

# *Influenza Preparedness in Aboriginal Community Controlled Health Services*

**Date** Wednesday 15 May 2019: 12.30pm  
**Presenters** Dr Sean Tobin  
Ms Kylie A Taylor  
Dr Jennifer Bell

*This education has been developed in partnership with Aboriginal Health & Medical Research Council of NSW and NSW Health*



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## *Acknowledgement of Country*

We recognise the traditional custodians of the land and sea on which we live and work.

We pay our respects to Elders past and present.



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# *Learning Outcomes*

- Discuss the differences between seasonal flu and a pandemic flu
- Identify risk factors and their reduction strategies
- Increase appropriate influenza preparedness plans, and understand how seasonal flu preparedness helps with pandemic flu preparedness
- Improve the rates of influenza vaccinations and data quality



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# *Presenters*



**Dr Sean Tobin**  
Medical Epidemiologist  
Communicable Diseases  
Branch, Health Protection NSW



**Dr Jennifer Bell**  
Medical Director  
RivMed

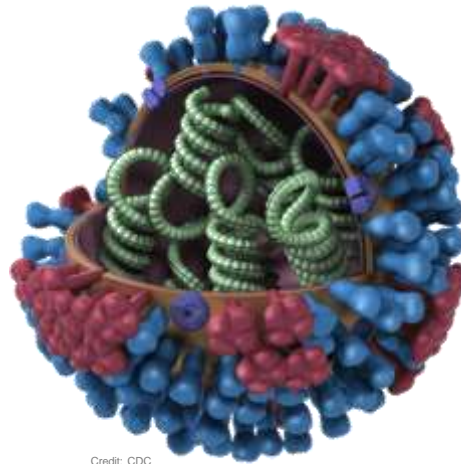


**Ms Kylie A Taylor**  
Aboriginal Health Worker  
Communicable Diseases Team,  
HNE Population Health



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# *Influenza (flu)*



Hemagglutinin



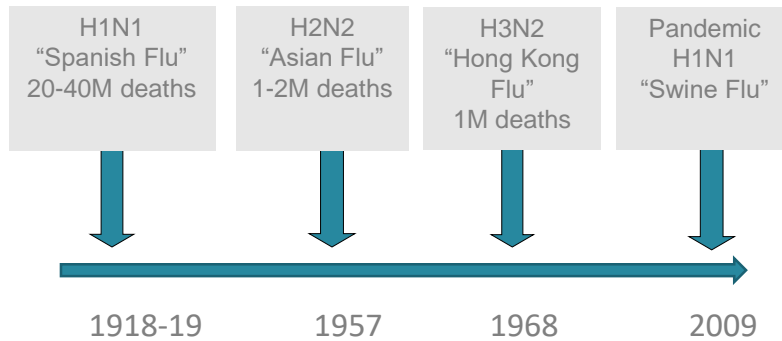
Neuraminidase

Credit: CDC

# *Influenza terminology*

- **Seasonal (human) influenza**
  - Strains previously adapted to humans; cause annual winter outbreaks
- **Pandemic influenza**
  - Influenza strains newly adapted to humans
  - Cause a global outbreak of influenza in humans
- **Avian influenza**
  - Wild birds are the original and natural host of influenza viruses
  - Most likely source of new pandemic influenza strains
- **Swine influenza**
  - Influenza viruses that have adapted to pigs
  - Pigs susceptible to both human and avian strains so may allow viruses to combine into pandemic strains

# Influenza pandemic years



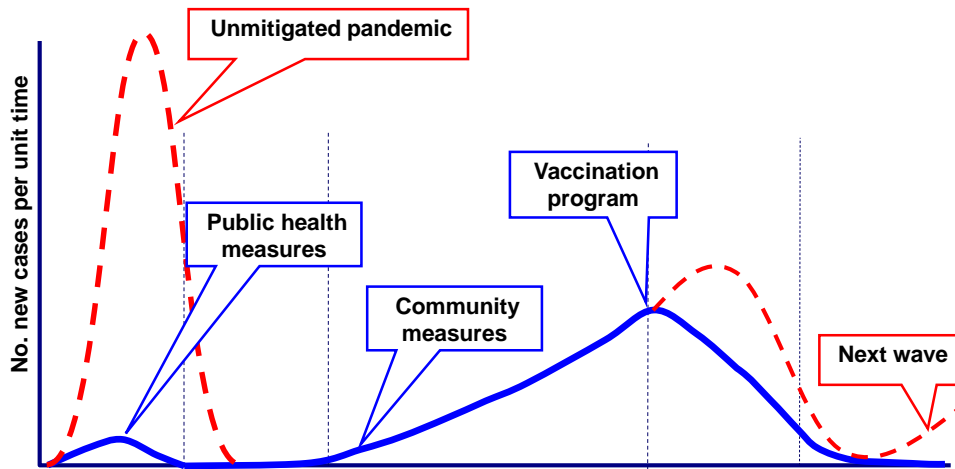
\* Exposure to similar H1N1 viruses in the 1950's explains why older adults now have better levels of protection to H1N1 since 2009

