



IMMUNISATION  
COALITION



Dr Lisa Beecham

GCPHN Board Chair , Chair  
Clinical Advisory group  
Primary Sense

## Optimising vaccine uptake strategies and targeting high risk patients

1:00 pm



# Gold Coast Primary Health Network

*Primary Sense Immunisation prompts, Reports, data*  
*Primary Sense Immunisation prompts, Reports, data*

- **Immunisation Coalition Conference 25<sup>th</sup> ASM**
- **Optimising vaccine uptake strategies and targeting high risk patients**
  
- ***Dr Lisa Beecham GCPHN Board Chair , Chair Clinical Advisory group Primary Sense***



**PRIMARY  
SENSE**

# Primary Sense Background

- Primary Sense Desk top App for General Practice
  - Population Health Planning and management
  - Risk Stratification of regional and practice level populations
  - Clinical e-decision support at point of care
  - High quality data and reporting





# Strong clinical governance Clinical Advisory Group

**Clinician lead,  
ensuring best  
practice and fit  
for purpose now  
and into the  
future**

Dr Lisa Beecham (Chair) – GP, GCPHN Board member

Professor Mark Morgan (Deputy Chair) – GP, Assoc. Dean, Chair Expert Committee Quality Care, Chair PIPQI Data Governance Committee

Professor Kim Greaves – Cardiologist, epidemiologist ANU

Dr Krishan Madhan – Director Renal Medicine

Miranda Grace – CEO, Australian Association of Practice Managers (rep)

Helen Storer – Nurse Practitioner, Australian Association of Practice Nurses (rep)  
Australian College Rural and remote medicine (

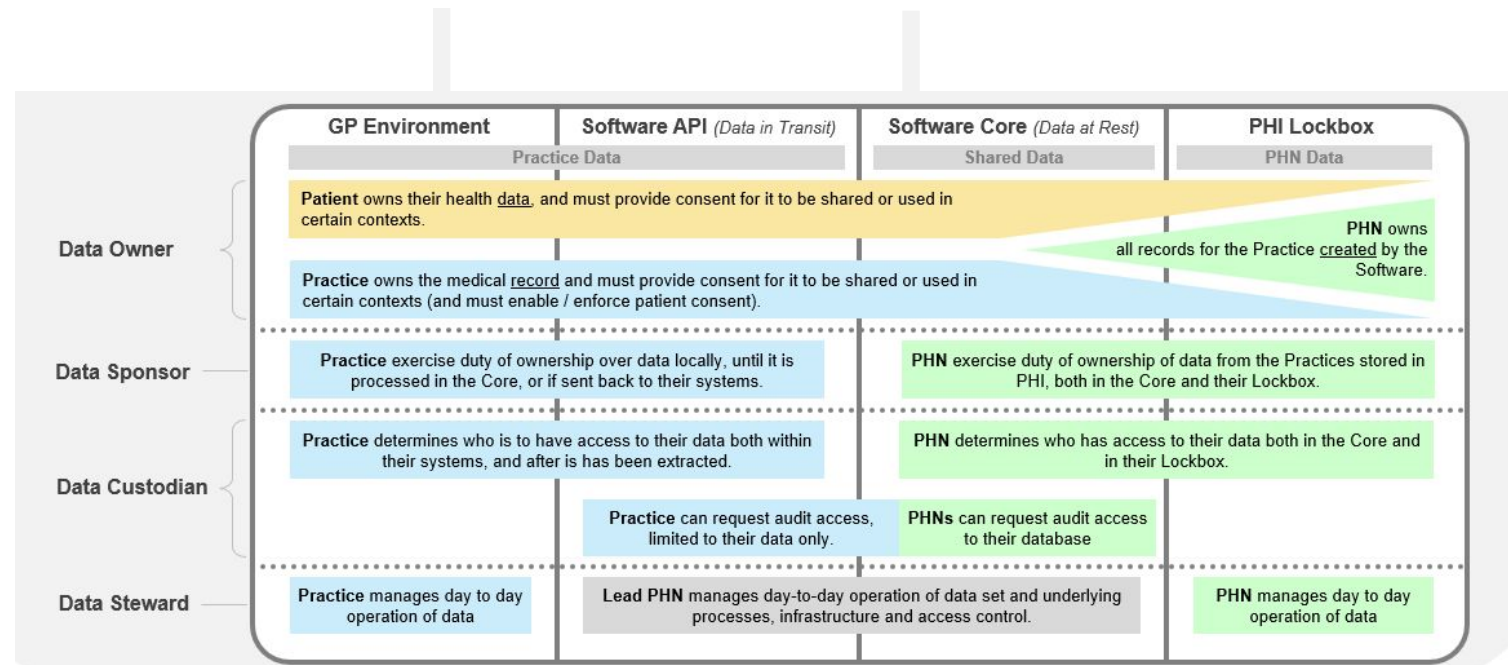


# Strong Data Governance

Alignment in how PHNs manage the data lifecycle – strength in consistency

Aligns with RACGP and industry

Guidelines for strong data governance



# Identify high-risk patient :counter prompt fatigue



## 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
- Recommended for all people with medical conditions and from vulnerable groups

## 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 consistent recommendation from HCP shown to increase uptake influenza vaccinations.

