</li> </ul>
Implement	<p>List your chosen solutions in order of implementation</p> <ol style="list-style-type: none"> <li>....</li> <li>....</li> </ol>
Monitor	<p>Review 1 - Date: <u>xxxx</u></p> <ul style="list-style-type: none"> <li>What is working/not working?</li> <li>Has there been a change in data? If not, why not?</li> </ul>

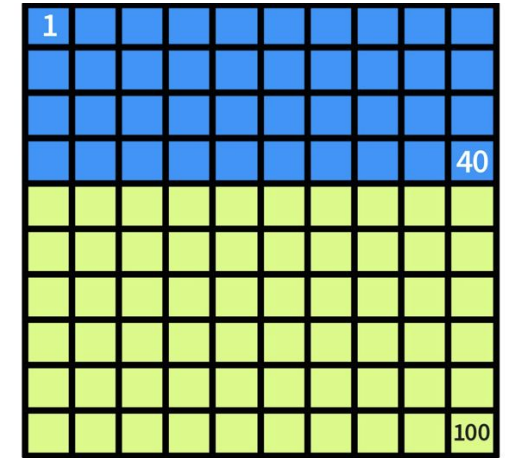
# 2023 influenza data

## 2023 influenza immunisation data

Practice where most of their GPs have the app  
 Have vaccinated on average 40% more of their complex patients against influenza  
 Recorded smoking on average 20% more often  
 Data was collected on 14th July 2023. Of the high-risk patients, 64% had influenza immunisation recorded



**40%** →  
**means 40 per 100**  
**(40% of the diagram**  
**is shaded in blue)**



GPs with desktop – average patients vaccinated	174	174	150	145	180	172	210	152	<b>1357</b>
GPs without desktop- average patients vaccinated	99	127	101	71	120	137	100	99	<b>854</b>
% increase in GPs with desktop	43%	27%	33%	51%	33%	20%	52%	35%	<b>37%</b>

# Some results past 12 months



## Alerts

- Over 2.7 million patients had their medications monitored in case an alert was warranted
- Over 79,500 medication alerts have triggered
- More than 7,600 GPs got one or more alerts for 62,500 patients
- On average 40% of the time an intervention is done

## Prompts

- 7,300 GPs got one or more prompt
- Nearly 484,000 patients triggered one or more prompt
- Over 17 million patients have been assessed for risk related if a prompt should trigger
- On average 5-20% of the time intervention is done

A screenshot of a software prompt window titled "Primary Sense™ Prompt" for patient "M Martin, 71 y/o, Dr U King". The window displays patient metrics: Complexity Score 5/5, Chronic Conditions 4, and Hospital Risk Score 87%. It asks the user to indicate their actions for two items: "Due Influenza Vaccination" and "Due Care Plan", both of which are marked as "Last not available". Below each item are five icons: a thumbs up (Agree - Action), a hand with a checkmark (Agree - Override), an alarm clock (Next Time), a thumbs down (Wrong), and a plus sign in a square (More Info). At the bottom, there is a text input field for "Comment (optional)", a "Prompt not meant for me" button, a "Submit Comment" button, a "Give me more time" button, and a "Close" button.

# Monitoring GP responses to alerts: potential AI on app success

**Primary Sense™ Medication Alert**

M Williams  
LANOXIN

**Possible renal impairment.** This alert is being generated because of the digoxin dose and current renal impairment. The risk of digoxin toxicity should be considered. Digoxin is predominantly renally cleared (about 70%). Recommended maximal doses are CrCl 10–30 mL/minute, oral 62.5–125 micrograms once daily. CrCl.

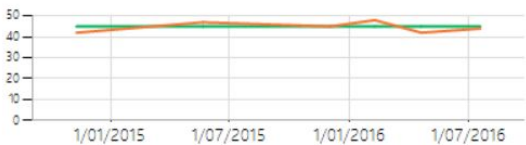
Please note results in PDFs can not be read.

