

Spatial distribution of late HIV diagnoses from 2015 to 2024 in Australia

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Conflict of interest

I have no conflict of interest to declare.

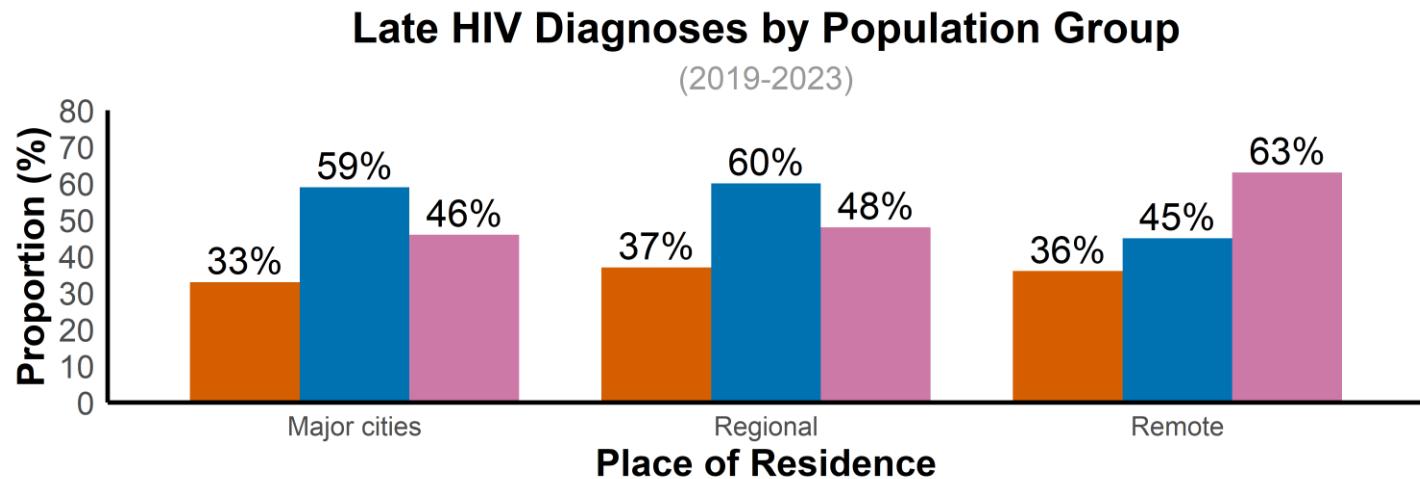
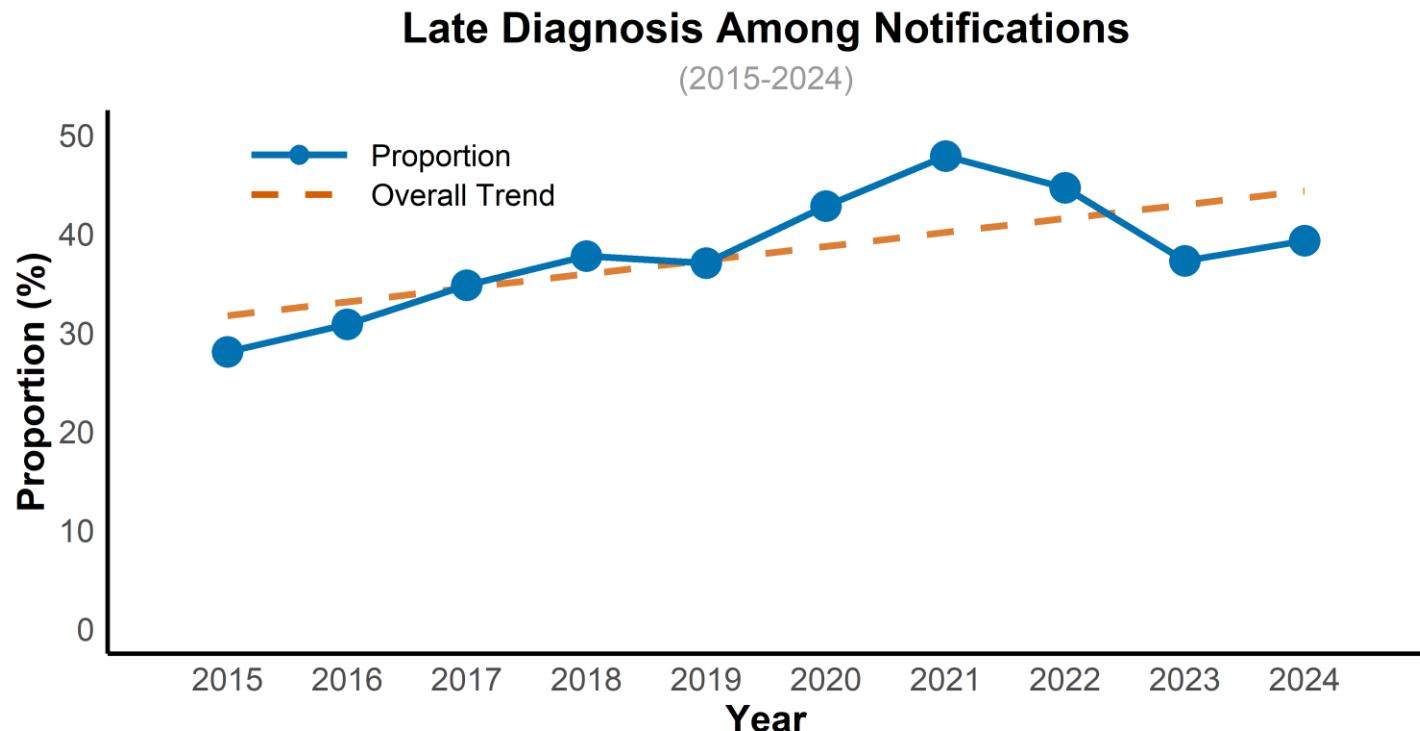
Background