\*Source: [Department of Health and Aged Care](#)

# Evidence for response to prompts

**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

## Supporting quality and safety in general practice

*Response rates to computer decision support*

**Dorothé Davies, Mark Morgan, Carl de Wae**

**Background and objective**  
Primary health networks (PHNs) are tasked with supporting quality improvement in general practice. Traditional methods to do this are labour intensive and lack impact measurement. We aimed to measure general practitioner (GP) response rates to computer decision support at the point of care.

**Methods**  
GPs in the PHN developed a decision support tool to deliver real-time medication safety alerts and prompts for interventions and record the GP intervention in 80 general practices covering 510,000 patients.

**Results**  
From July 2020 to June 2021, there were 3153 alerts triggered for 2328 patients, with 1552 of the suggested interventions being done (46%). From January 2021 to June 2021, 15219 prompts were triggered during a visit for 12,398 patients, with 1444 of the suggested interventions being done (22%).

**Discussion**  
Our findings suggest that GPs respond to automated, real-time medication safety alerts and care prompts that are specific to individual patient need without the need for intensive PHN input.

Primary health networks (PHNs) were established in Australia in 2015 with the goal of increasing the efficiency 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.<sup>1</sup> 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 changes during defined, rapid quality-improvement cycles, characterised by measurable targets, with the aim of sustained care performance.<sup>2</sup>

However, the practical experience of most PHNs is that sustainable, measurable improvements in general practice care are challenging to achieve.<sup>3</sup> The relative lack of formal CQI activities and inconsistency in clinician participation can lead to significant variation in patient care.<sup>4</sup> There are well-known barriers to CQI, including time to participate, organisational culture, and a growing evidence base that suggests continuing practice support, training and financial incentives are required to overcome these barriers.<sup>5</sup> However,

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

For some general practitioners (GPs) who are supported by their PHN, not being able to sustain quality improvement could be in part due to the fee-for-service environment of general practice, where ring-fenced time for GPs to engage in such activities is not funded through Medicare. Furthermore, fee-for-service might incentivise excessive services and unnecessary or inappropriate care, directly affecting the quality of care.<sup>6</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,<sup>7</sup> which recommends that the traditional approach to CQI of face-to-face 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 efficiencies.<sup>8</sup> Low response rates to decision support could be due to the type of content, with clinicians more likely to respond

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

# Prompts and Reports

## Prompts

- Ensure high-risk patients do not slip through the gaps and miss getting their annual influenza vaccination, evidenced based

## Reports to find patients

- booked in without a vaccination
- not booked in without a vaccination
- not visited for a long time and decide whether to inactive them.
- QPIP /audit report

Primary Sense™ Prompt ✕

R King, 71 y/o, Dr J Nguyen






Complexity Score 5/5    Chronic Conditions 4    Hospital Risk Score 87%

Please indicate your actions:

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Due Influenza Vaccination






Last not available

 Agree - Action     Agree - Override     Next Time     Wrong     More Info

---






Due Care Plan

Last not available

 Agree - Action     Agree - Override     Next Time     Wrong     More Info

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Due Medication Review

 Agree - Action     Agree - Override     Next Time     Wrong     More Info

Prompt not meant for me     Submit Comment



# Reports in Primary Sense that support influenza vaccinations sms functionality

- Winter Wellness
- Pregnant Vaccination
- Chronic Lung Disease and Asthma
- Frailty Care Management
- Patients missing PIP QI or accreditation measures

Remove	ACG Score	Patient Name	Patient Phone	Last Visit	Existing Appt	GP Name	Age	ATSI	Frail	Indicated By Dx/Rx	Last EDS	Last Fluvax Vaccination	Last Pneumovax Vaccination	Covid Vaccine Count	Last Covid Vaccination	Last Covid Infection
<a href="#">Remove</a>	5	Anderson, C	0401 234 567	2021-09-22	Nil	Dr B Lee	77			methylprednisolone, tacrolimus	Nil	Nil	Nil	0	Nil	Nil
<a href="#">Remove</a>	5	Smith, Y	0401 234 567	2022-07-24	Nil	Dr B Lee	65	Y		metformin, tacrolimus	Nil	Nil	Nil	0	Nil	Nil
<a href="#">Remove</a>	5	Lee, Q	0401 234 567	2022-09-24	Nil	Dr B Lee	64	Y		Affective Psychosis, Diabetes, insulin degludec and insulin aspart, metoprolol	Nil	Nil	Nil	0	Nil	Nil
<a href="#">Remove</a>	5	Campbell, K	0401 234 567	2022-07-24	Nil	Dr B Lee	51	Y		Affective Psychosis, Cardiovascular Disease, bisoprolol, mycophenolic acid, prednisolone	Nil	Nil	Nil	1	2021-05-10	Nil
<a href="#">Remove</a>	5	Ryan, E	0401 234 567	2022-09-24	Nil	Dr B Lee	62	Y		CKD low eGFR	Nil	2022-10-06	Nil	1	2021-09-30	Nil
<a href="#">Remove</a>	4	Brown, I	0401 234 567	2021-09-22	Nil	Dr B Lee	72			Affective Psychosis, Cancer, docetaxel	Nil	Nil	Nil	0	Nil	Nil
<a href="#">Remove</a>	4	Brown, S	0401 234 567	2021-10-01	Nil	Dr B Lee	83		Y	Cardiovascular Disease, metoprolol	Nil	2022-10-06	Nil	0	Nil	Nil

