

Enhancing public health surveillance through programmatic implementation of a national sexually transmitted infections (STIs) point-of-care testing (POCT) network

Monaghan R and King J, Andrewartha K, Smith K, Saha A, Tangey A, O'Connor S, McGregor S, Matthews S, Shephard M, Guy R, Causer L on behalf of the TTANGO3 and First Nations Infectious Diseases Point-of-Care Testing Programs

Background

- 62% of Aboriginal and Torres Strait Islander peoples live in regional/remote areas compared with 27% of non-Indigenous people.
- Chlamydia (CT) and gonorrhoea (NG) notification rates are highest in regional and remote areas.
- ~1/2 of CT notifications in the National Notifiable Disease Surveillance System (NNDSS) are missing Aboriginal and Torres Strait Islander status.
- ~1/4 of NG notifications in the NNDSS are missing Aboriginal and Torres Strait Islander status.
- There is likely underreporting of notifications among Aboriginal and Torres Strait Islander peoples.
- Accurate data are needed to:
 - ✓ Identify emerging trends
 - ✓ Evaluate programs
 - ✓ Inform resourcing

First Nations Molecular POCT Program

- A community-led molecular POCT network for STIs and respiratory infections across remote and regional Australia.
- Positive program CT/NG test results are nationally notifiable.
- Sociodemographic and positive results directly provided to state/territory health authorities for recording in surveillance databases.
- The First Nations Infectious Diseases POCT Leaders Group provides cultural oversight for the program.

Aims

- To explore the potential for molecular POCT data to enhance national surveillance of CT and NG.

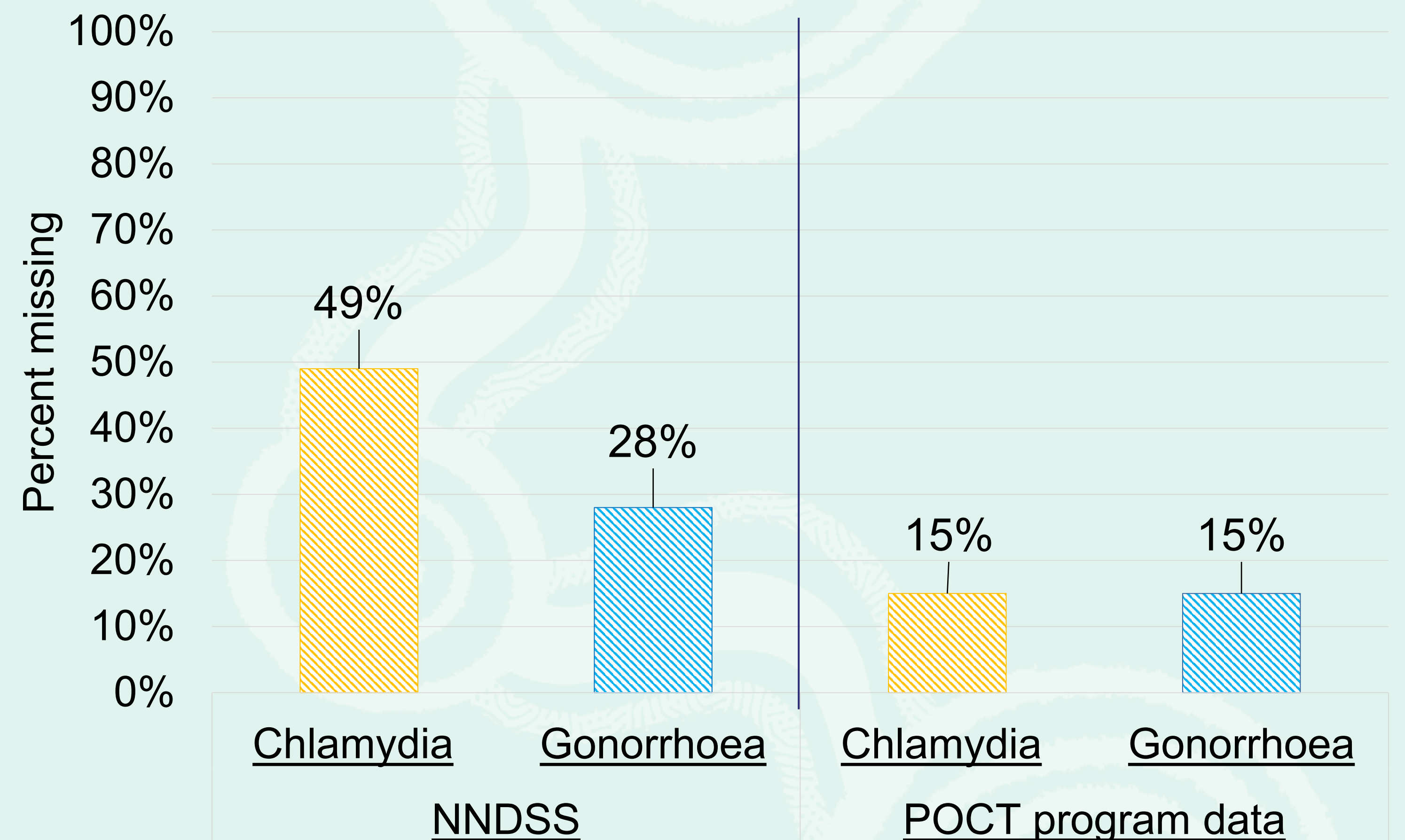
Methods

- Describe publicly available testing data reported by the POCT program including sociodemographic characteristics of those tested .
- Compare completeness and availability of POCT program data with publicly available national surveillance data.
- Describe POCT program test positivity.

