"It's positive - now what?": Developing systems to enable real-time public health action in a large decentralised remote and regional COVID-19 point of care testing program

Patel P [1], Applegate TL [1], Andrewartha K [2], Causer L [1], Saha A [1], **Kindinger A [1]**, Law H [1], Borgnolo B [1], Miller A [1], Martinez M [1], Crowley H [1], Williams A [1], Bodiyabadu K [1], Verich V [1], Khawar L [1], Alternetti N [2], Jayasinghe I [1], Mathews S [2], Guy RJ [1] on behalf of the COVID-19 Point-of-Care Testing team and Clinical Advisory Group
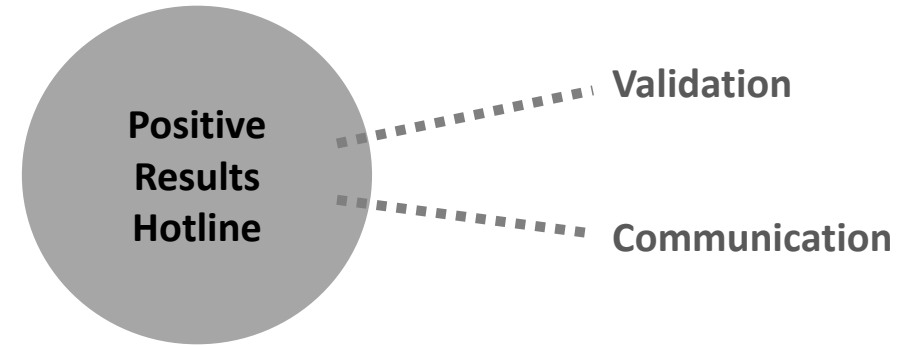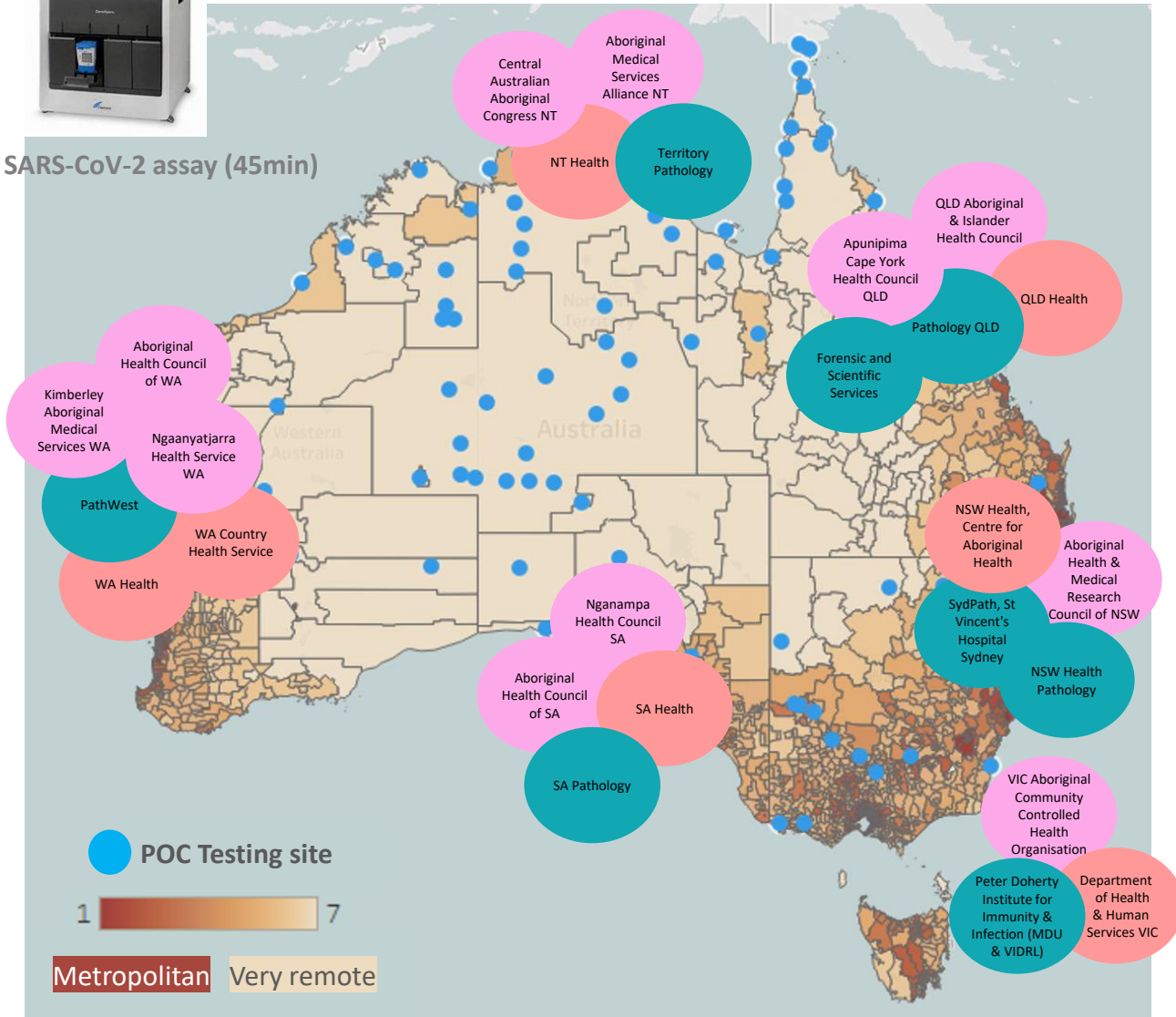
1. The Kirby Institute, UNSW Sydney
2. Flinders University International Centre for Point-of-Care Testing