# Pregnancy and Vaccinations Report

## Pregnant and Vaccinations

DEMO

27 April 2023 13:50

Which patients are included in this report?

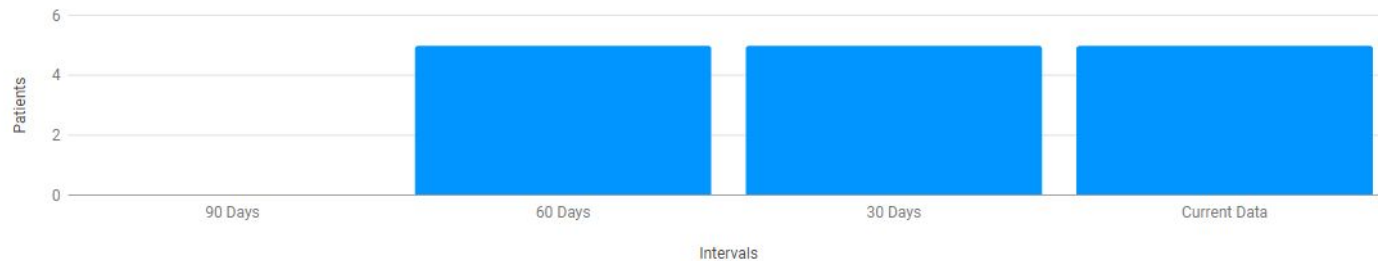
What data is in this report?

How do we use this report?

What are ACG patient complexity levels?

### Report Synopsis

Number of pregnant Patients across 30 day intervals



Patients

All Doctors

View As Columns

#### Report-Related Data:

Patients With Fluvax (Last 40 weeks): 73

Patients With Pertussis (Last 40 weeks): 0

Note: Empty interval columns will populate over time.

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

Search:

Mark	Patient Name	Patient Phone	Last Visit	Existing Appt	GP Name	Age	Fluvax Date	Pertussis Date	Weeks Pregnant	Estimated Due Date	Source
<a href="#">Remove</a>	Ryan, Q	0401 234 567	2021-09-22	Nil	Dr T White	32	N	N	35	2023-05-18	Ultrasound
<a href="#">Remove</a>	Taylor, Y	0401 234 567	2021-09-22	Nil	Dr T White	33	N	N	32	2023-06-07	Ultrasound
<a href="#">Remove</a>	Thompson, L	0401 234 567	2021-09-22	Nil	Dr T White	26	N (2022-10-06)	N	26	2023-07-17	Ultrasound

# Winter Wellness Report

Winter Wellness  
DEMO

09 May 2023 10:32

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

Search:

Remove	ACG Score	Patient Name	Patient Phone	Last Visit	Existing Appt	GP Name	Age	ATSI	Frail	Indicated By Dx/Rx	Last EDS	Last Fluvax Vaccination	Last Pneumovax Vaccination	Covid Vaccine Count	Last Covid Vaccination	Last Covid Infection
<a href="#">Remove</a>	5	Martin, O	0401 234 567	2021-09-27	Nil	Dr B Johnson	89			Cancer, CKD low eGFR, metoprolol, prednisolone	Nil	2022-10-06	Nil	0	Nil	Nil
<a href="#">Remove</a>	5	Jones, Q	0401 234 567	2021-09-22	Nil	Dr B Johnson	77			methylprednisolone, tacrolimus	Nil	Nil	Nil	0	Nil	Nil
<a href="#">Remove</a>	5	Lee, R	0401 234 567	2022-07-24	Nil	Dr B Johnson	65	Y		metformin, tacrolimus	Nil	Nil	Nil	0	Nil	Nil
<a href="#">Remove</a>	5	Johnson, U	0401 234 567	2022-09-24	Nil	Dr B Johnson	64	Y		Affective Psychosis, Diabetes, insulin degludec and insulin aspart, metoprolol	Nil	Nil	Nil	0	Nil	Nil


# CQI Template

## Continuous Quality Improvement (CQI)

### Influenza Immunisation using Primary Sense™

Where .... 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 inactive 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>  </u> (The last vaccine date will be in brackets if before the pregnancy started and very close to the start date)</p>

	<p>&gt; This PC &gt; Documents &gt; Primary Sense &gt; 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>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>....</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 <u>range</u>).....</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 <u>immunisation</u> clinics for at risk and vulnerable groups (allocate appropriate times when the risk of potentially infectious patients being onsite is <u>minimised</u>)</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>....</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 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 14 th July 2023. Of the high-risk patients, so far 64% had influenza immunisation recorded