# Pandemics and plans

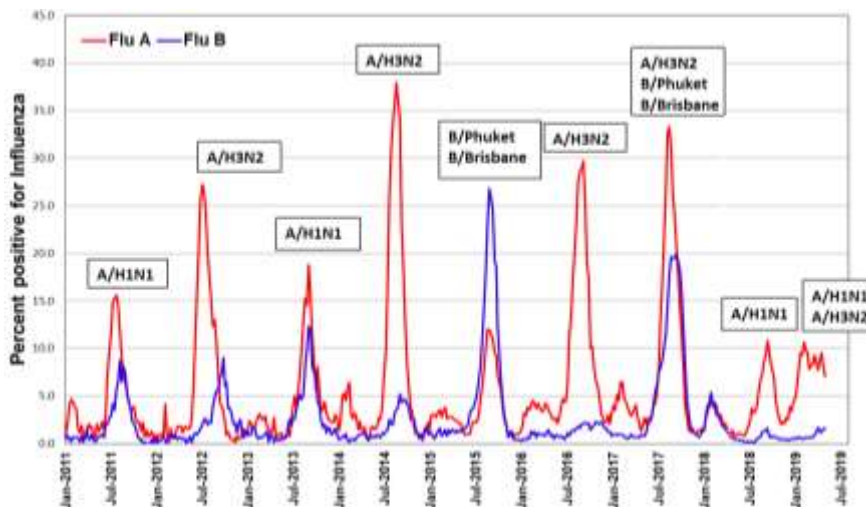
- Have the capacity to overwhelm health services
- Cause fear and anxiety in the community
- Difficult to predict when they will occur
- A state, national and international public health emergency
- Need for a high level of central coordination and communications from Health Departments



# Pandemic responses

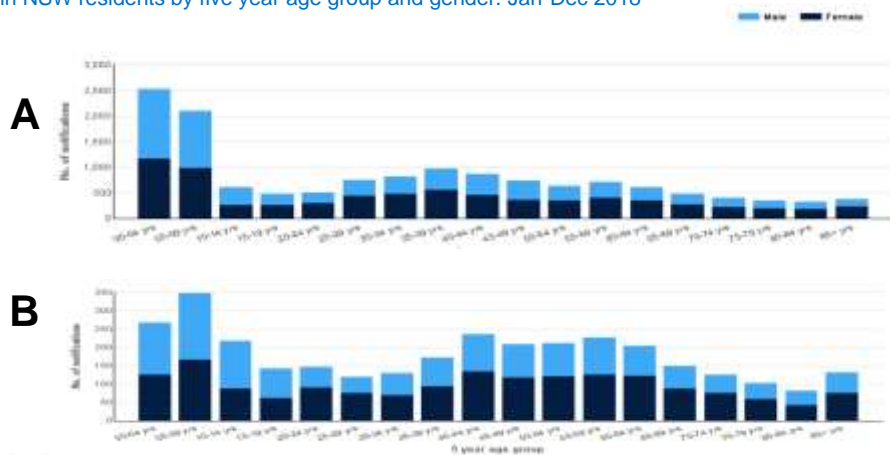


# Seasonal influenza in NSW



# NSW influenza in 2018 by Age

Influenza notifications in NSW residents by five year age group and gender. Jan-Dec 2018



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## Flu impact in children

- Highest rates of flu hospitalisation in children under 5 years (with over 50 year olds)
- Pneumonia and encephalitis complications
- Child flu deaths reported each year in children, mainly under 5 years
- Deaths not just in children with high-risk medical conditions (49% in one US study)
- Free flu vaccine for all Aboriginal children from 6 months (and adults)



# VACCINATE AGAINST FLU. PROTECT YOUR BABY TOO.



Free flu shots for pregnant women.  
Ask your doctor or nurse today.