Late HIV diagnosis:

CD4 count < 350 cells/ μ L at diagnosis without evidence of recent infection

National trends:

- Proportion of late diagnoses in Australia has increased
- Number of late diagnoses has remained steady
- Substantial variation by place of residence



Research Aim

To explore the spatial distribution of late HIV diagnoses among adults from 2015 to 2024 in Australia by primary health network (PHN).

Methods

Data: HIV notifications from the National HIV Registry

Late diagnosis index (proportion + count)

Balances both the proportion of late diagnoses among notifications **and** the number of late diagnoses in each PHN.

High value: reflect a PHN with

1. Both high proportion and count, or 2. a high proportion alone, or 3. a high count alone

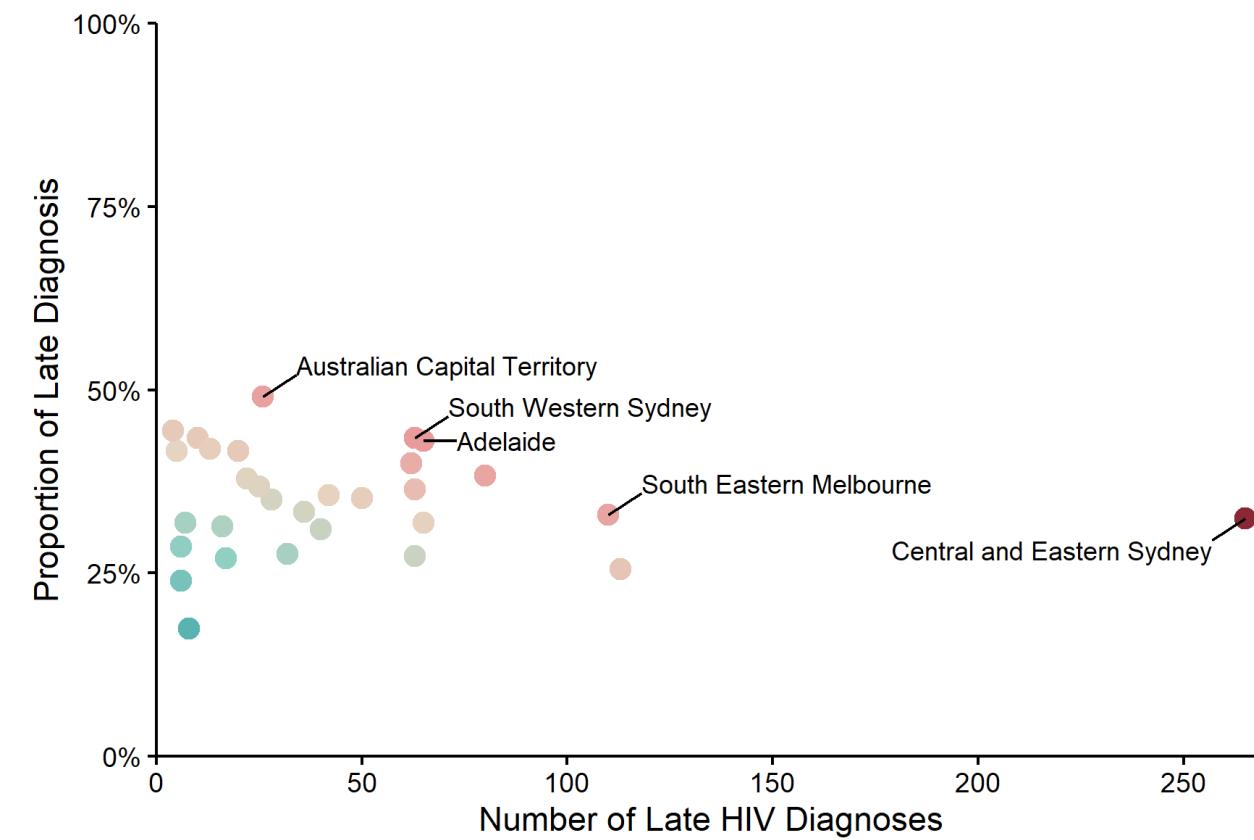
Statistical analysis

We conducted descriptive analyses to examine patterns in late HIV diagnoses across Australia by PHN. Analysed separately for pre-COVID (2015–2019) and post-COVID (2020–2024) periods

Results

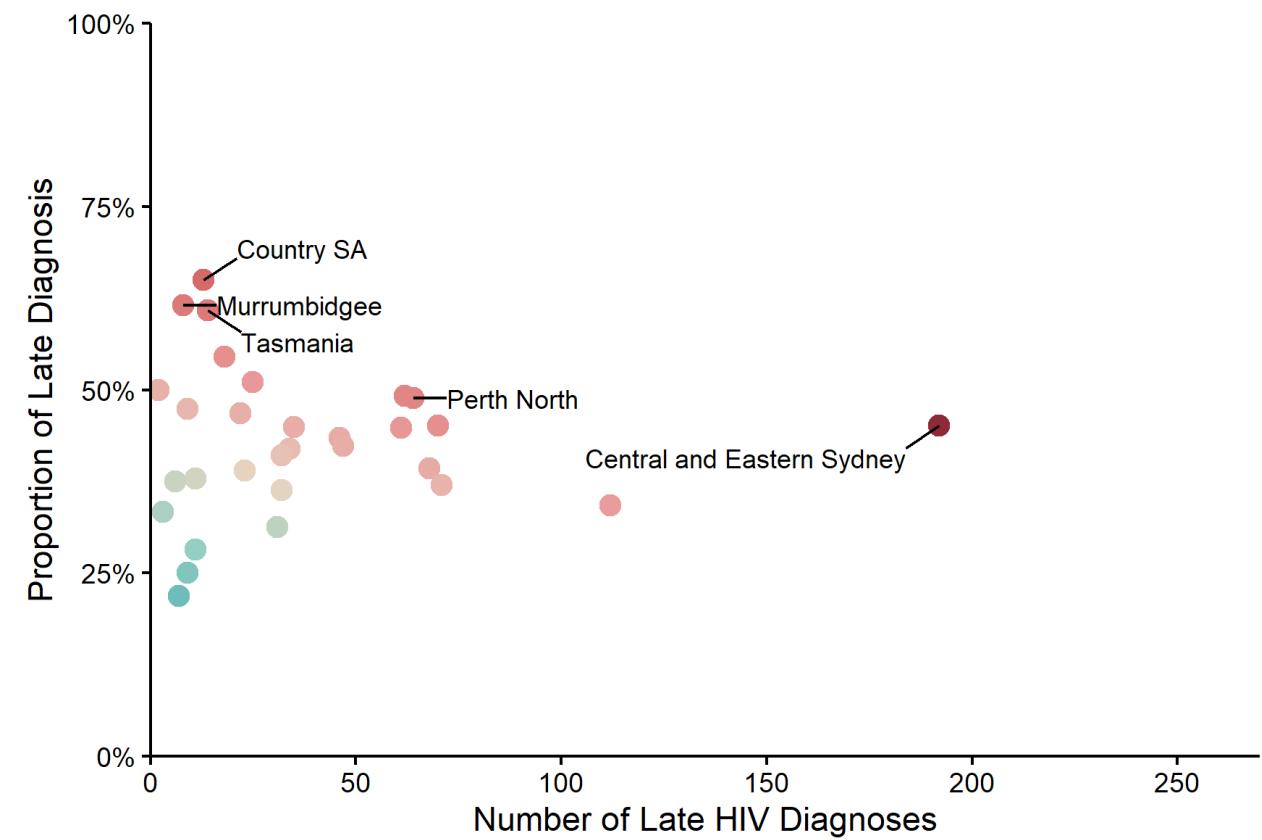
(1)

