# Australian Vaccinology Course

# Day 1 summary



**19th October 2026**

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Katie Flanagan, Chris Morgan, Julie Leask, Chris Blyth

NCIRS National Centre for Immunisation Research and Surveillance Australia

# Acknowledgement of Country

A honouring of country from Susan Moylan Coombs

**‘Protect your mob – get vaccinated’**

Samantha Williams (1988–2023; *vale*),
Wiradjuri woman from Narrandera, NSW

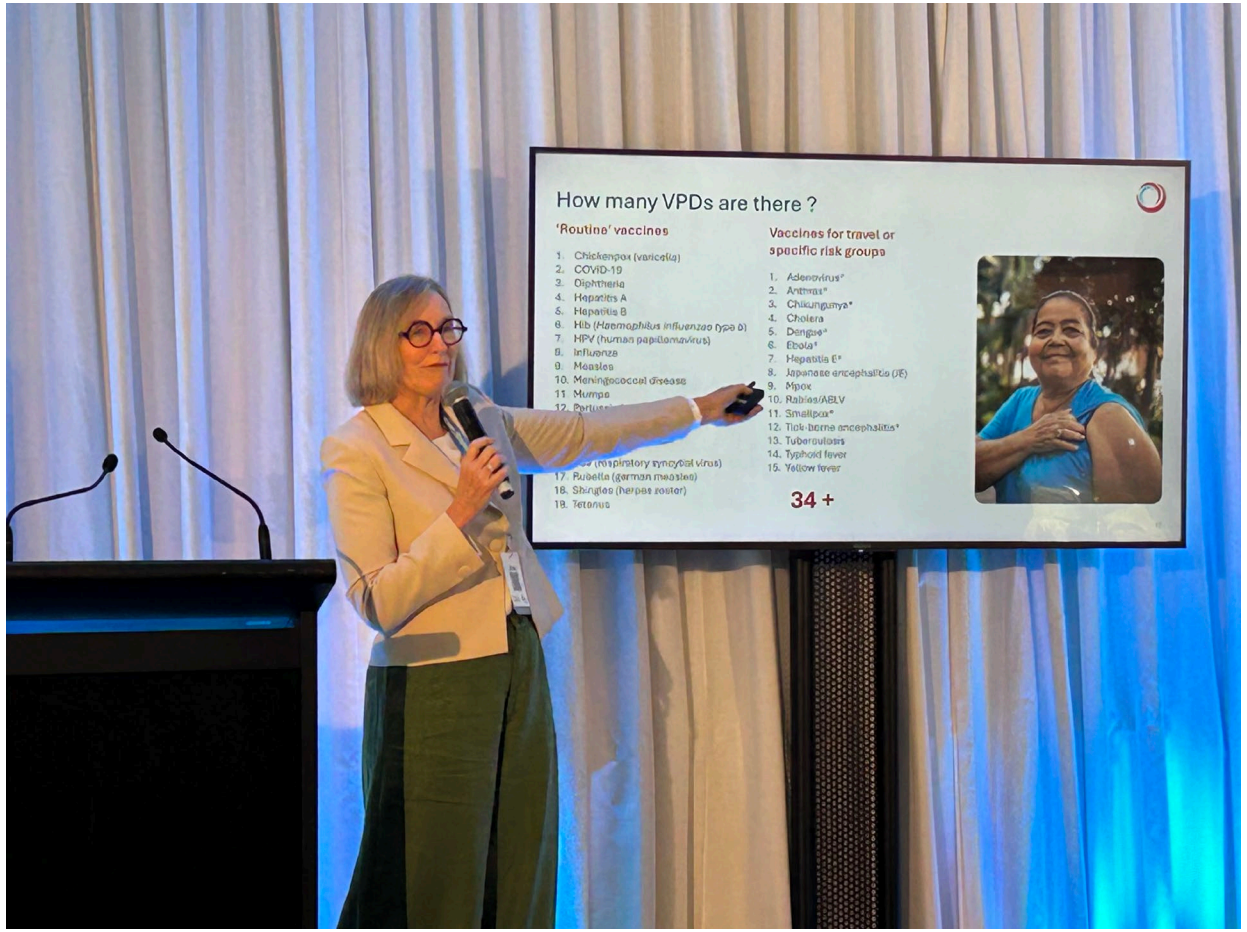
*NCIRS would like to recognise Samantha for her significant contribution to the community through her work in health and immunisation.*

