

# 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:

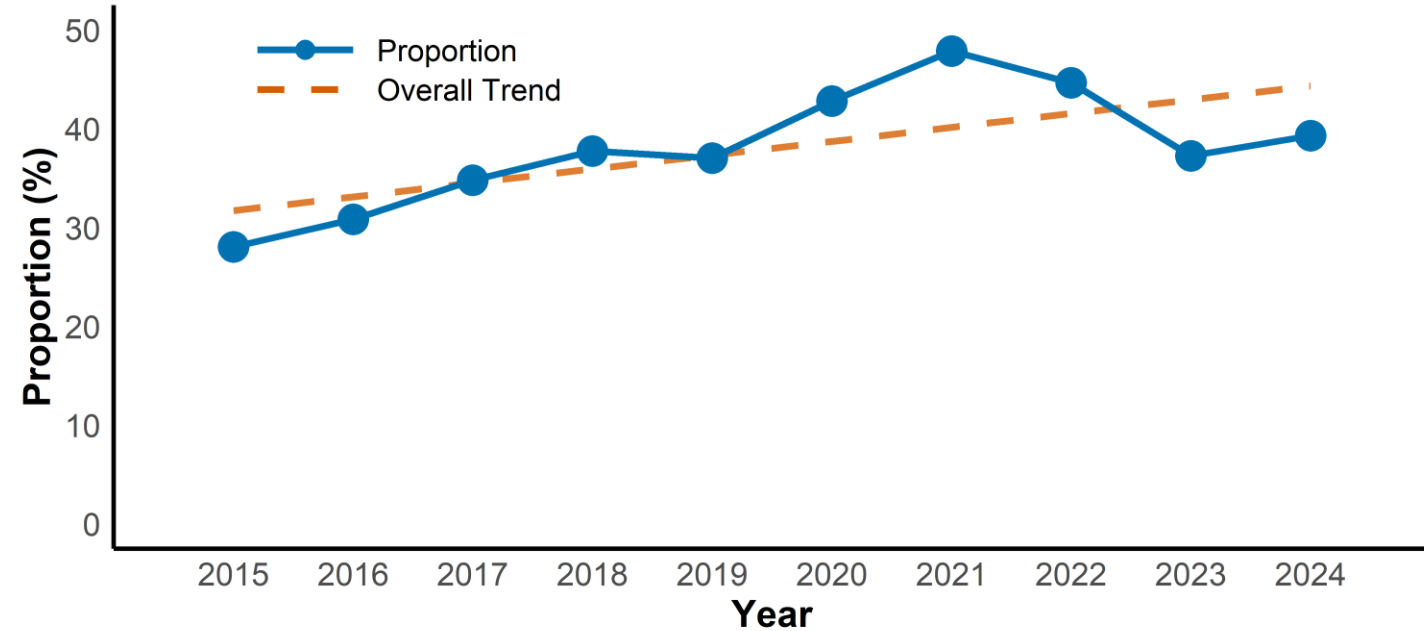
CD4 count < 350 cells/ $\mu$ L at diagnosis without evidence of recent infection