	BNPHN	BSPHN	GCPHN	NTPHN	NMBPHN	SNPHN	TPHN	WAPHN	Totals
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>

# 2023 data

	BNPHN	BSPHN	GCPHN	NTPHN	NMBPHN	SNPHN	TPHN	WAPHN	Average
Number of patients with prompts for influenza	6795	5475	2916	58	2279	3322	1037	8008	
Number of vaccines done on the day of the prompt	1900	1385	527	12	463	870	293	1966	
<b>Total as % on the day vaccine done</b>	<b>28%</b>	<b>25%</b>	<b>18%</b>	<b>21%</b>	<b>20%</b>	<b>26%</b>	<b>28%</b>	<b>25%</b>	<b>24%</b>
Number of vaccines done between day 1 and 15 post prompt	2270	1698	429	12	580	793	237	1921	
As % during day 1-15 vaccine done	33%	31%	15%	21%	25%	24%	23%	24%	24%
<b>Total as % two weeks after a prompt</b>	<b>61%</b>	<b>56%</b>	<b>33%</b>	<b>41%</b>	<b>46%</b>	<b>50%</b>	<b>51%</b>	<b>49%</b>	<b>48%</b>
number of vaccines done between day 16 and 28 post prompt	1315	1018	246	6	296	514	113	1057	
as % during day 16-28 vaccine done	19%	19%	8%	10%	13%	15%	11%	13%	14%
<b>Total as % four weeks after a prompt</b>	<b>81%</b>	<b>75%</b>	<b>41%</b>	<b>52%</b>	<b>59%</b>	<b>66%</b>	<b>62%</b>	<b>62%</b>	<b>62%</b>

NB GCPHN has been switching between V1 and V2 which may have lowered their results

## What difference does Primary Sense make on the GCPHN

A look at the % of patients in each band immunised in 10 practices with similar patient size.  
Based on who visited during the year and had an ACG record

The 5 practices with highest influenza imm % that received the most influenza prompts immunised on average 42% of their over 65yrs  
The 5 practices with lowest influenza imm % rate (no prompts) averaged 30%

Practices with high volume of prompts raise the GC average

The effect of prompting for band 4 and 5 and 3 with high hospital risk may flow into the other bands

5 practices	No Prompts	Band 1	Band 2	Band 3	Band 4	Band 5	
Age band	65-69	13%	11%	30%	42%	61%	
	70-74	9%	20%	38%	53%	70%	
	75-79	11%	23%	42%	57%	89%	
	80-84	11%	13%	39%	70%	45%	
	85+	10%	25%	45%	71%	47%	
	Average	<b>11%</b>	<b>18%</b>	<b>39%</b>	<b>58%</b>	<b>63%</b>	
	High Prompts						
5 practices	Age band	65-69	13%	29%	44%	55%	51%
		70-74	17%	37%	57%	67%	71%
		75-79	13%	40%	61%	69%	81%
		80-84	11%	40%	65%	74%	79%
		85+	16%	44%	63%	75%	75%
		Average	<b>14%</b>	<b>38%</b>	<b>58%</b>	<b>68%</b>	<b>71%</b>

By applying timeframes to the data, we can very quickly see changes to vaccination rates and patterns overtime  
2022 saw a total of 558K vaccinations

2023 saw 351k total vaccinations, mainly due to the decrease in covid vaccinations

Patients visiting both years were about the same 880k

	2022Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
COVID	78091	34791	20424	16534	23495	16061	26096	9002	2998	1889	3540	1624	234545
Flu Vacc	287	201	1539	44550	60647	30040	8953	2575	1098	686	671	421	151668
DTPplus	3045	2843	3193	2596	3098	2886	2885	3162	2892	3177	3046	2607	35430
Prevenar	2210	2363	2893	2752	3583	3150	2773	2882	2425	2624	2640	2027	32322
Pertussis	1405	1595	1823	1633	1783	1624	1498	1552	1451	1402	1396	1133	18295
MMR	1284	1261	1491	1196	1490	1452	1347	1511	1418	1460	1442	1229	16581
Rotavirus	1212	1093	1300	1073	1248	1161	1115	1268	1110	1173	1140	991	13884
MenACWY	624	612	791	606	806	832	825	870	787	734	704	651	8842
Dip tet	583	657	879	622	604	609	597	580	614	573	706	578	7602
Not allocated	440	585	649	506	637	665	564	788	734	708	706	581	7563
Childhood HIB	571	544	550	473	571	539	491	576	546	659	627	548	6695
Hepatitis B	430	478	549	492	569	542	478	520	464	426	494	401	5843
Meningococcal	401	462	492	405	474	489	450	535	481	476	523	490	5678
Varicella	240	483	570	365	573	496	451	512	431	475	405	270	5271
HPV	204	194	358	312	326	233	204	166	198	258	300	205	2958
Typh Hep A	9	49	54	62	105	119	130	208	239	234	301	226	1736
Typhoid	24	33	54	73	104	112	113	192	214	205	249	167	1540
Hepatitis A and B	47	59	71	70	78	93	81	95	82	83	76	78	913
Hepatitis A	37	35	68	35	56	115	85	90	61	83	111	87	863
													558229

