The HIV Quality of Care Data Ecosystem: Use of Data to improve Quality of Care for People Living with HIV

Rawson-Harris P[1], Hacket M[1], Price B[1], Leeder M[1], Aubichon C[1], Pierce A[1,2], Hoy J[1].

Background

A recent survey of people with HIV in Victoria, identified quality-of-care as an important priority. In addition to routine HIV monitoring, screening and management of comorbidities are essential for holistic care. Our aim was to create a data ecosystem embedding quality-of-care within the Alfred Health patient journey, and to ensure the selected key performance indicators (KPIs) reach 80% (by individual clinicians and the Victorian HIV Service).

Approach

7 KPIs were selected for initial benchmarking and included 1) On ARV treatment 2) Suppressed viral load (below 200 copies/ml 3) Blood Pressure 4) Weight, 5) Lipids (6) HepC serology (7) HepB serology. An ecosystem of data solutions was created to track the KPIs, based on data loads fed from CERNER electronic medical record plus systematic data entry of external pathology to the SQL HIV database. A number of dashboards have been built (HIV Quality of Care Tracker displaying KPI breakdown per doctor; Scheduling Tool which includes missing KPIs reported against list of patients attending upcoming clinic appointments for review by nurses; Unsuppressed Viral Load Report - a weekly alert listing of patients with detectable HIV viral load); Auditing Dashboards for review of patient notes, text mined for key terms.

Outcomes/Impact

With nursing support, improvements in 4 of 7 KPIs were observed. Both proportion on ART (97%) and suppressed viral load (96%) remained stable. Documentation of weight (44%→71%), BP (41%→70%), Lipids (55%→69%), hep B status (17%→70%) all improved. Over 6 months, 163 patients with viral loads >20copies/ml were identified, physicians notified, and retests organised. Patients who had fallen out of care were re-engaged in care.

Innovation and Significance

Although the 80% benchmark has not yet been reached, quality-of-care has been embedded in the patient journey, as well as a mechanism for benchmarking for physicians and their patient cohort across the clinic.