IMPROVING INFLUENZA VACCINE COVERAGE FOR ELIGIBLE 0-4 YEAR OLDS IN AUCKLAND AND WAITEMATA DHBS

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Auckland and Waitemata DHBs

On behalf of Georgina Tucker, Kim McRae, Michael Walsh, Natalie Desmond, Catherine Jackson

6 QUESTIONS OF QI

- Why?
- What?
- Who?
- How?
- What happened?
- What Next?

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SYSTEM LEVEL MEASURES FRAMEWORK 2016

- High level aspirational goals
  - Nationally set measures locally determined activities
  - Outcomes focused
  - Focus on equity gaps
  - Promote sector wide collaboration

- Improvement methodology
- Results Based Accountability – Collective Impact

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6 SYSTEM LEVEL MEASURES

Measure	Focus
Ambulatory Sensitive Hospitalisations 0-4	**Keeping children out of hospital**
Acute Hospital Bed Days	**Using health resources effectively**
Amenable Mortality	**Prevention and early detection**
Patient Experience of Care	**Person centred**
Babies in Smokefree Homes	**Healthy start to life**
Youth Access to and Utilisation of care	**Youth are healthy, safe and supported**

AMBULATORY SENSITIVE HOSPITALISATIONS IN 0-4 YEAR OLDS

- Potentially preventable via preventative and therapeutic interventions deliverable in a primary care setting
- 30% of all admissions in 0-4 year olds
- Respiratory admissions contribute the most to ASH and include
  - Asthma and wheeze
  - Bronchiectasis
  - Pneumonia
  - Other lower respiratory infections
  - Upper and ENT respiratory infections

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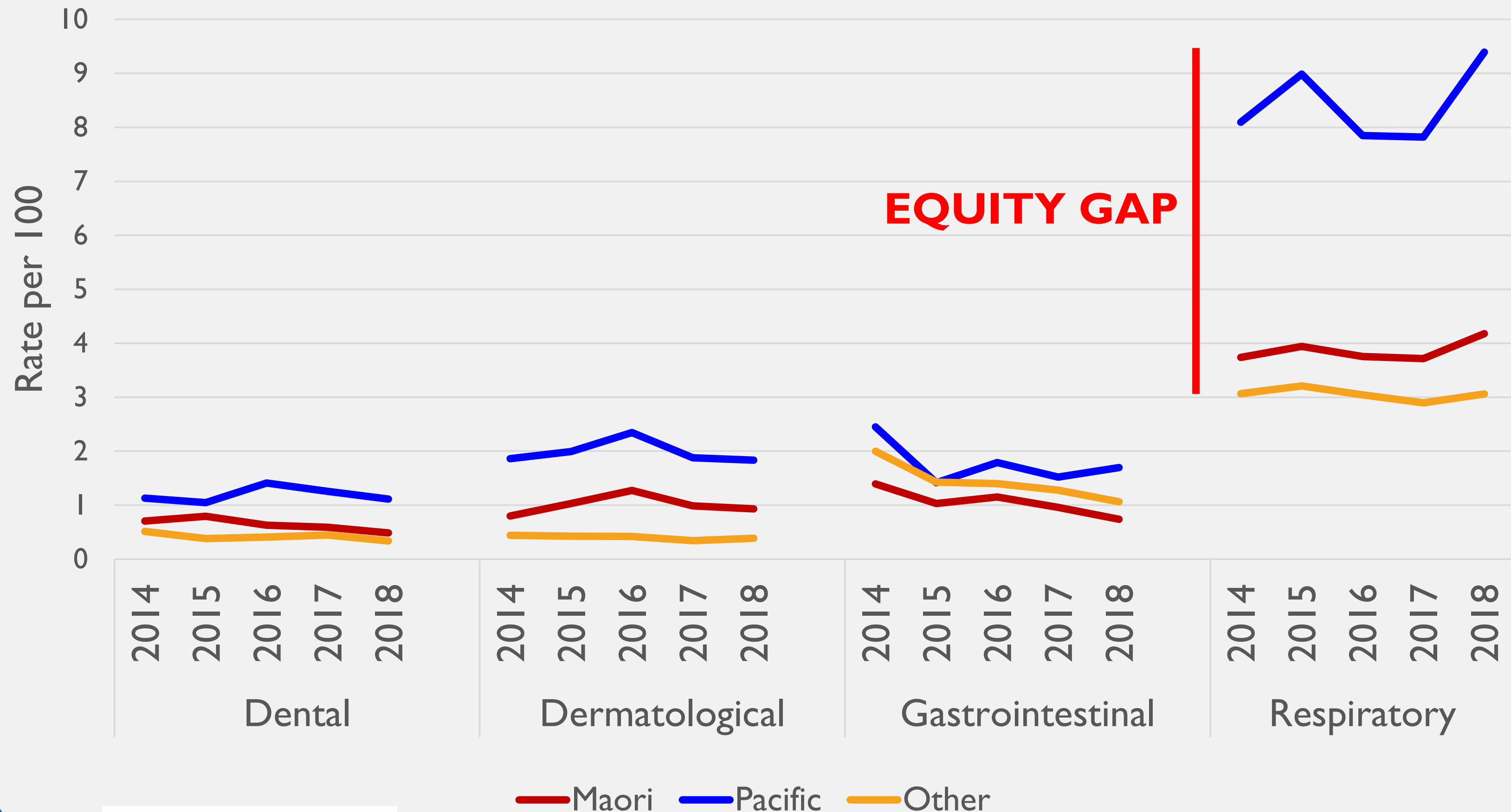
ASH RATE PER 100 IN 0-4 YEAR OLDS AUCKLAND AND WAITEMATA DHB