	2023Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Grand Total	Change from 2022
Flu Vacc	281	109	2435	53545	41230	13941	8699	4113	1198	839	820	476	127686	-46%
COVID	1167	2936	10035	11115	11331	6273	2914	1727	1181	1403	4293	2177	56552	-63%
DTPplus	3251	2683	3069	2365	2976	2571	2689	2624	1810	1801	1675	1209	28723	-19%
Prevenar	2362	2172	2278	2327	2915	2648	2363	2402	2005	2123	2046	1634	27275	-16%
Not allocated	720	868	1408	1429	1395	1063	843	888	737	739	4078	3689	17857	-2%
Pertussis	1411	1446	1785	1555	1689	1477	1447	1434	1207	1248	1295	1043	17037	3%
MMR	1528	1361	1531	1262	1492	1384	1302	1381	1187	1240	1176	840	15684	13%
Rotavirus	1136	952	1096	838	1021	949	952	1029	869	967	875	738	11422	29%
MenACWY	771	669	721	597	743	813	752	783	615	640	580	397	8081	6%
Dip tet	720	641	755	583	605	549	564	598	615	661	586	602	7479	-1%
Childhood HIB	706	578	641	526	631	570	551	561	500	505	516	382	6667	0%
Meningococcal	553	493	631	512	623	485	578	574	455	513	426	270	6113	5%
Hepatitis B	419	483	625	479	614	527	500	560	454	400	363	243	5667	0%
Typh Hep A	328	360	422	296	394	290	340	372	394	357	372	219	4144	-21%
Varicella	297	340	402	353	492	395	352	327	248	176	39	19	3440	16%
Typhoid	217	239	291	228	269	216	192	272	248	213	220	172	2777	60%
HPV	201	175	254	218	213	156	175	125	107	112	86	80	1902	24%
Hepatitis A	91	100	120	87	132	111	113	150	123	133	123	110	1393	53%
Hepatitis A and B	75	104	123	74	116	101	113	88	84	86	101	63	1128	31%
													351027	