## MATERNAL IMMUNISATION AGAINST INFLUENZA DURING PREGNANCY. EVIDENCE REVIEW.



### KEY POINTS

1. Influenza vaccination during pregnancy has been shown to be safe and effective.
2. Vaccination during pregnancy protects pregnant women from influenza and its complications in pregnancy, and in the first few months after birth.

### BACKGROUND

The evidence reviewed in this guideline was limited to all pregnant women, unless contraindicated.

### EFFECTIVENESS

**Maternal protection**  
A single flu shot during pregnancy is associated with a 40% reduction in influenza-like illness.

### SAFETY

Underlying the safety of influenza vaccine during pregnancy is a high level of safety evidence. There are no known risks.



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## Medically at risk groups

# DON'T RISK SEVERE FLU



Your condition makes influenza extremely dangerous

- Asthma
- Diabetes
- Cancer
- Immune disorder
- Heart, liver, kidney and lung disease



Speak to your GP or specialist about a free flu shot

It's in your hands  
[health.nsw.gov.au/flu](http://health.nsw.gov.au/flu)



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# PROTECT YOUR MOB FROM FLU



Credit – Sydney LHD

FREE flu shots for all Aboriginal people



Ask your health worker or GP

It's in your hands  
[health.nsw.gov.au/flu](http://health.nsw.gov.au/flu)



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## NSW Health resources for influenza

[www.health.nsw.gov.au/flu](http://www.health.nsw.gov.au/flu)

The screenshot shows the NSW Health website page for 'DON'T SPREAD FLU'. At the top, there is a search bar and a navigation menu. The main heading is 'DON'T SPREAD FLU'. Below this, there is a section titled 'Don't spread flu. It's in your hands.' which includes a list of actions: 'Get a flu shot now', 'Wash your hands often', 'Avoid close contact with people who are sick', 'Avoid touching your eyes, nose or mouth', and 'Cover your mouth and nose when you cough or sneeze'. There is also a 'Find more information for' section with icons for 'Influenza', 'Vaccines', 'Healthcare', 'Medicines', and 'Exercise'. At the bottom, there is a section for 'Further information and resources are available to help protect yourself and your community' with a 'Download' button. A footer note states: 'Free flu shots for citizens aged 65 months to under 5 years'. The NSW Health logo is in the top left, and the RACGP logo is in the bottom left. The 'Healthy Profession. Healthy Australia.' slogan is in the bottom right.



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# Families

- Families are usually big & extended
- Kids & Elders are not separate – they are a part of a family & a part of a community
- More than just a house – there may be several homes
- Big families – small houses (not overcrowding)
- Realities of living



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# Reducing risk at home

- Increase handwashing
- Helping kids wash their hands & asking/reminding often
- Cough & sneeze etiquette – tissues/gel/handwashing



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## *Reducing risk at home (cont.)*

- Pregnant women – safe & effective to be immunised against flu
- Chronic conditions may be common – underlying risk
- Traditional medicines/remedies
- Cultural practices & cultural connections = cultural strength & healing
- Holistic – often helps with multiple things, not just flu
- Healthy eating
- Isolation & not sharing.....



## *Reducing risk at gatherings*

Celebrations are seen as just as important as sorry business – so people may still attend while sick with flu:

- Letting the organisers know
- Standing back
- Staying outside is safest
- Supply hand gel, tissues and bins
- Less lovin' up – less kissing, less lovin' = less flu bugs spreadin'
- Mainstream advice v's common cultural practices/obligation

## *Reducing risk - actions*

- Doctors, staff & AHW's need to speak positively about immunisation in pregnancy
- Families experience of conversation with clinicians and Aboriginal Health Workers have a ripple effect in family and community now and into the future for that family & the wider community.
- AMS's & local health services to consider supply/subsidise flu kits
- Making sure the people that need the service have access to the service



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## *Reducing risk – actions (cont.)*

- Key message to Aboriginal community to present early so conversations about risk reduction and antivirals can be considered
- Local champions and local messages – localise, personalise, humourise
- Sharing key messages through traditional social networks and social media networks



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# Recording vaccination KPIs

## About RivMed Service and the Quality Improvement Project Mission

Within 12 months to improve the rates of influenza vaccinations to meet nKPI Goal 19 for people 50+ Immunised for Influenza of 60% in 2018.