## National trends:

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

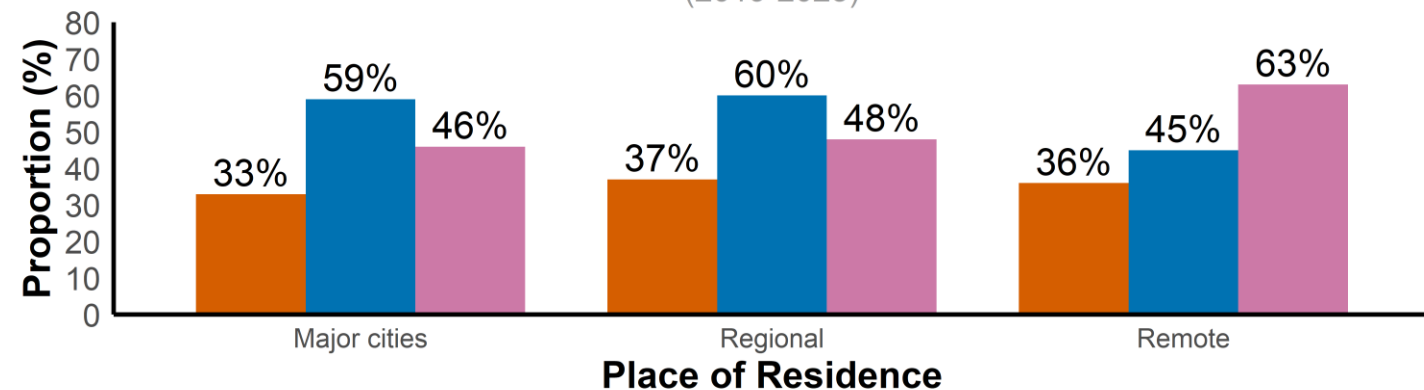
## Late Diagnosis Among Notifications

(2015-2024)



## Late HIV Diagnoses by Population Group

(2019-2023)