## A look at the % of patients in each band immunised.

Based on who visited during the year and had an ACG record

### General drop in influenza vaccinations

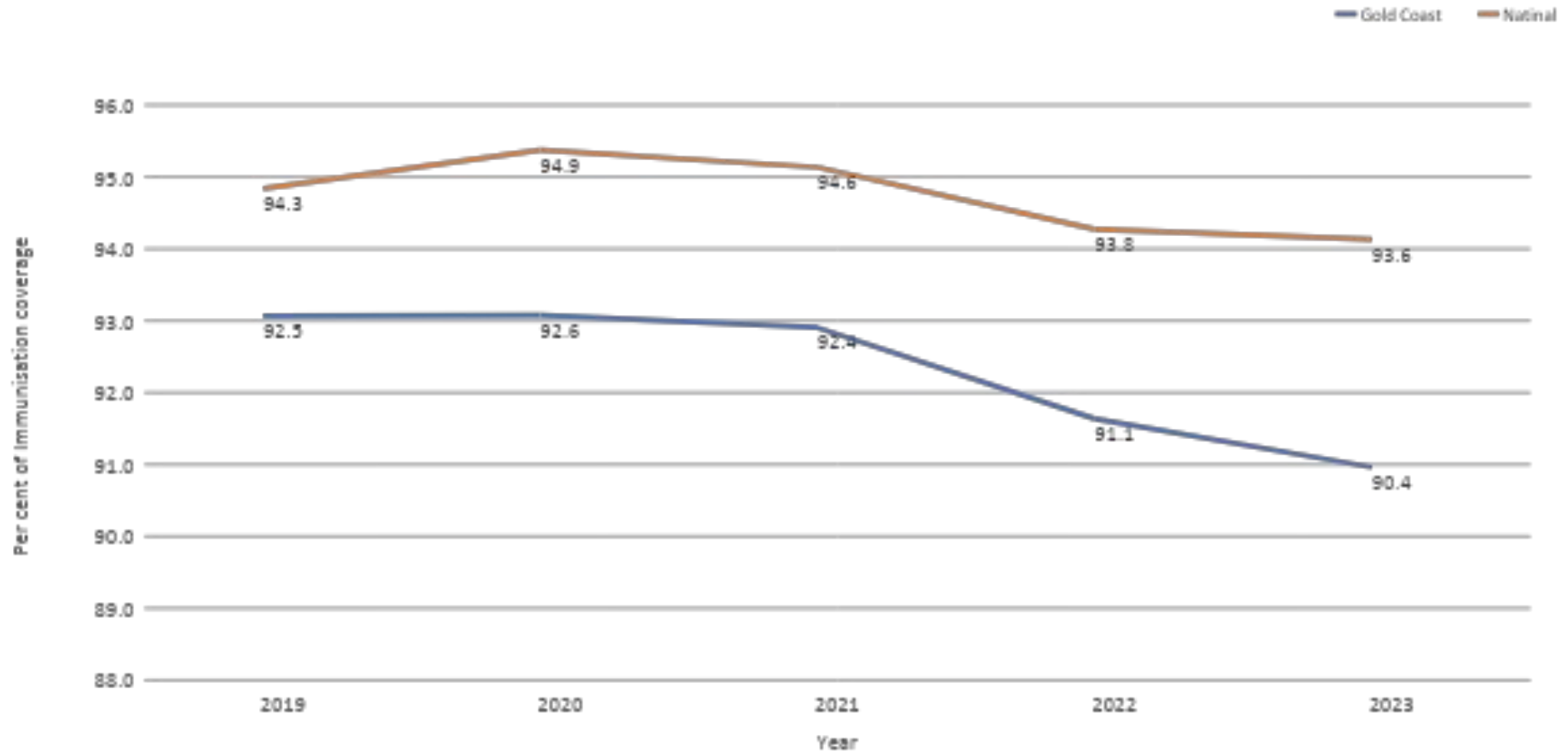
noting can be done in pharmacies etc

	Age band	Band 1	Band 2	Band 3	Band 4	Band 5
2022	65-69	17%	30%	44%	58%	65%
	70-74	22%	40%	58%	74%	83%
	75-79	21%	43%	63%	79%	89%
	80-84	21%	42%	65%	80%	90%
	85+	22%	40%	64%	83%	91%
	Average	<b>21%</b>	<b>39%</b>	<b>59%</b>	<b>75%</b>	<b>84%</b>
2023	65-69	15%	22%	37%	50%	55%
	70-74	19%	30%	49%	63%	67%
	75-79	18%	34%	54%	68%	74%
	80-84	17%	32%	56%	70%	76%
	85+	20%	31%	55%	69%	72%
	Average	<b>18%</b>	<b>30%</b>	<b>50%</b>	<b>64%</b>	<b>69%</b>

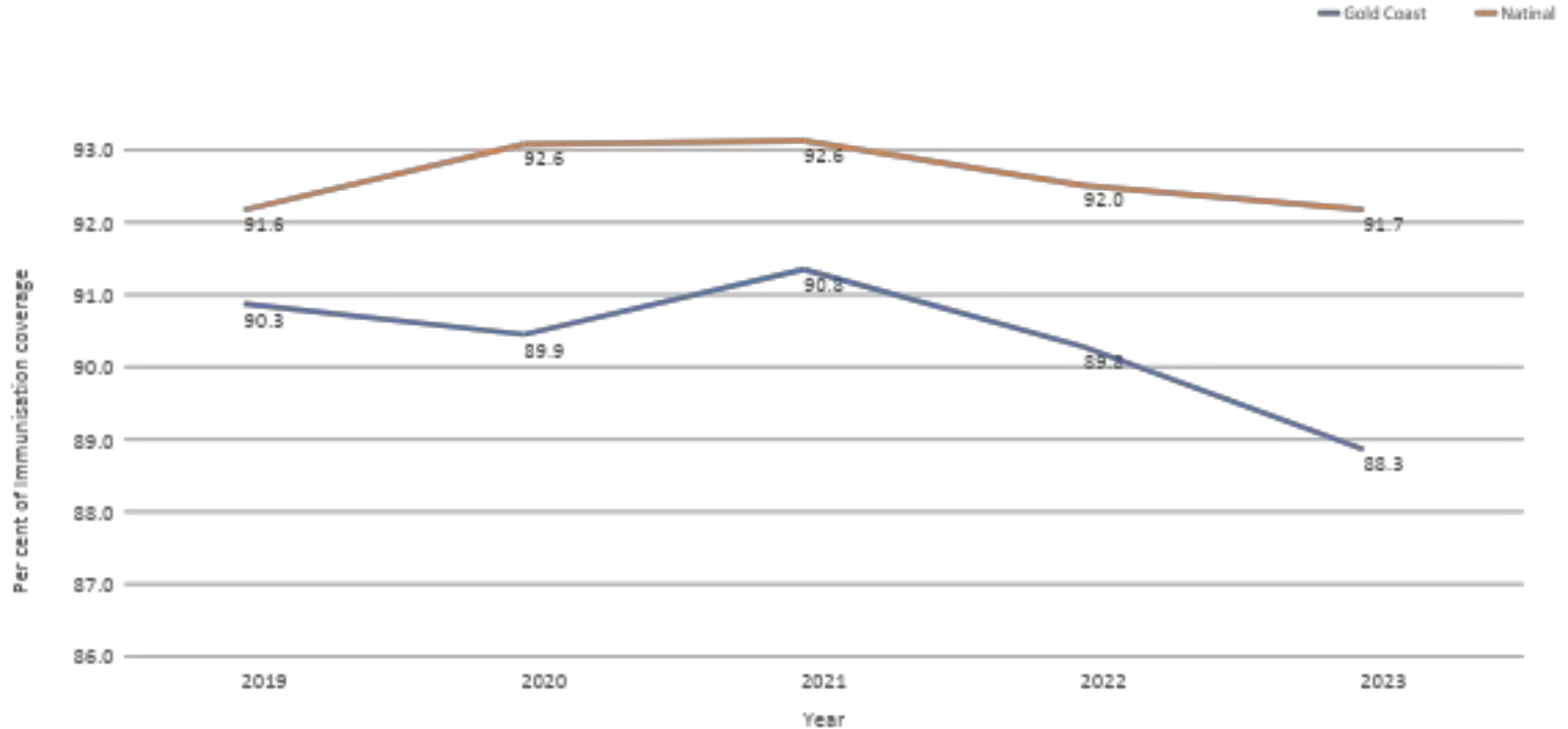
### Similar drop with pneumococcal vaccination in the over 70yrs