The artwork’s design represents our communities in the centre, from our home to the wider community. The symbols around the circle represent the people, both men and women – this could be anyone from mothers to fathers to gran. It is our responsibility to keep our mob healthy. We need to educate our younger generation and communities about the importance of immunisations and how they keep us protected. The lines going out from the circle represent our journeys, jobs and relocation and the impacts we have made along the way. Many Aboriginal and Torres Strait Islander families may relocate from one community to another. We have mob all over – but no matter where we go, the story is the same: we need to protect our mob. So the smaller circles represent herd immunity across our communities, and the people that this has an impact on – our elders, our babies and our people who cannot be immunised.

*NCIRS commissioned this artwork*



# Setting the scene – Kristine Macartney

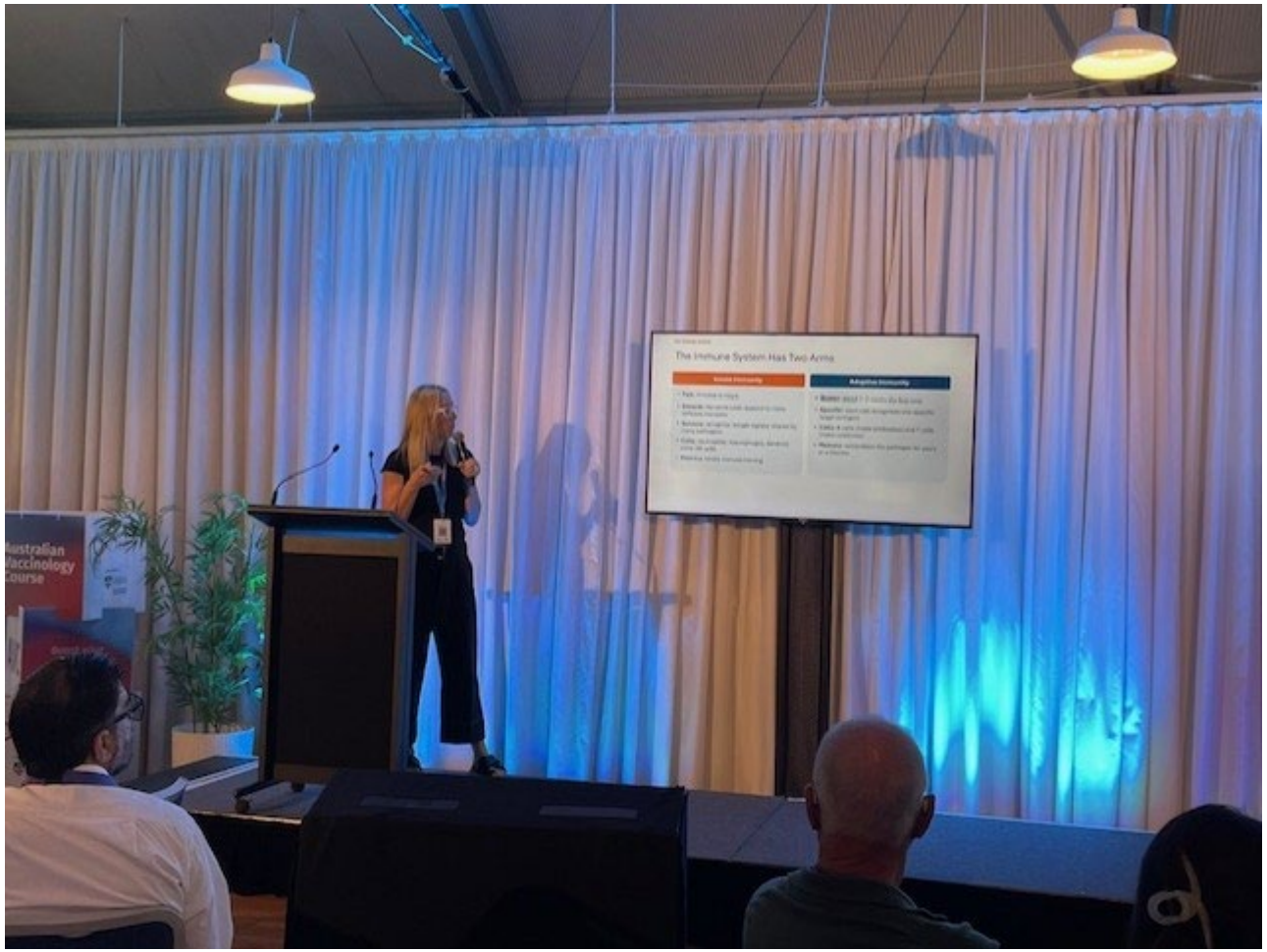



- People, Diseases, Vaccines, Communities
- Society is getting older
