COMPARING HIV VIRAL LOAD AND CD4 COUNTS FOR PEOPLE RETAINED IN CARE TO PEOPLE WITH UNKNOWN OUTCOMES

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Background: People in HIV care with unknown outcomes may re-engage in care, transfer care elsewhere or remain lost to follow-up. This study examined whether people with unknown outcomes have different HIV viral load and CD4+ T-cell counts at time of disengagement from people retained in care. Furthermore, it assessed whether viral load and CD4 differed for those with unknown outcomes who returned to care or remained unknown.

Methods: Individuals with HIV viral load testing performed as part of routine care in 1/3/2011-31/5/2013 but not from 31/5/2013-28/2/2014 were classified as having unknown outcomes. The intervention to share patient data between sites and call patients established if they entered GROUP 1: transferred care elsewhere, returned to care at the original site, been retained in care with irregular viral load testing, or GROUP 2: declined care, died, remained unknown. Viral load and CD4+ T-cell counts for a representative 10% sample retained in care (GROUP 3) were compared with groups 1 and 2 with appropriate statistical tests.

Results: For 141 people with unknown outcomes identified across 4 Victorian HIV care sites 46 were assigned to group 1 and 95 to group 2 after the intervention. Group 3 comprised 256 retained people. Median (IQR) viral load copies/mL: were 698 (undetectable[UD]-46100), 149 (UD-21550) and UD (UD-UD) ($p<.01$), and proportion <50 copies/mL were 41.3%, 45.3% and 83.6% respectively ($p<.01$). Mean CD4+ cells/µL (+/- SD) were 520+/-229, 576+/-262 and 616+/-284 respectively ($p=.07$).

Conclusions: Individuals retained in care had lower viral loads compared to people with persistently unknown outcomes or people that had transferred or returned to care or in care with irregular viral load testing. People with unknown outcomes including those who re-engage or transfer care are at risk for worse clinical outcomes and onward transmission. These individuals should receive interventions to improve virological suppression across this population.

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