**Recommendations**

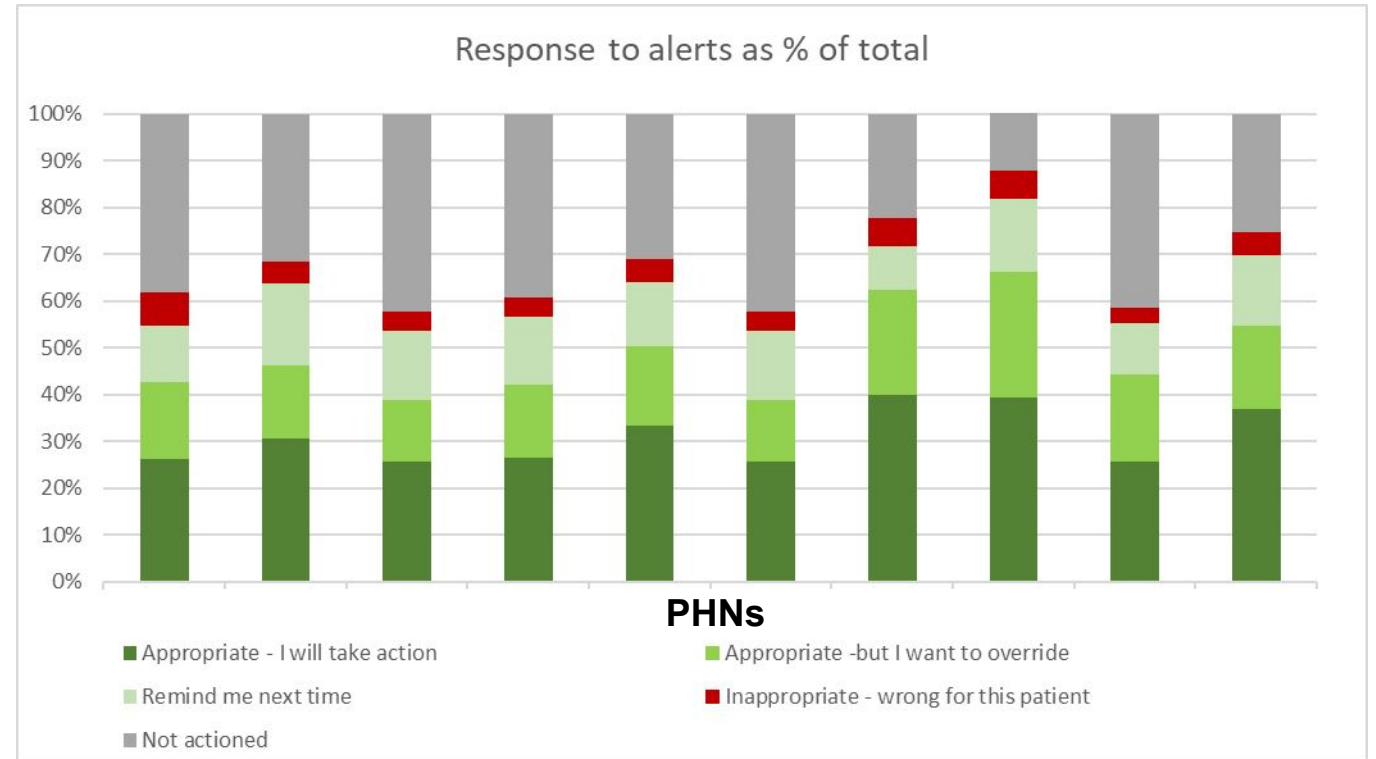
A check of serum digoxin levels at least 6 hours post dose and a review of patient symptoms is recommended.

*Comment (optional)*

**Patient results (Click chart for more details)**



— Alert Threshold is 45  
— eGFR



## Summary-Digital tools proven to increase immunisation rates and deliver efficiencies in care, target most at need

- Targeted point of care prompts increase immunisation rates by up to 40 % (GP with prompt vs no prompt)
- Data reports can be utilised to find patients that are high risk of VPD that require immunisation and streamline care equitably
- Population data mapping can identify trends in VPD and immunisation rates
- Digital tools drive efficiencies and outcomes
- HCP coding improves data
- Need increased GP desktop %



# WISH LIST ... Blue sky thinking.... Help me brainstorm

Immunisation coalition pneumococcal algorithms added to Primary Sense!

Seek permission to share de-identified vaccination data from OIHC so less overprompting/ work out AI / digital solution to get AIR data into Primary Sense / MD/ BP

AI to give bespoke patient information eg CALD/ Indigenous/ Hesitant vaccinators+ SKAI

AI to prompt bespoke immunisations eg hears consult Hajj prompts men acwy vaccination/ hears abattoir worker prompts q fever , child care worker prompt hep A etc, bat handlers and rabies vaccine

AI delivers text link to Pregnant parent re immunisation information for baby before birth, then for at birth , before 6 week immunisations etc

AI used to improve outcomes from prompts / colours / movement / length on screen

AI to do CPD points automatically tracked by Primary Sense prompt interactions ...

AI to track VPD illnesses hot spots/ Vaccine benefits and SE, eg shingles reducing dementia

**Efficiencies gained fund sustainable healthy primary care into the future ....**





IMMUNISATION  
COALITION



## Q&A

Digital & AI strategies to increase  
vaccination: best practice primary care

Dr Lisa Beecham GCPHN , Primary Sense CAG

Contact: [lisabeecham@gmail.com](mailto:lisabeecham@gmail.com)