2015-2019



(2)

2020-2024



From 2015–2019 to 2020–2024:

Mean proportion \uparrow 35% to 43%; Mean Count \downarrow from 45 to 37;

Mean late diagnosis index was **higher** in 2020–2024

Late diagnosis index

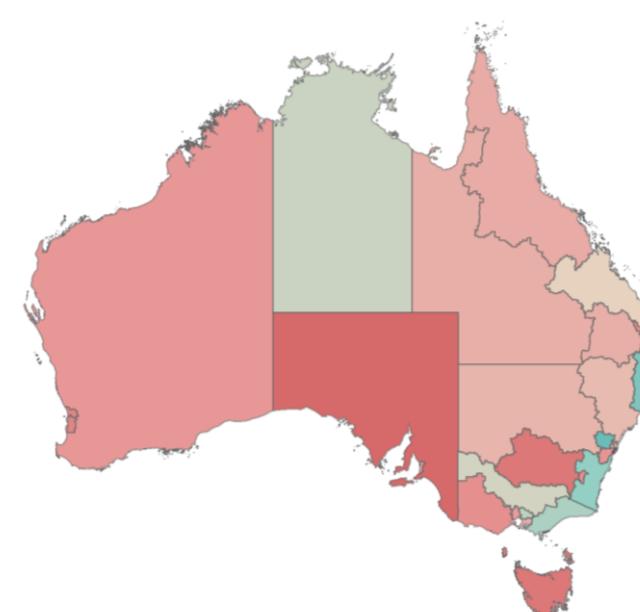
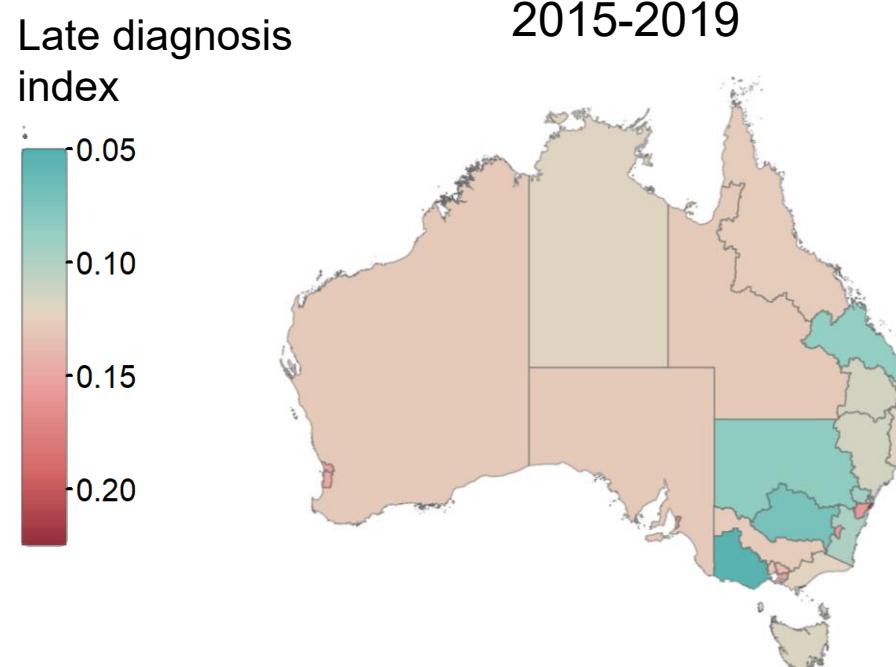


0.05 0.1 0.15 0.2

Results

- 21 PHNs had a higher late diagnosis index in 2020–2024 compared with 2015–2019.
- PHNs with persistently high burden (ranked in the top 10 late diagnosis index in both periods):

Central and Eastern Sydney, Country SA,
Perth South, Perth North, Australian
Capital Territory, South Western Sydney



Key messages

- Overall burden increased in 2020-2024 vs. 2015-2019.
- Persistent spatial hotspots

Central and Eastern Sydney, South Western Sydney, Country SA, Perth North, Perth South, and Australian Capital Territory.

They can help prioritise where additional support or services may be most beneficial.

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Thank you!