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FOCUSSED ON ACTIVITIES TO REDUCE RESPIRATORY ADMISSIONS

- 8 month Immunisation Coverage
- Antenatal Pertussis and Influenza Immunisation
- **0-4 Influenza Vaccine for Eligible Children**
- Smoking Cessation in Pregnant Women and their Whanau
- Healthy Housing Referrals

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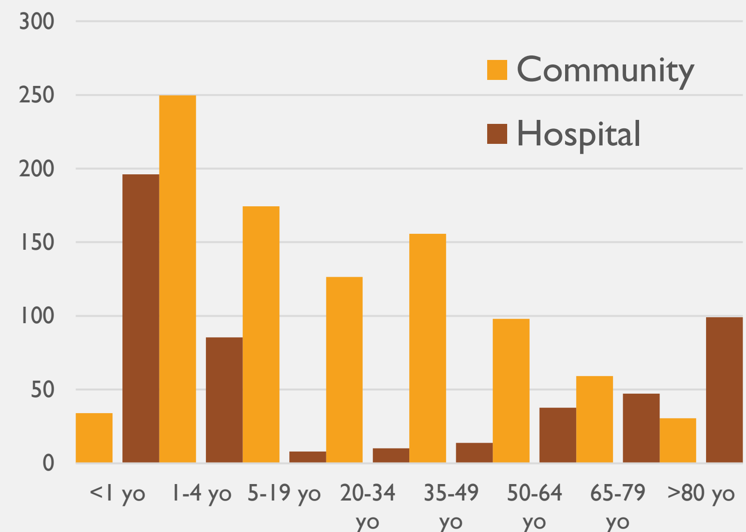
INFLUENZA IN CHILDREN

- Flu infection rates are generally highest in children
- Healthy children are the major cause of the spread of influenza viruses in the community
- Immunising healthy children will help protect those immunised and their family
- Previously healthy children make up 50-60% of children who are hospitalised or die from influenza (Australia/USA)



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CHILDHOOD FLU VACCINE APPROACHES

Country	Policy	Funded
New Zealand	Eligible 0-4 year olds	Targeted
Australia	0-4 year olds (2018) Indigenous 0-4 year olds	Universal in all but NT Universal
UK	2-9 year olds	Universal
USA	0-17 year olds	Universal

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NZ APPROACH
WHICH 0-4 YEAR OLDS?