# 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

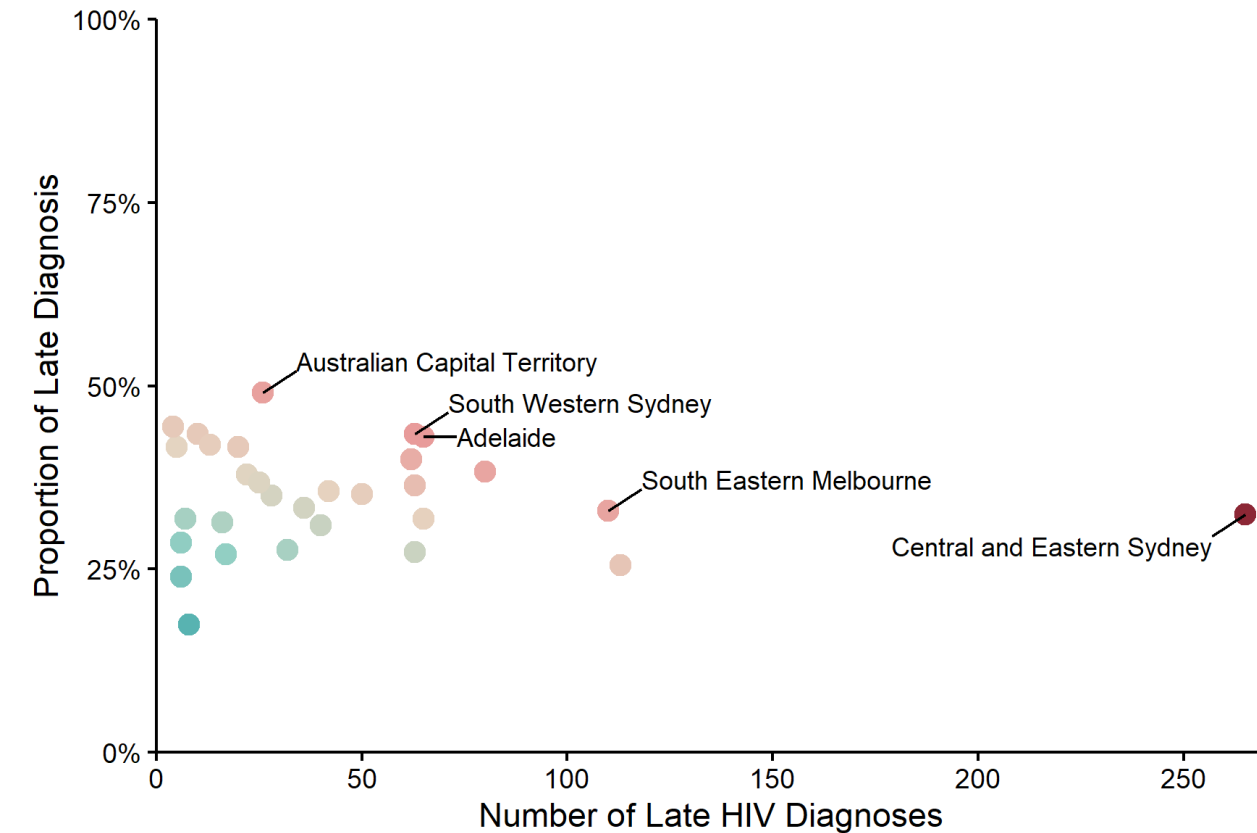
## **Statistical analysis**

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

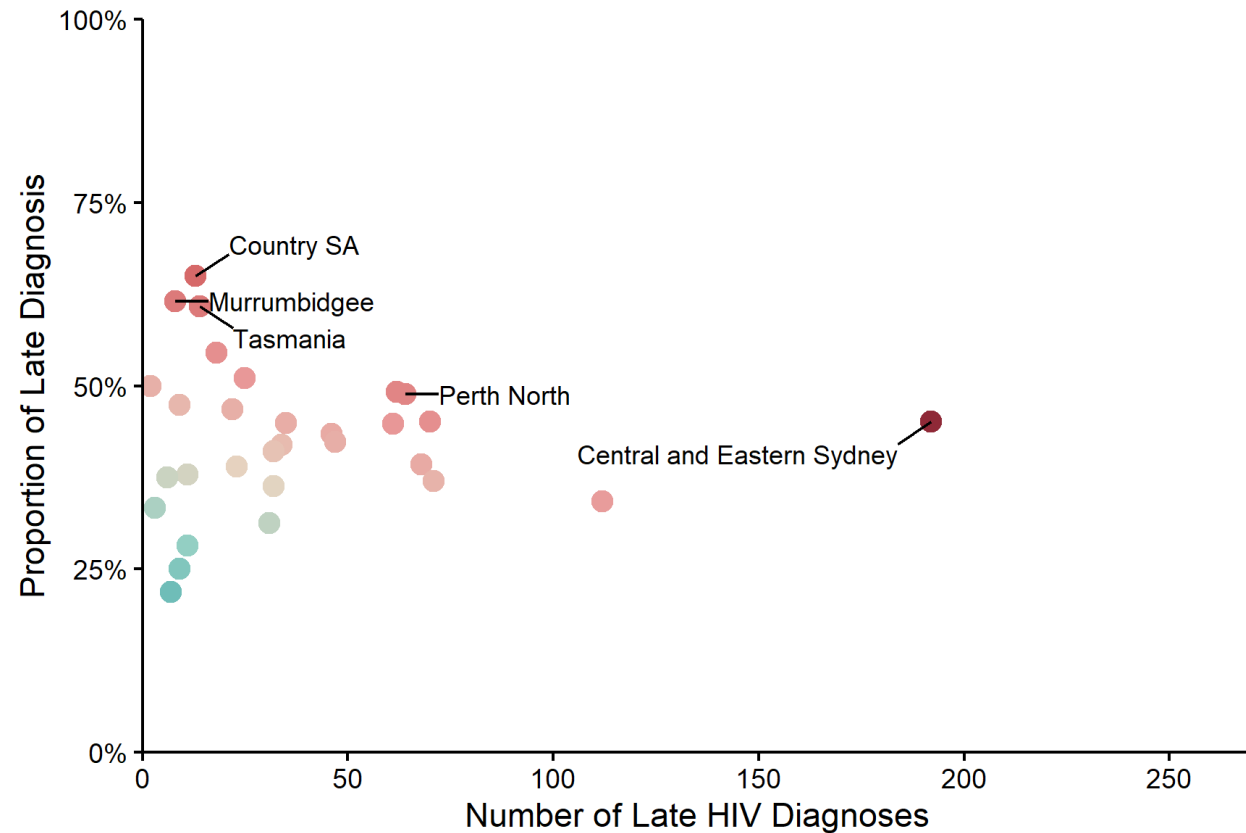
(1)

2015-2019



(2)

2020-2024

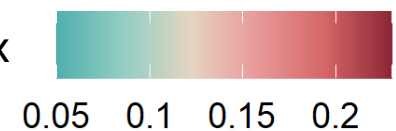


From 2015–2019 to 2020-2024:

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

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

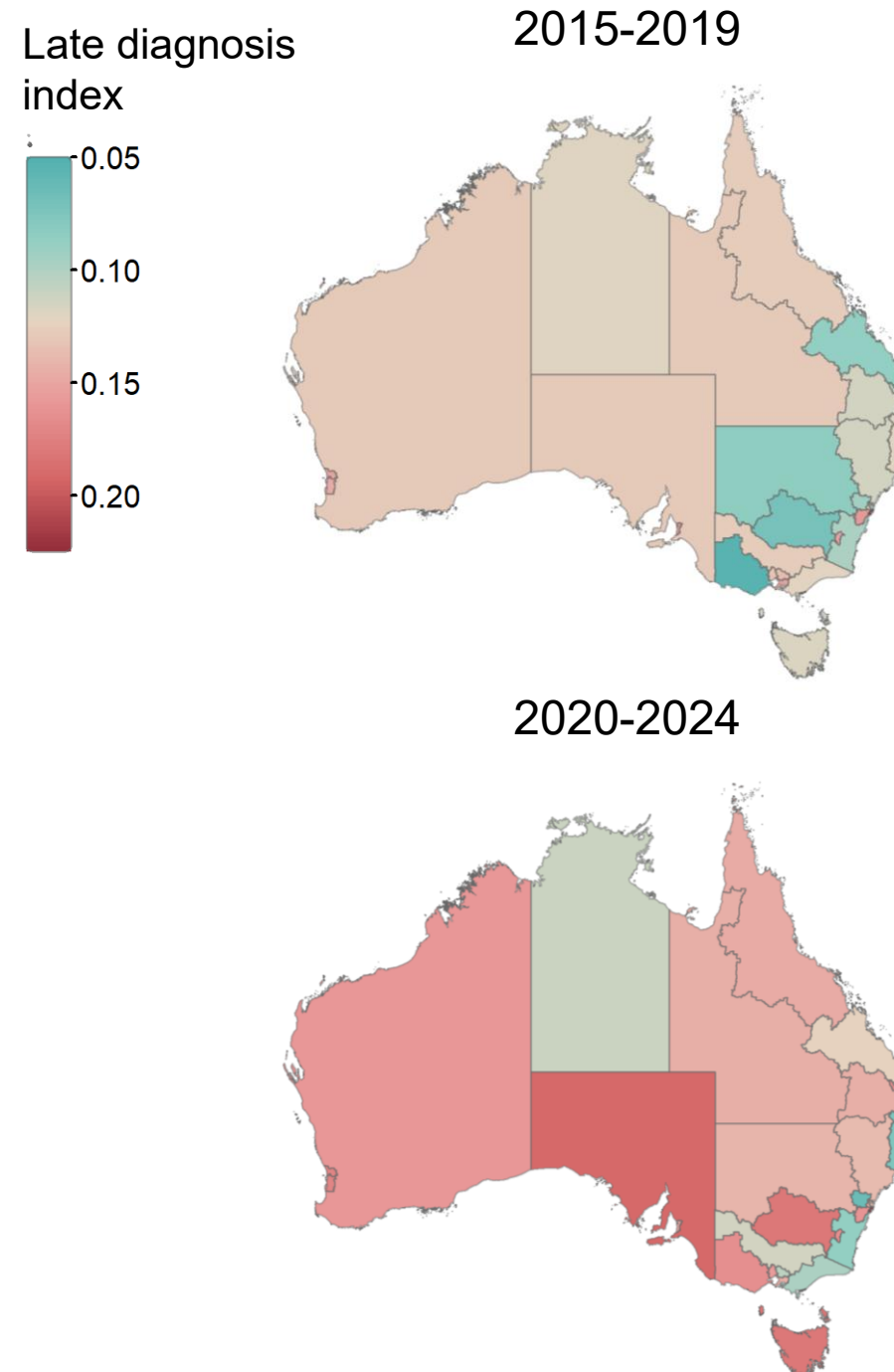
Late diagnosis index



# 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.



# Acknowledgements

- Richard Gray, Skye McGregor, Amy Kwon, Jonathan King
- All Australian states and territories for providing HIV surveillance data
- People living with HIV
- Australian Government Research Training Program Scholarship

# Thank you!