- New funding model
  - 5 year funding agreements, with evaluation after 3 years
  - Funding is based on Client Population + Episodes of Care adjusted by an equity loading
  - Adjustment for **Service Provider Capability** – performance measured by nKPI Reports
- Services need to show that 5 of 7 selected nKPI's are at or above the trajectory -- GOAL



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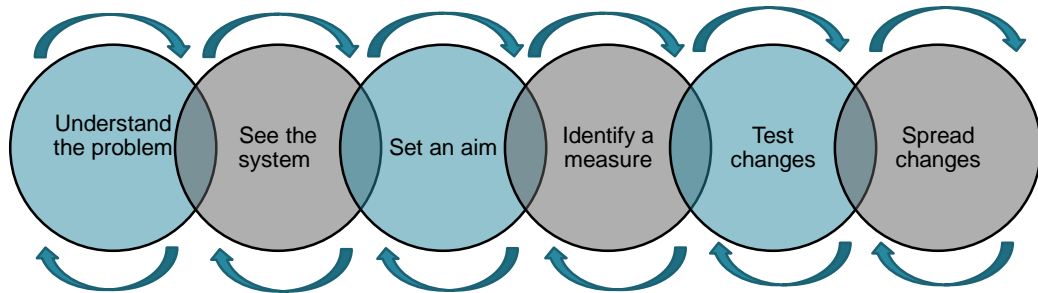
# nKPIs & Trajectory

	Goal 4 Health Check 0-4 yrs (PI03 0-14)	Goal 14 Health Check 25-54 yrs (PI03 25-54)	Goal 15 Health Check 55+ yrs (PI03 55+)	Goal 16 Type 2 diabetes checks (PI05)	Goal 17 Type 2 diabetes BP tests (PI 23)	Goal 18 Type 2 diabetes renal function tests (PI18)	Goal 19 50+ immunised for influenza (PI14)
Goal by 2023 →	69%	63%	74%	69%	70%	69%	64%
Trajectory for 2022 →	63.9%	58.5%	69.4%	68.5%	69.5%	68.5%	63.3%
Trajectory for 2021 →	58.7%	54.1%	64.8%	68.1%	68.9%	68.0%	62.6%
Trajectory for 2020 →	53.6%	49.6%	60.2%	67.6%	68.4%	67.5%	61.9%
Trajectory for 2019 →	48.5%	45.1%	55.6%	67.2%	67.9%	67.0%	61.3%
Trajectory for 2018 →	43.3%	40.7%	50.9%	66.7%	67.3%	66.6%	60.6%
Trajectory for 2017 →	38.2%	36.2%	46.3%	66.3%	66.8%	66.1%	59.9%
Trajectory for 2016 →	33.1%	31.7%	41.7%	65.8%	66.3%	65.6%	59.2%



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# The improvement journey



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# What is the issue?

Initial discussions at management and clinical meetings

- Future funding amounts are calculated on outcomes i.e. meeting nKPI goals
  - 2016 RivMed are above 5/7 goals and below 2/7 goals
  - **2017 RivMed below in 1/7 goals – Goal 19 50+ Immunised for Influenza**

	Goal 8 Health Check 0-4 years		Goal 14 Health Check 25-54 yrs (24 mths)		Goal 15 Health Check 55+ yrs		Goal 16 Type 2 Diabetes checks		Goal 17 Type 2 Diabetes BP tests		Goal 18 Type 2 diabetes renal function tests		Goal 19 50+ Immunised for influenza	
	P03 0-14	P03 0-14	P03 25-54	P03 25-54	P03 55+	P03 55+	P05	P05	P12	P12	P18	P18	P14	P14
	RivMed	AHMRC	RivMed	AHMRC	RivMed	AHMRC	RivMed	AHMRC	RivMed	AHMRC	RivMed	AHMRC	RivMed	AHMRC
2016	62.53%	33.1%	72.17%	31.3%	73.25%	41.7%	82.47%	65.8%	70.10%	66.3%	55.31%	65.6%	42.24%	59.2%
2017	48.85%	30.2%	72.15%	36.2%	72.50%	46.3%	75.05%	66.3%	68.55%	66.8%	63.60%	66.1%	44.10%	59.9%