- **Hospitalised for respiratory illness** or have a history of significant respiratory illness (includes asthma on regular preventor)
- Children with an **eligible medical condition** (eligible for life)
  - Heart disease e.g. congenital or rheumatic heart disease
  - Chronic respiratory diseases
  - Diabetes
  - Chronic renal disease
  - Other conditions e.g. HIV, transplant recipients, celebral palsy, children on long term aspirin, cochlear implant, Down syndrome, etc
- Free via **Primary Care** General Practices

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https://www.influenza.org.nz/eligibility-criteria

ADHB / WDHB APPROACH

Special Immunisation (Flu) for paediatric patients – June 2019 coverage summary

The cohort includes 2,676 ADHB children, 3,341 WDHB children and 5,075 CMDHB children that are enrolled in a PHO (status as per Q2 2019 register). The following coverage statistics includes children with a completed influenza vaccination recorded on the NIR between 1st of March 2019 and 30th of June 2019 and the event was recoded on the NIR as of the 9th of July (date vaccine lists were run). The definition relating to the cohort can be provided on request. Comparison coverage for July 2018 is included in tables (reporting period changed this year to align with end of quarter, coverage to be reported at end of May, June, September and December).

Uptake by DHB of domicile and Ethnicity

	Number in cohort	Completed (n)	Completed (%) June 19	Completed (%) July 18
Auckland	**2676**	**443**	**16.6%**	**15.0%**
Asian	659	147	22.3%	23.4%
European/Other	697	164	23.5%	18.0%
Maori	399	35	8.8%	7.0%
Pacific	921	97	10.5%	10.6%
Counties Manukau	**5075**	**454**	**8.9%**	**9.8%**
Asian	710	129	18.2%	19.0%
European/Other	598	102	17.1%	11.2%
Maori	1432	91	6.4%	6.3%
Pacific	2335	132	5.7%	9.0%
Waitemata	**3341**	**501**	**15.0%**	**12.3%**
Asian	736	202	27.4%	23.2%
European/Other	1121	199	17.8%	12.8%
Maori	746	55	7.4%	7.7%
Pacific	738	45	6.1%	6.0%
Total	**11092**	**1398**	**12.6%**	**11.9%**

** PHO enrolment status is at Q2 2019. This differs to the original lists sent in March.

Uptake by PHO

	Number in cohort	Completed (n)	Completed (%) June 19	Completed (%) July 18
Alliance Health Plus Trust	1075	198	18.4%	15.6%
Auckland PHO Limited	313	94	30.0%	24.1%
Comprehensive Care	888	218	24.5%	16.2%
East Health Trust	361	91	25.2%	13.1%
National Hauora Coalition Limited	901	125	13.9%	10.9%
Procare Networks Limited	4985	596	12.0%	13.2%
Total Healthcare Charitable Trust	2569	76	3.0%	4.4%

** PHO enrolment status is at Q2 2019. This differs to the original lists sent in March. Includes only ADHB, WDHB and CMDHB domiciled individuals as per domicile recorded in the PHO register.

- Identified eligible ICD codes
- Identified eligible children – Hospital admission data
- Matched to primary care enrolment data to identify their primary care provider
- **March**: Provide each general practice with an excel file of their eligible children – sorted
- **May:** Match eligible cohort to NIR and provide updated list to practices
- **June – Dec:** Match eligible list to NIR to determine coverage and provide practice level updates in June, Sept, Dec
- Other activities – Eligibility on hospital discharge summaries, PHO activities – recall, promotion, CPD