Results

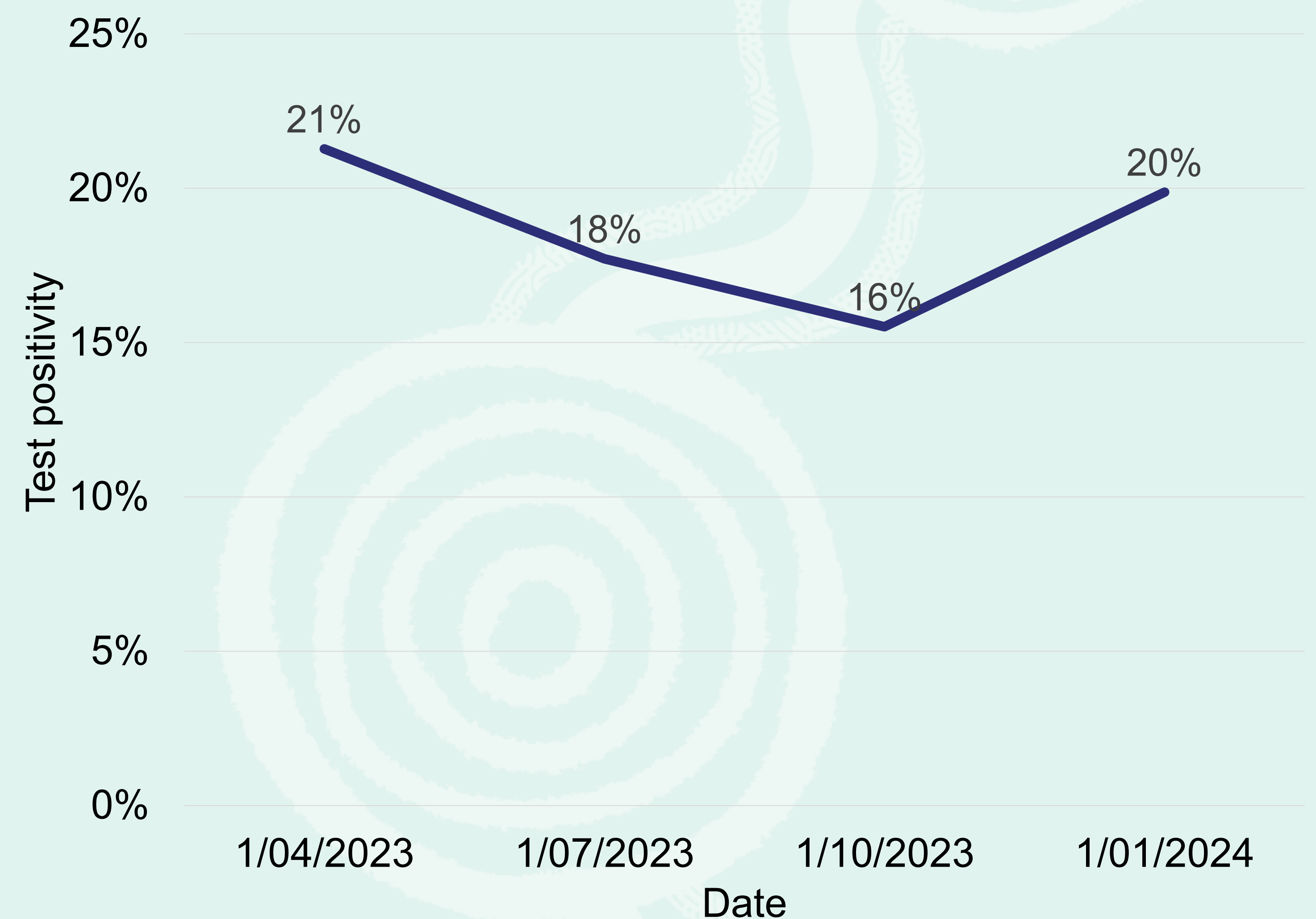
- 7,660 POC STI tests conducted between 2022-2023
- 96% of people tested were Aboriginal and/or Torres Strait Islander people .
- 60% aged 15-29 years, 61% women.
- 1,290 positive test results.
- Positive POCT results represent an estimated 12% of CT notifications & 8% of gonorrhoea notifications in the NNDSS.

Proportion of chlamydia and gonorrhoea diagnoses missing Aboriginal and Torres Strait Islander status by data source, 2022-2023



Abbreviation: NNDSS = National Notifiable Diseases Surveillance System

CT/NG POCT positivity, Q2 2023 - Q1 2024



Note: Positivity is the number of positive CT and/or NG tests divided by the number of patient tests. One CT/NG test is counted as two tests in the denominator.

Conclusions

- High completeness of Aboriginal and Torres Strait Islander status in POCT program data for STIs compared with NNDSS data.
- Going forward, as the POCT program scales up POCT data may improve completeness of Aboriginal and Torres Strait Islander status in NNDSS STI notifications, particularly chlamydia.
- Test positivity from POCT program data may provide complementary epidemiological information.