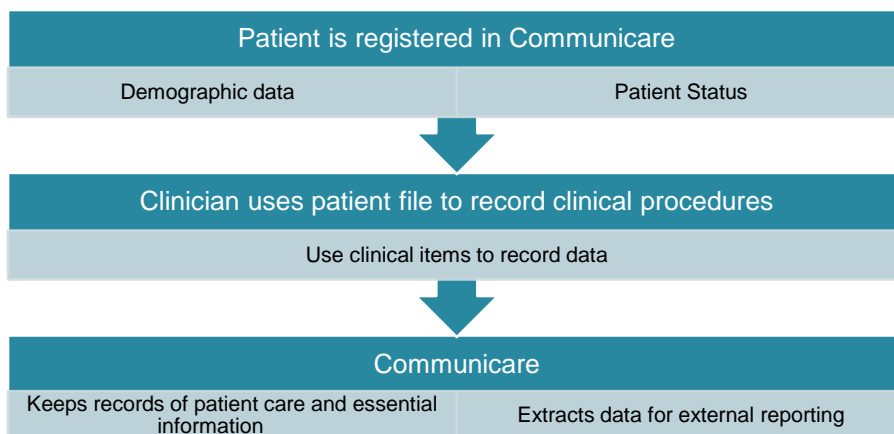
Clinical meetings reflect concerns in the data quality regarding influenza vaccinations

- Clinical staff believe our rates of influenza vaccinations are higher than the data from Communicare reports.



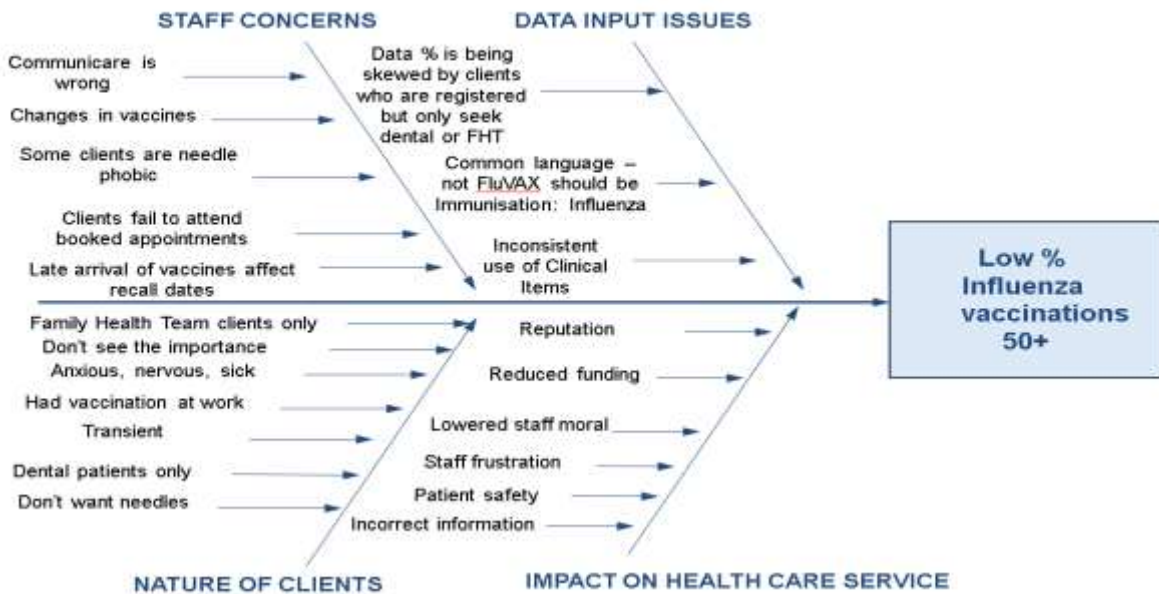
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# How is influenza data being recorded?