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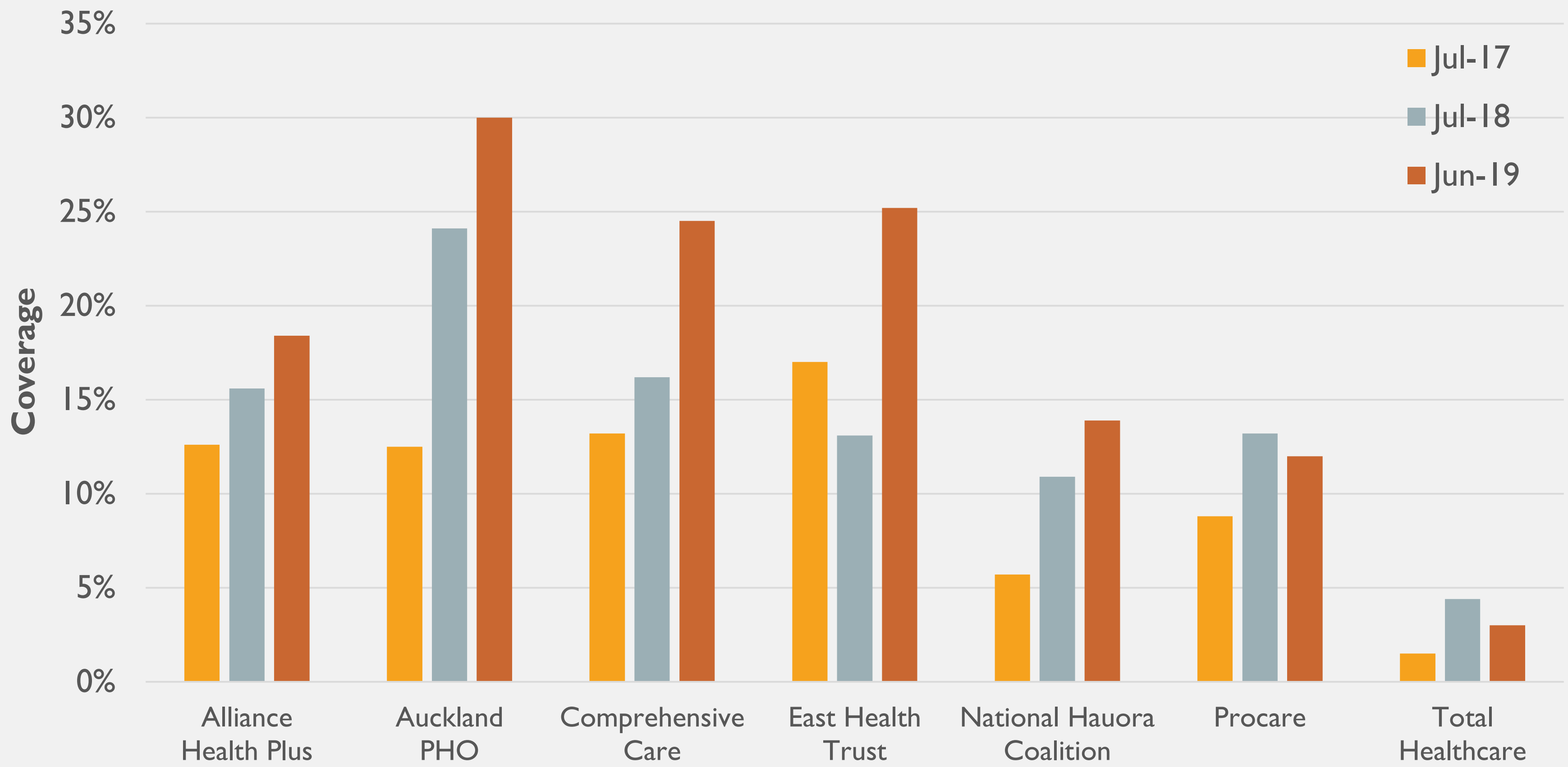
LIMITATIONS OF APPROACH

- Defines a **minimum** eligible cohort (not on the list)
- ICD coding accuracy
- NIR data completeness
- Reliance on manual systems