- Planetary and climate change
- >34 VPDs –"plenty to think about"
- Resurgence of "old foes"
- Vaccine design matters
- Benefit vs risk of vaccines
- Cost effectiveness and budget impact
- Vaccine acceptance and trust in science

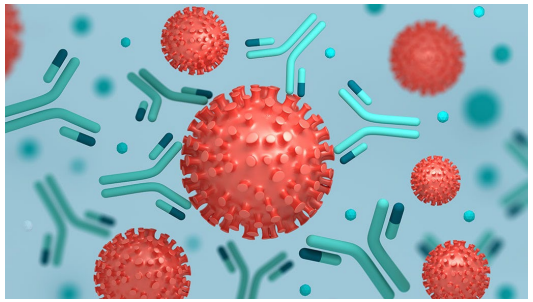
- "Vaccines don't save lives vaccination does"

""astronauts can intermittently shed varicella virus"

# How vaccines work? – Katie Flanagan



- Immune system has two arms = Innate and adaptive



- Types of vaccines
- Importance and type of adjuvants
- Mucosal immunity
  - "target the site of infection"
- Why vaccine responses vary between people
  - Sex differences
- Immunity changes across the lifespan
- Correlates of protection

Immune response is sophisticated and adapted – the future is "personalised vaccinology"

# Vaccine research to licensure – Chris Blyth

- Choice of platform
- Commercial viability of platform
- Pre-clinical testing
  - organoids
- Phases of trials
  - RSV as an example
  - Pneumococcal
- Human challenge trial
  - Salmonella example
- Need for speed
  - COVID-19 vaccine





