Spatial distribution of late HIV diagnoses among adults from 2014 to 2023 in Australia

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Background:
There has been an increasing trend in late HIV diagnoses in Australia from 2014 to 2023. This study aimed to explore the spatial distribution of late HIV diagnoses among adults between 2014-2023 in Australia to see where the HIV response could be focused.

Methods:
We obtained HIV notifications data from the National HIV Registry and conducted a descriptive analysis to examine patterns in late HIV diagnoses across Australia. The analysis was stratified by Primary Health Network (PHN) using individuals' postcode of residence at the time of diagnosis. Data from Tasmania (TAS) was not available and therefore excluded. Late diagnosis was defined as a CD4 count < 350cells/μL at diagnosis (excluding cases classified as newly acquired). We calculated the number and proportion of all notifications that were classified as a late diagnosis for each PHN.

Results:
Of the 7,913 new HIV notifications between 2014-2023, 90% (n = 7,099) were included in the study. Overall, 35% (n = 2,492) were classified as late diagnoses. The largest number of late diagnoses were found in Central and Eastern Sydney (n = 457), North Western Melbourne (n = 210), and South Eastern Melbourne (n = 171). The highest proportion of late diagnoses were found in Country SA (49%, 21/43), Australian Capital Territory (48%, 46/96), and Western Queensland (47%, 7/15). The proportion of late diagnoses showed an increasing trend over the study period, rising from 28% (274/982) in 2014 to 37% (241/648) in 2023 as the total number of notifications declined.

Conclusion:
Our study found substantial geographic disparities in both the number and the proportion of late HIV diagnoses across Australia's Primary Health Networks. Late diagnosis remains a persistent issue in several regions. Targeted and region-specific intervention strategies to increase timely HIV testing and diagnosis are needed to reduce late diagnoses and improve health outcomes.

Disclosure of Interest Statement:
None declared.

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