Artwork by Rickesha Burdett, a Noongar woman from the Menang Region of WA currently living in the Whadjuk Country

Positive Results Hotline: validation, communication

Xpert® SARS-CoV-2 assay (45min)
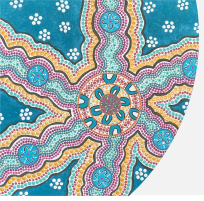
Phase 1 – COVID-19 outbreak preparation

No community cases

1000

500

0

July 2020
November 2020
March 2021
July 2021
November 2021
March 2022
July 2022

Phase 1

📞 1. Receipt of result
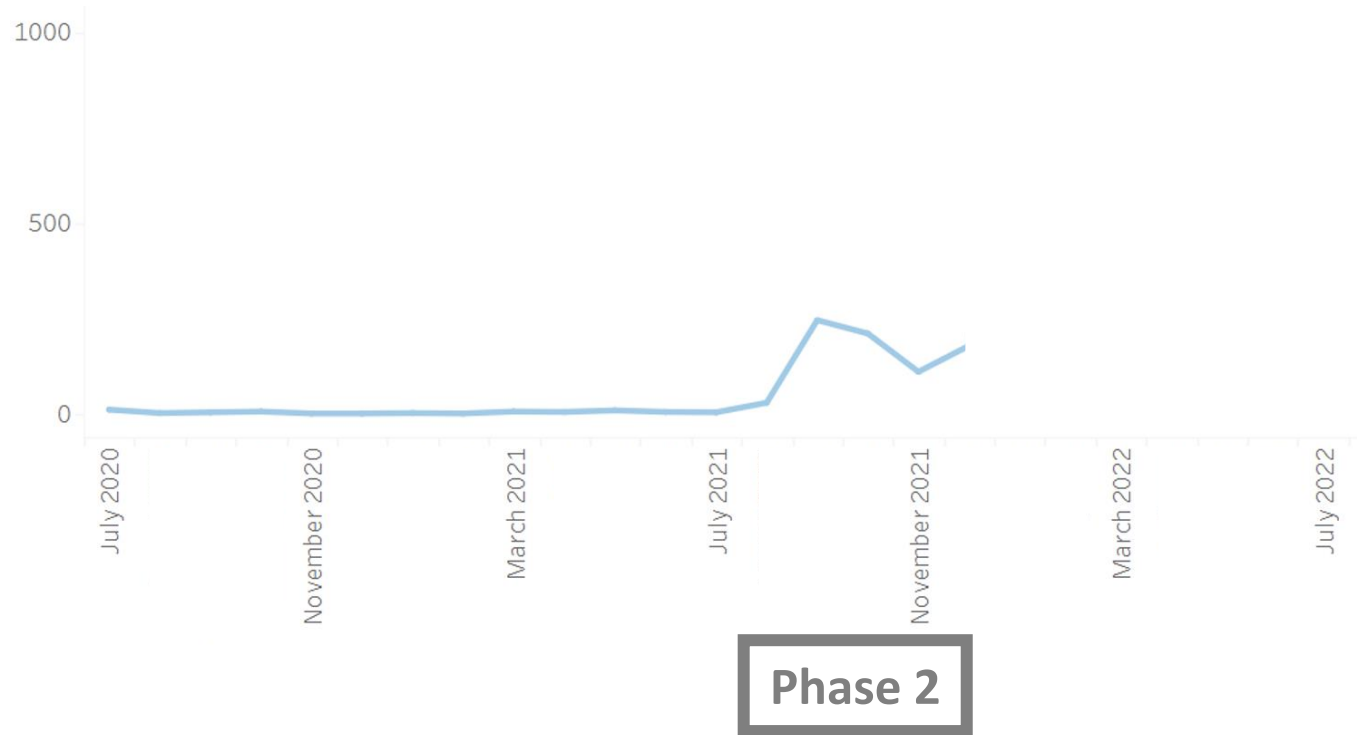
2. Validation of result