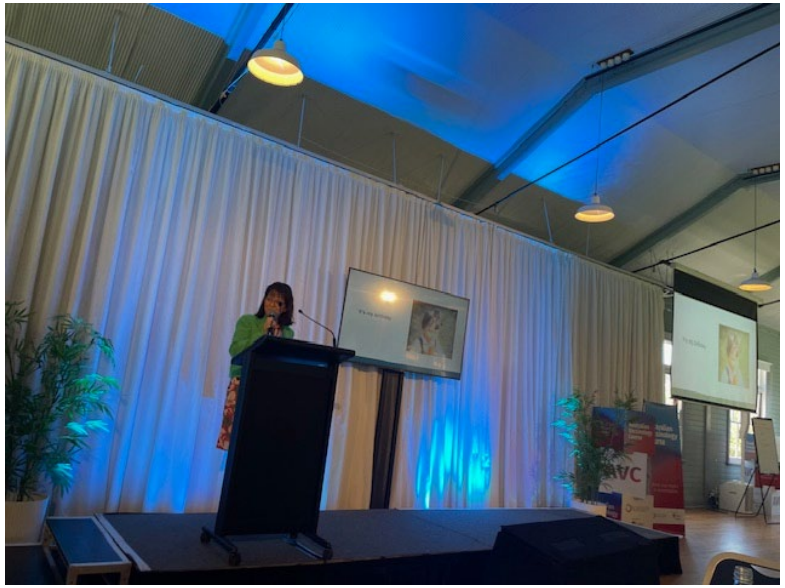


# Vaccine licensure – from trial to policy?



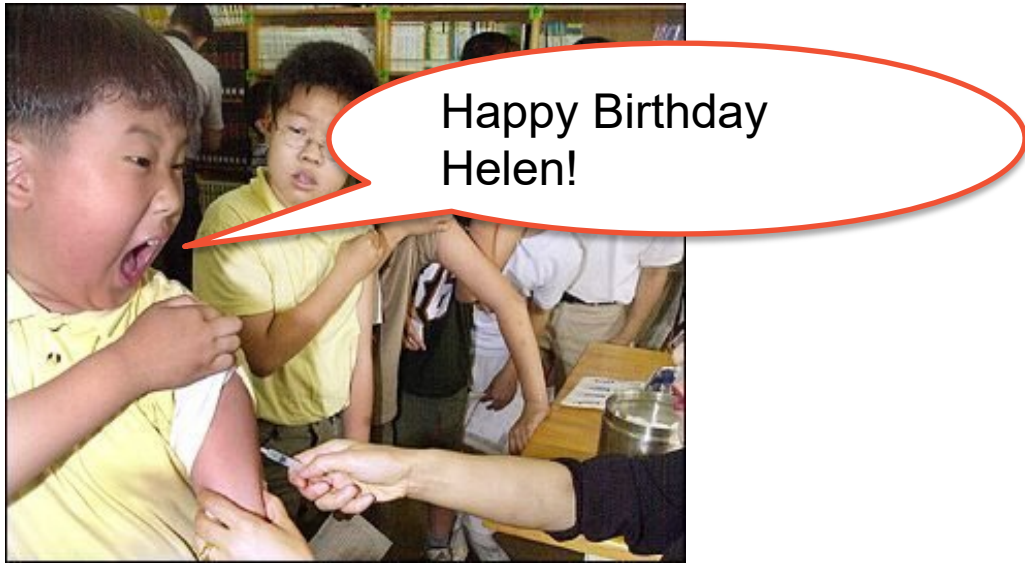






- How do vaccines get licensed in countries - HIC, LMIC
- 95 million girls have recently received HPV vaccine – a remarkable achievement

- "Example of meningococcal vaccine development – to licensure
  - Especially for the meningitis belt