	Age band	Band 1	Band 2	Band 3	Band 4	Band 5
2022	70-74	3%	6%	11%	14%	16%
	75-79	2%	5%	9%	12%	14%
	80-84	1%	4%	7%	9%	12%
	85+	1%	4%	6%	9%	11%
	Average	<b>1%</b>	<b>4%</b>	<b>7%</b>	<b>9%</b>	<b>11%</b>
	2023	70-74	3%	6%	9%	11%
75-79		1%	4%	7%	8%	8%
80-84		1%	3%	6%	6%	8%
85+		1%	2%	4%	5%	6%
Average		<b>1%</b>	<b>3%</b>	<b>5%</b>	<b>7%</b>	<b>7%</b>

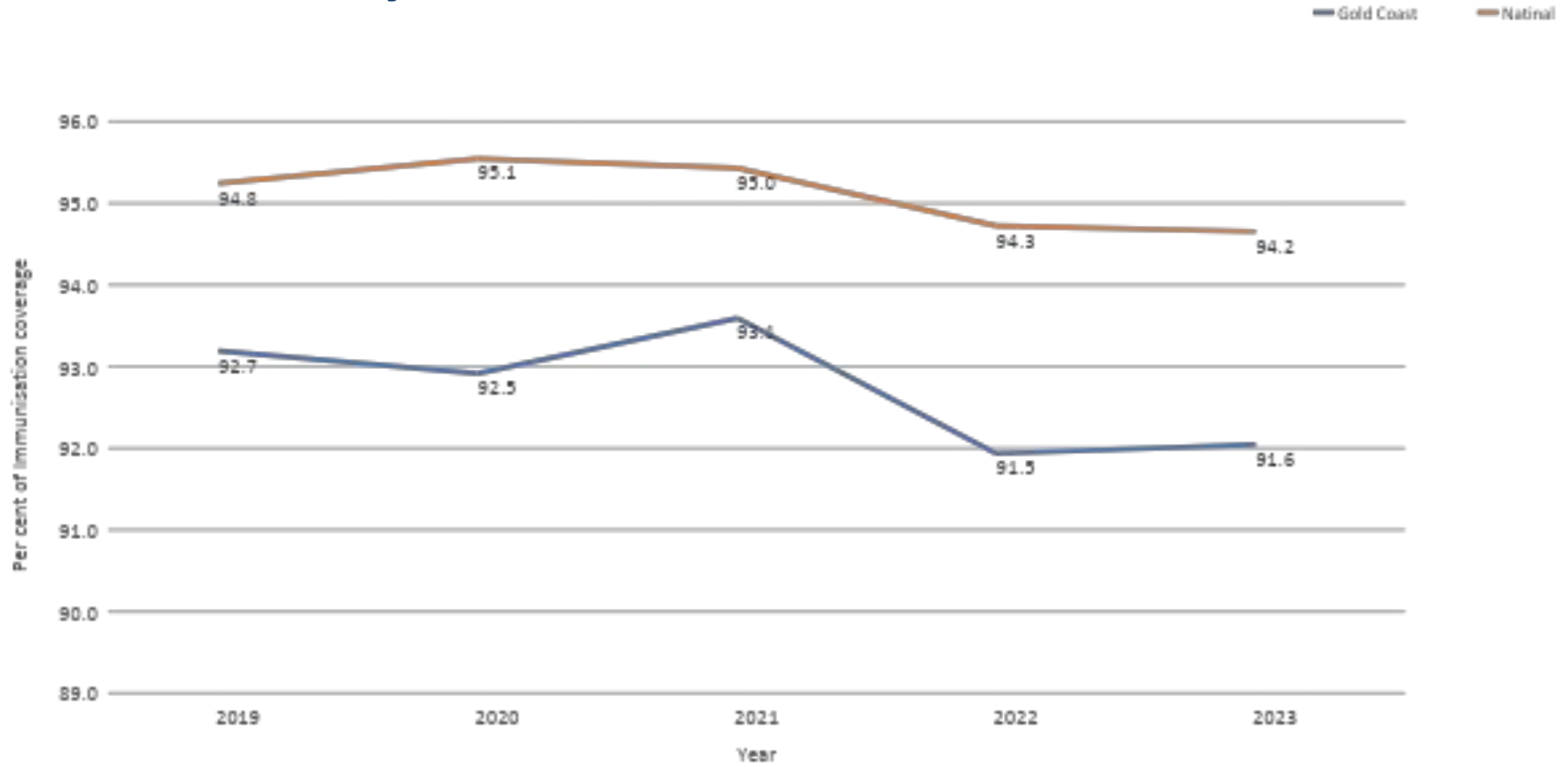
# Immunisation coverage rates for one-year olds GC vs National