OUTCOMES

COVERAGE IS IMPROVING



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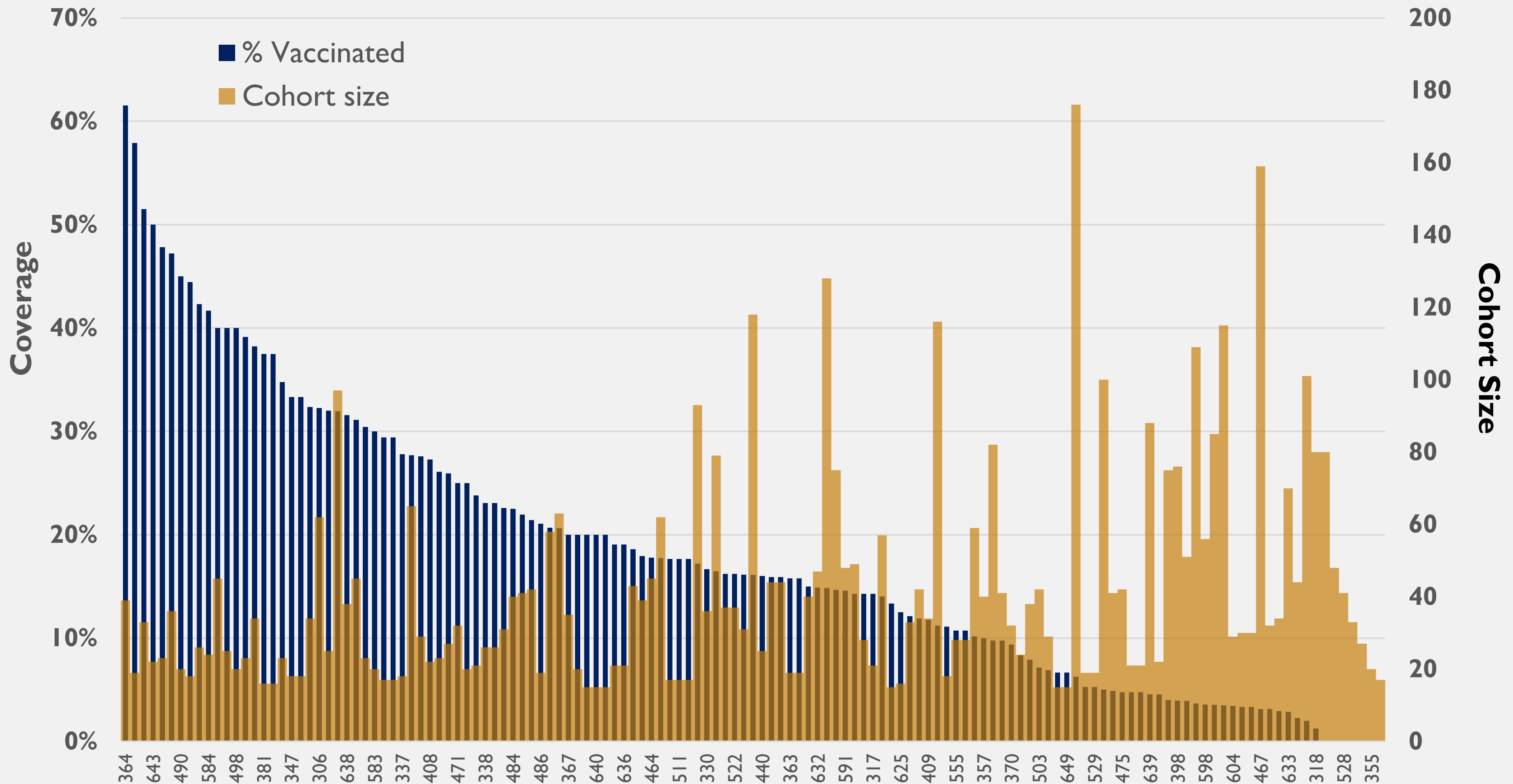
PRACTICE LEVEL VARIATION SIGNIFICANT