⌨ 3. Case data notification

✅ 4. Close case

Phase 2 – COVID-19 outbreak in the first 2 State and Territories

1000

500

0

July 2020
November 2020
March 2021
July 2021
November 2021
March 2022
July 2022

Phase 2

📞 1. Receipt of result

24/7

🧑 2. Validation of result
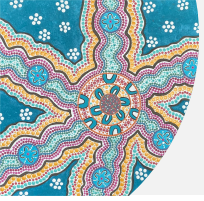
QCs, detailed epidemiological case info

⌨ 3. Case data notification
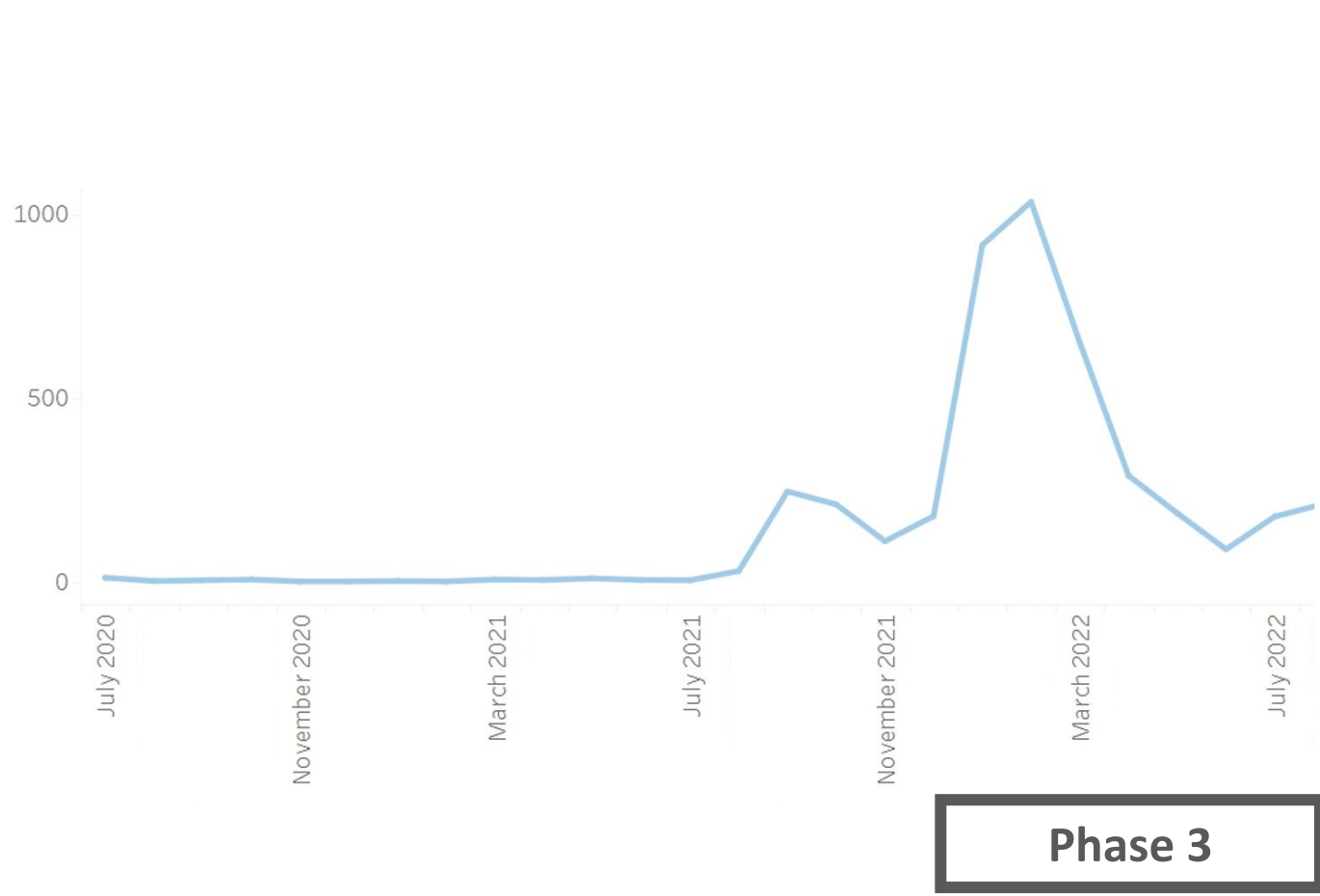
Inter - department calls with PH