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## CAUSES OF LOW STATISTICS FOR INFLUENZA nKPI – brainstorm *What is going on?*



## *What was our intention?*

Initial meeting with project team

- What do we intend to do about the problem?
- What can we achieve?
  - Aim - within 12 months to increase the rates of influenza vaccinations to meet nKPI Goal 19 for 2018 - people 50+ Immunised for Influenza of 60%



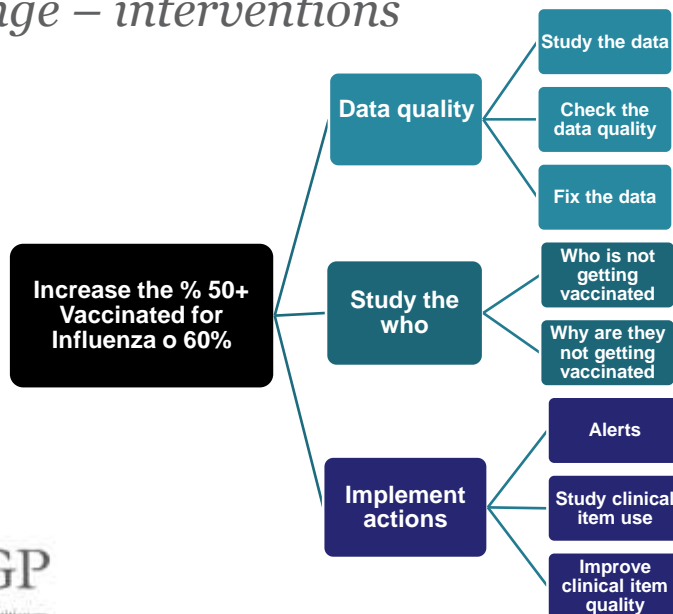
# How do we know if we are successful?

Initial meeting with project team

– What can we achieve?

- Reaching the 60% goal by the end of 2018

## Driving change – interventions

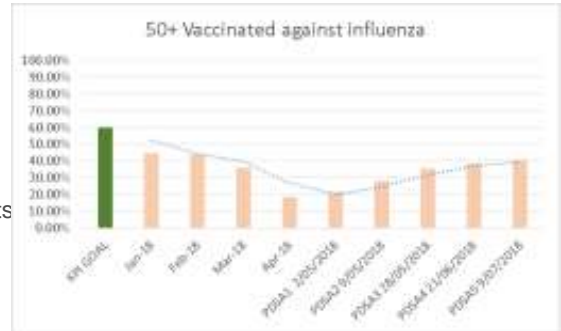




## PDSA 1-5 - Intervention

**May:** Jackie and Michelle established a regular working group to consider the issue

- Run the reports
- Start collating the data to check whether improvement is happening
- Identify who is NOT vaccinated
- Place alerts in these client files
- Clinical team react to alerts and recalls and patients vaccinated
- Check this report, and repeat process for newly identified clients who are not vaccinated
- **A slight improvement was evident**



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## PDSA 2 - Intervention

Study trends – improving but slowly, still didn't seem “right”

- Study trends – improving but slowly, still didn't seem “right”
- What is going on ...patients are being vaccinated on recalls and alerts – also opportunistic ....
  - Some patients ONLY seek dental services!!
  - **ACTION – make these patients “Non-Patients”**

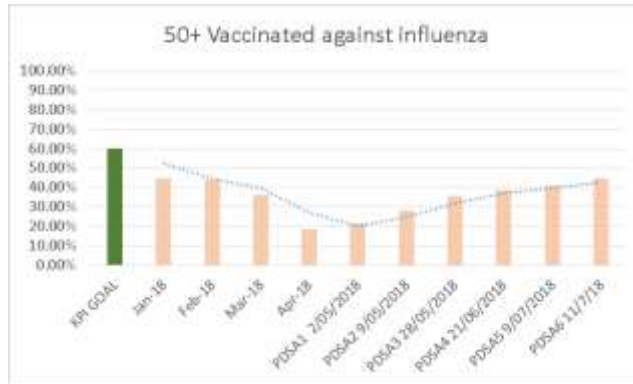


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## PDSA 6 - Intervention

What happened?? **4.5% increase immediately!**



## PDSA 7 - Intervention

BUT .....data cleansing noted an important inconsistency

- Many of the clients who were being reported as “not vaccinated” **WERE** vaccinated!