# Immunisation coverage rates for two-year olds GC vs National



# Immunisation coverage rates for five-year olds GC vs National





# Macro level population planning

## Hospitalisation risk in primary care patients

(Primary Sense, Gold Coast PHN)

<b>COPD</b>	<b>Number of patients</b>	<b>Hospitalisation risk in 12 months</b>	<b>Patients with 12-month hospitalisation risk &gt;80%</b>
	<b>32,123</b>	<b>41.9%</b>	<b>4,941</b>

### Chronic obstructive pulmonary disease (COPD):

Chronic condition with 3<sup>rd</sup> highest hospitalisation risk.

The most common cause of chronic potentially preventable hospitalisations.

## Potentially preventable hospitalisations

(top 5 chronic PPH, Gold Coast, 2019-20)

<b>Condition</b>	<b>Number of PPH</b>	<b>Average length of stay</b>	<b>Total PPH bed days</b>
<b>COPD</b>	<b>1,849</b>	<b>4.6</b>	<b>8,507</b>
Congestive cardiac failure	1,366	5.7	7,824
Diabetes complications	1,350	4.3	5,867
Iron deficiency anaemia	2,265	1.3	2,856
Angina	743	2.1	1,553

Note: Analyses were performed on data from 150 general practices and extrapolated to an estimated patient population of 210 general practices. Only 'active patients' according to RACGP definition (3 visits in last 2 years) are included.

# Hospitalisation risk in primary care patients

(Primary Sense, Gold Coast PHN)

Chronic conditions	Number of patients	Hospitalisation risk in 12 months	Patients with 12-month hospitalisation risk >80%
Hypertension	187,001	25.5%	9,331
Lipid disorder	156,719	25.2%	7,706
Asthma	166,514	16.3%	5,878
COPD	32,123	41.9%	4,941
Osteoporosis	74,965	28.0%	4,769
Ischemic heart condition	25,242	46.9%	4,231
Diabetes	66,902	26.5%	4,133
Congestive heart failure	6,060	68.3%	2,060
Frailty	45,409	20.5%	2,386
Renal failure	8,139	56.2%	1,865
Rheumatoid arthritis	12,434	24.9%	589
Low back pain	10,001	21.8%	471
Deficiency anaemia	5,239	16.2%	147

~ 47,000 patients visiting GPs on the Gold Coast with one of these 10 conditions likely to be hospitalised in the next 12 months.

Some chronic conditions can be managed effectively through timely Primary Care with care plans, immunizations medication review, behavior modification and lifestyle change, to prevent deterioration and hospitalization.

*Note: Analyses were performed on data from 150 general practices and extrapolated to an estimated patient population of 210 general practices. Only 'active patients' according to RACGP definition (3 visits in last 2 years) are included.*

# Future immunization plans for Primary Sense

- New Primary Sense report for childhood vaccinations currently being developed
- Report will include any child who is due for vaccinations as per the National Immunisation Program including influenza prompts
- Report will include any child who is due for vaccinations as per the National Immunisation Program including influenza prompts
- New Primary Sense nurse prompt on childhood vaccination currently being developed so Prompt may appear when a Nurse opens the child's record in the clinical software and child is due for vaccination as per the National Immunisation Program
- Prompts for indigenous patients for Meningococcal B in place already, prompts for non- indigenous patients for Men B being developed (SA and Qld state programs now funded) rest country private
- Study Vaximums for early pregnancy loss



# Resources

Primary Sense tools to assist use in practice:

<https://www.practiceassist.com.au/The-Tool-Kit/Primary-Sense>

[https://www.youtube.com/watch?v=yRR2x8f9k28&ab\\_channel=GoldCoastPrimaryHealthNetwork](https://www.youtube.com/watch?v=yRR2x8f9k28&ab_channel=GoldCoastPrimaryHealthNetwork)

Commonwealth Government 2023 influenza Immunization resource:

<https://www.health.gov.au/resources/publications/2023-influenza-vaccination-program-advice-for-vaccination-providers?language=en>

NCIRS resources for influenza:

<https://ncirs.org.au/ncirs-fact-sheets-faqs-and-other-resources/influenza>

Australian Immunisation Handbook:

<https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/influenza-flu>

Sharing knowledge about immunisation:

<https://talkingaboutimmunisation.org.au/Why-does-my-child-need-a-flu-shot>



**PRIMARY  
SENSE**

# Questions?