✅ 4. Close case

Summary email, genotyping recommendation on recollects

Phase 3 – borders open, widespread COVID-19

1. Receipt of result — 9am-9pm

2. Validation of result — QCs, basic epidemiological case info

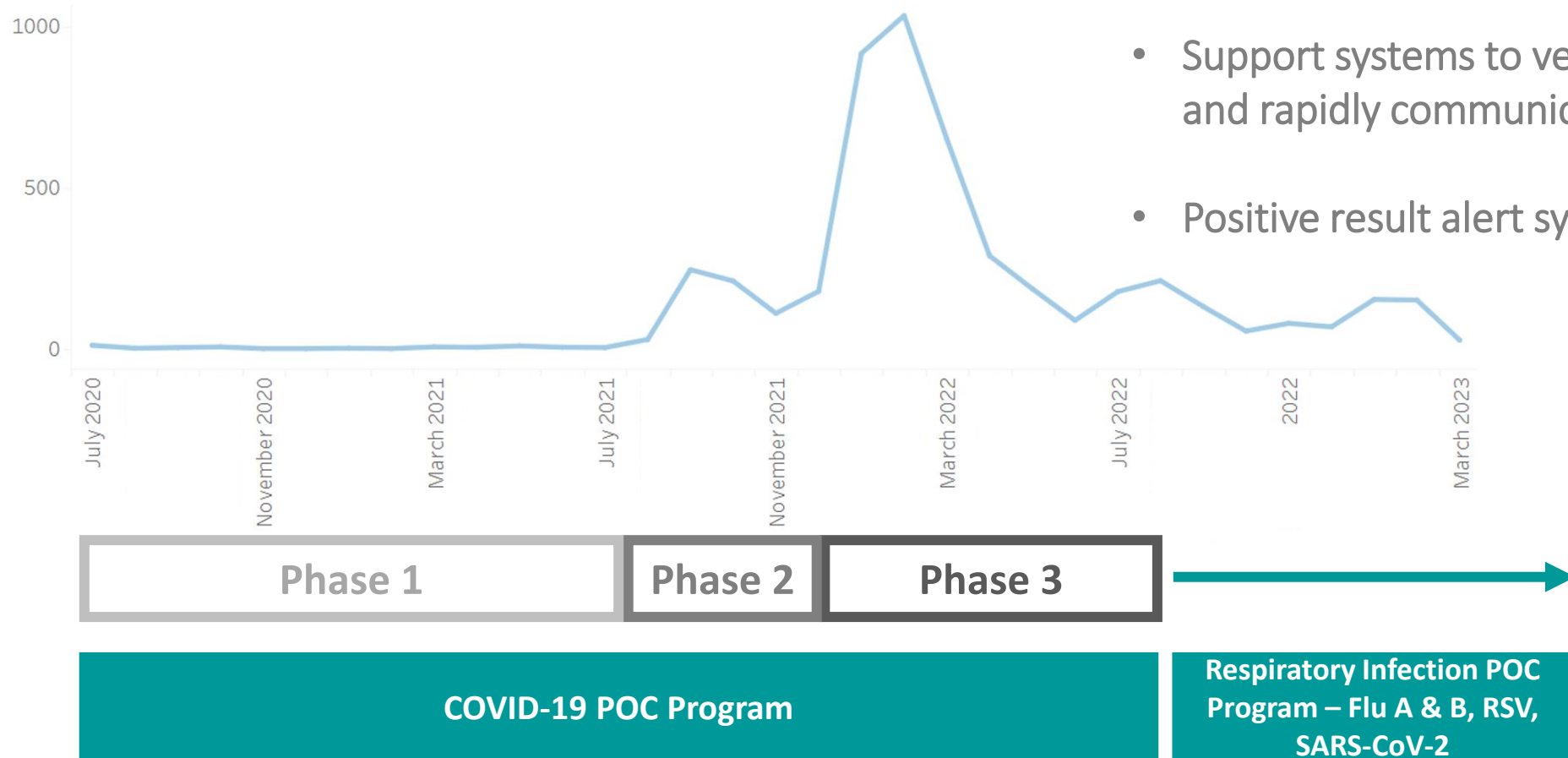3. Case data notification — Inter-department calls with PH