The project team then studied the clinical items that were being used for those who were reported as “vaccinated” compared to those who were “not vaccinated”

- **Different clinical items were being used for different vaccines!!**





## PDSA 7 - Intervention

### Clinical items were reviewed, what we found!!

- Export codes were different
- Clients who were vaccinated elsewhere (e.g. work) were recorded as vaccinated in **progress notes i.e. data not extractable!**
- Initially Vaccine for the 65+ (new vaccine) did not have a clinical item – therefore **recorded in progress notes i.e. data not extractable!**

### What we did ....

- Fixed the export codes
- Created a clinical item to record vaccinations for those vaccinated elsewhere
- Created a clinical item for the 65+ vaccine
- Data cleansed, went into files and re-recorded vaccinations using the new clinical items



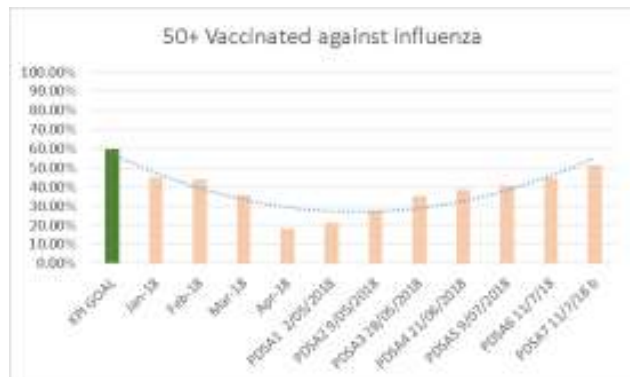
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## PDSA 7 - Intervention

### What happened ....

- 7% increase immediately
- Happy dances



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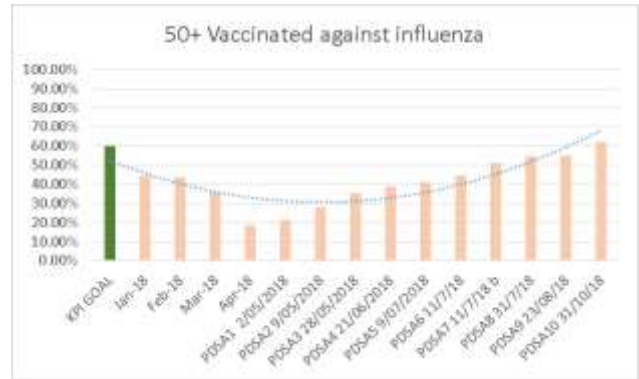


## PDSA 8 to10 - Intervention

### Continue process

- Reflect on data trends
- Check who was not vaccinated
- Data cleansing of client files
- Use recalls instead of alerts, common recall – common language

### GOAL ACHIEVED!!



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## Communicare Clinical Items

Each named influenza vaccine has its own export code.

Communicare report for nKPI based on the codes for each vaccine.

e.g. **<Immunisation;Fluad>** (export code GNFLU)

**Recall: <Immunisation Influenza>** Set for 1<sup>st</sup> April each year.

Once immunisation with named vaccine given & recorded

**Modify Recall** by changing the date to the next year

**Complete Recall <Immunisation Influenza> ONLY** If immunized elsewhere (drop down box with 4 options). Has an "export code".

**& then set the Recall: <Immunisation Influenza>** 1<sup>st</sup> April 2020.

**<Refused Immunisation;Influenza.>** No export code, for internal reporting only.



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# Additional

If there is no recall & immunisation is given, then record using vaccine name & set the recall **<Immunisation Influenza>** for 1st April 2020.

If immunisation has been given elsewhere record as **<Immunisation Influenza>** & set the recall <Immunisation Influenza> for 1st April 2020.

If Immunisation is refused then use clinical item **<Refused Immunisation;Influenza>** & set the recall **<Immunisation Influenza>** for 1st April 2020.



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## Influenza preparedness: Useful resources

### NSW Health

- [Pandemic influenza preparedness - Frequently asked questions](#)
- [NSW Health Influenza Pandemic Plan](#) (health sector)
- [NSW Human Influenza Pandemic Plan](#) (whole of Government)
- [Aboriginal people and influenza](#)
- [Seasonal influenza vaccination 2019](#) – information and recommendations

### Royal Australian College of GPs

- [Managing pandemic influenza in general practice – A guide for prevention, preparation, response and recovery](#)
- [Implementation guide](#) (flip chart format which aligns with the [Australian Health Management Plan for Pandemic Influenza](#))
- [Pandemic influenza toolkit](#)

### Other useful resources

- Dept. of Health - [The flu vaccine – Information for Aboriginal and Torres Strait Islander people in 2019 fact sheet](#)
- WHO – [A checklist for pandemic influenza risk and impact management](#) – building capacity for pandemic response
- WHO - [Tool for Influenza Pandemic Risk Assessment \(TIPRA\)](#)



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Q&A

*Thank you*



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