(2018 – PRACTICES WITH 15+ ELIGIBLE CHILDREN)



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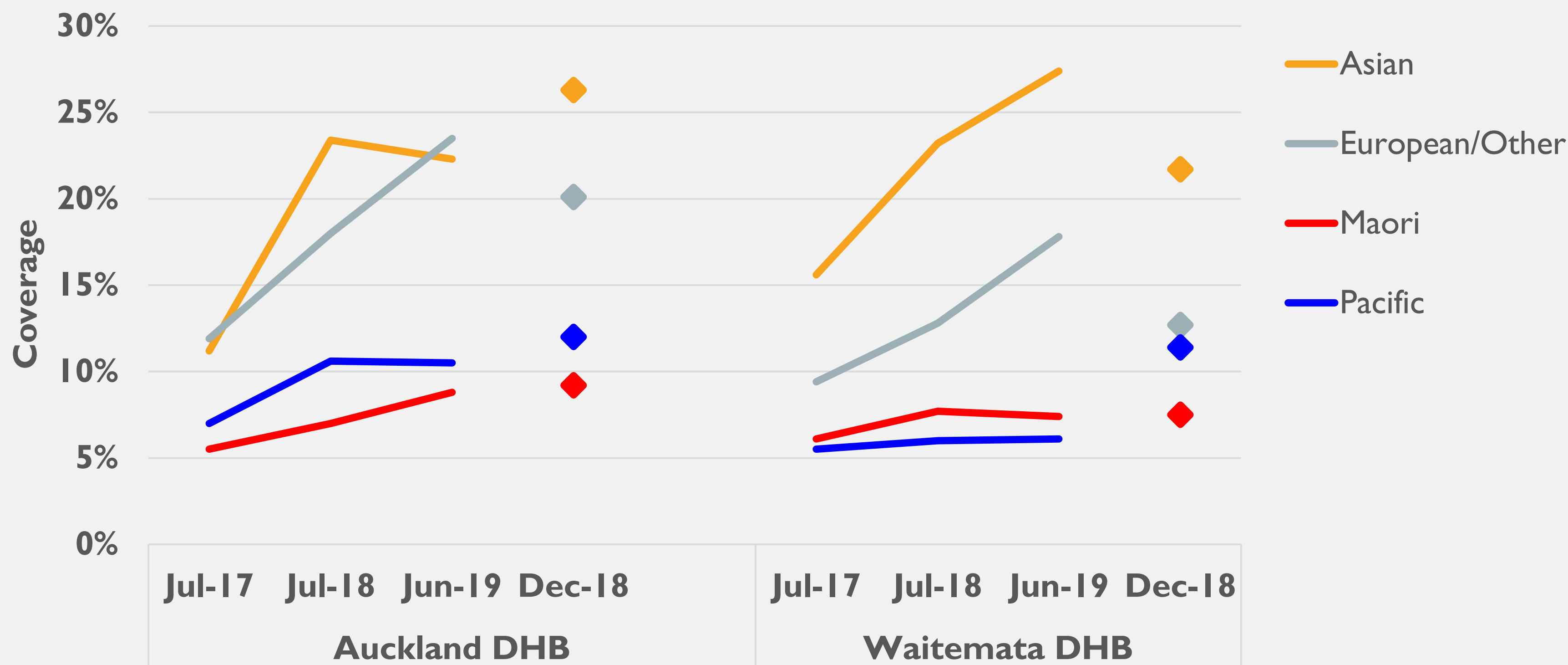
COVERAGE BY ETHNICITY