4. Close case — Summary email, genotyping (when requested by PH) recommendation on recollects

Phase 3

Lessons learnt and going forward

- POC testing programs aren't "set and forget"

- Ongoing communication with stakeholders critical, especially in an emergency response

- Support systems to verify analytical quality of results and rapidly communicate results are needed

- Positive result alert system in primary care is novel

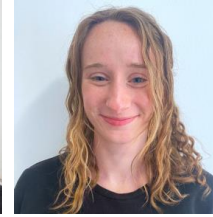# Reflection: honoured and privileged

Aboriginal and Torres Strait Islander Respiratory Infection

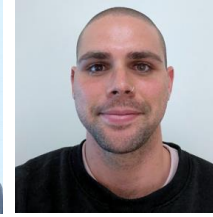## Point of Care Program Hotline

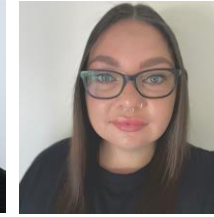### Current team members

Bianca Borgnolo   Alley Miller   Hayden Crowley   Ashton Williams   Andrey Verich   Maria Martinez

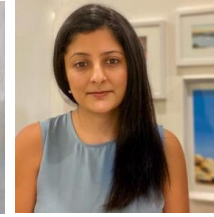### Past team members

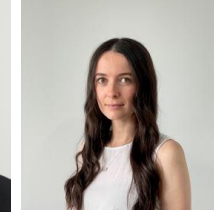Dr Susan Matthews   Dr Tanya Applegate   Dr Louise Causer   Dr Prital Patel   Dr Amit Saha   Hannah Law

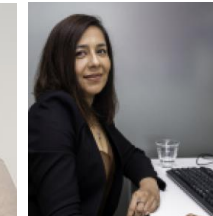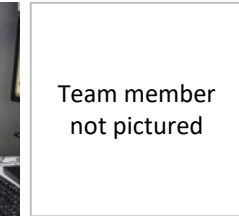Andrea Kindinger   Nina Alternetti   Kaveesha Bodiyabadu   Dr Laila Khawar   Team member not pictured   Indika Jayasinghe

Thank you