# Decision making for policy – Allen Cheng, Chris Morgan and Katrina Clark

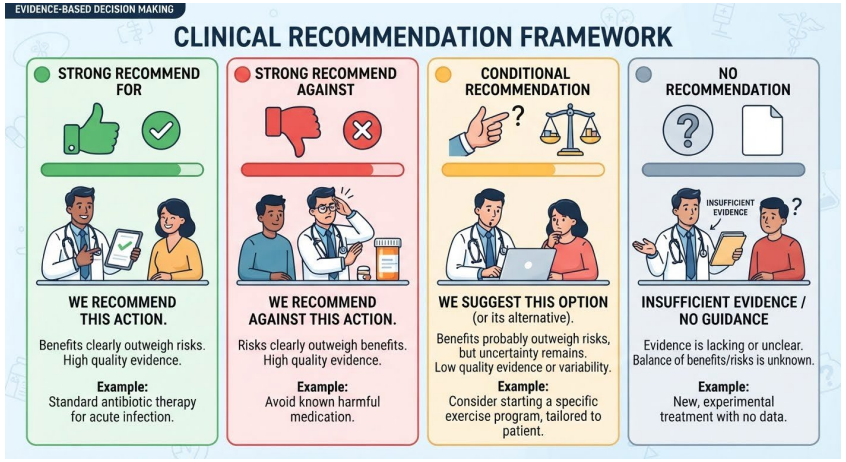





- Is the vaccine high quality, safe and effective?
  - Immunobridging

PICO, GRADE and ICER

- In which groups should the vaccine be used?
- Is the vaccine worth the cost?




- Evidence identifies the problem
- Communities help us understand the solution
- Good vaccination policy requires both



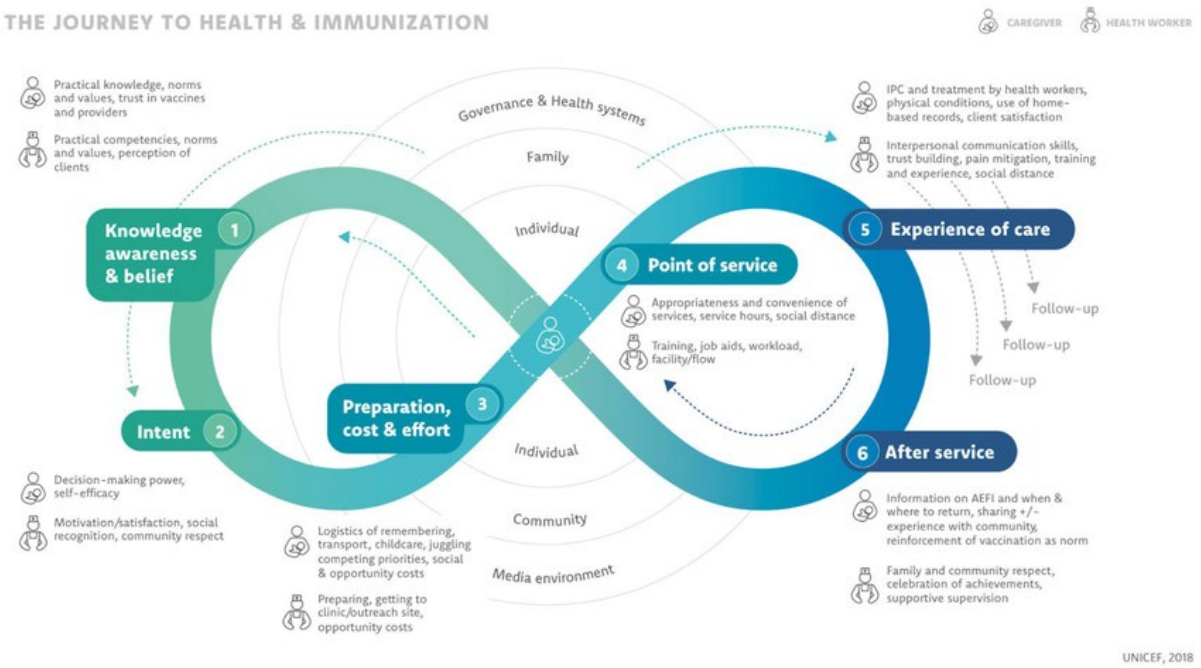
TPP and SAGE
Off label recommendation

Importance of family and community
Community knowledge critical
Cultural safety and Trust

# Vaccine coverage – theoretical models – Julie Leask




– Make things “explainable” and “easy to understand”




– The “5Cs”
– VBAT
– BESD
– Social-ecological model

The

# Q-TAG – Julia Brotherton, Chris Morgan, Michelle Giles, Allen Cheng, Katie Flanagan, Chris Blyth














# Off to drinks and networking in Nurse Egan room (Building H1)



# See you tomorrow for Day 2