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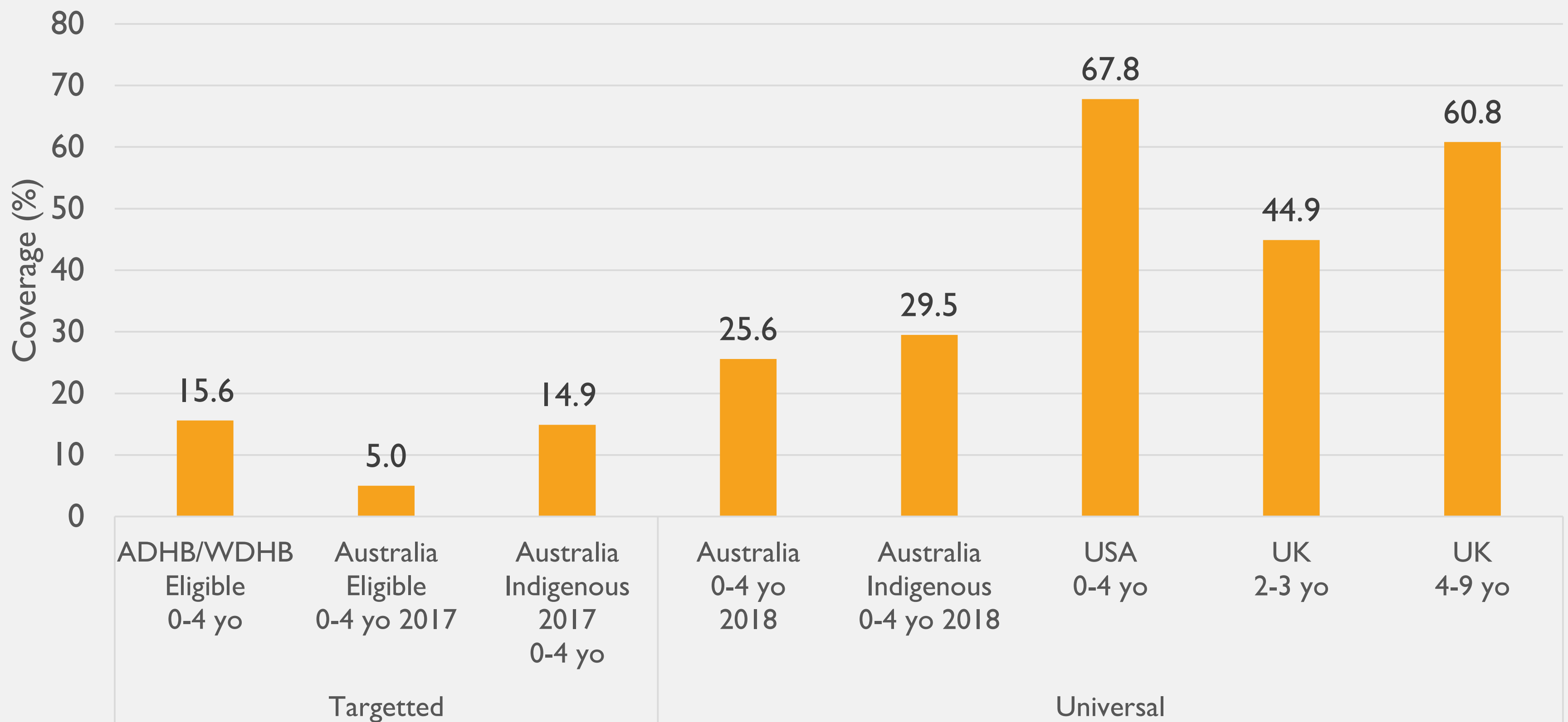
INTERNATIONAL COMPARISON



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IMPROVEMENT OPPORTUNITIES

- **Review eligibility criteria** – broaden to include other high risk children
- **Centralised eligibility recording -** NIR
- **Improve access** – other settings, DHB funded wider programmes – Maori and Pacific
- **Monitor and report coverage**
- **Awareness raising** for families / health care professionals

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LAST THOUGHTS

- Room to improve coverage in young children – be aware of increasing equity gap
- Universal programmes improve coverage and are equity promoting
- Higher coverage is achievable with injectable influenza vaccine
- **Universal Influenza Vaccine is Welcome Here**

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THANK YOU