CHRONIC CONDITIONS OF PEOPLE LIVING WITH HIV: A QUALITY IMPROVEMENT PROGRAM

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BACKGROUND

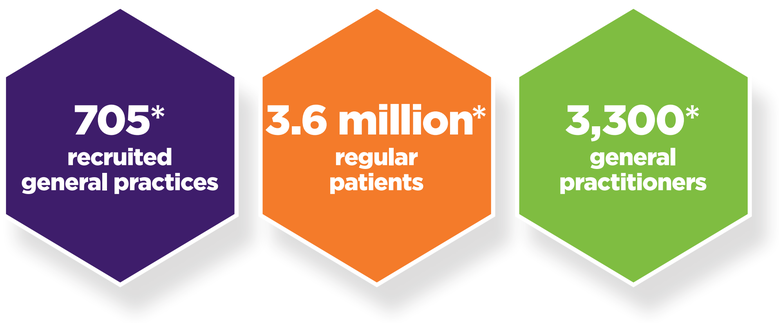
- The success of antiretroviral therapy has shifted HIV to a chronic disease, presenting new challenges for care.
- A range of HIV-associated non-AIDS comorbidities affect people living with HIV (PLWHIV).
- Cardiovascular (CV) and chronic kidney disease have emerged as important non-infectious comorbidities in the management of HIV.[1,2]
- This project aimed to understand and confirm the priority areas of chronic condition management in Australia. These priority areas informed the development of a quality improvement program.

APPROACH

This project had three components:

1. Multidisciplinary half-day symposium: to discuss and identify current issues in supporting the chronic condition health needs of PLWHIV. Attendees represented key opinion leaders in the field, GPs (s100 prescribers), sexual health physicians, infectious diseases physicians and two peak national bodies focused on the care of PLWHIV (ASHM and the National Association of People with HIV Australia (NAPWHA)).
2. MedicineInsight[a] report: Analysis of data on the care provided to PLWHIV by GPs.
3. Quality improvement program: Delivery of facilitated small group meetings to 15 general practices in New South Wales and Victoria, using data insights at national and individual practice level to inform discussion and identify areas for improvement.

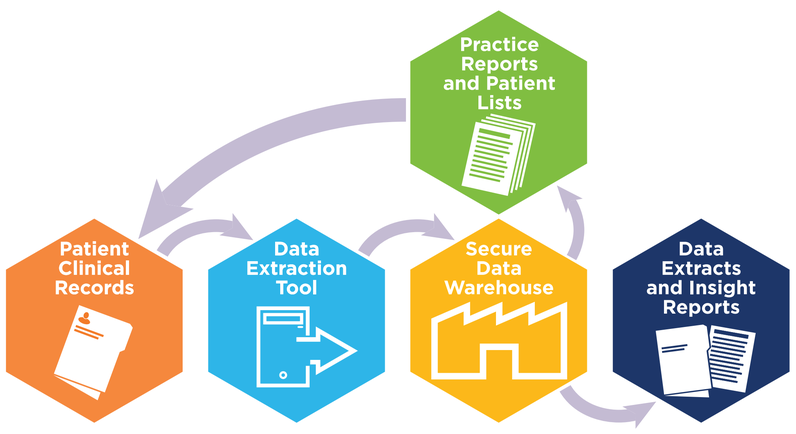
[a]WHAT IS MEDICINEINSIGHT?



*As of June 2018

MedicineInsight is Australia's leading large-scale general practice dataset. It extracts longitudinal, de-identified, whole of practice data (including historical data) from clinical information systems providing local, state and national level data insights.

Data analysis requires data to be recorded in the patient's clinical record in fields from which data can be extracted and is limited by the method of GP entry and decision rules applied within the project.



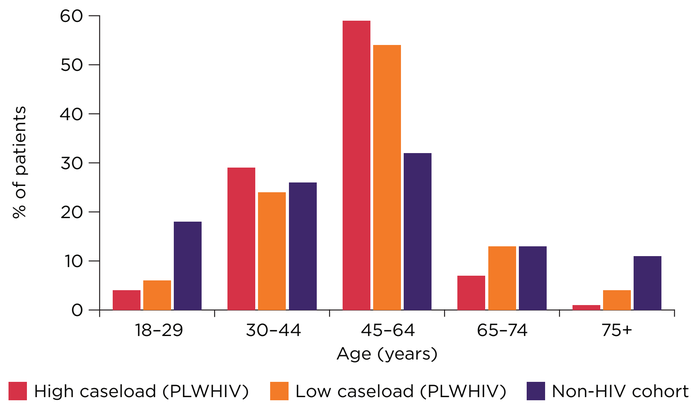
OUTCOMES

- The symposium recommended focusing on CV and renal risk factors such as blood pressure, cholesterol and eGFR.
- The MedicineInsight report included data insights from 315 general practices, caring for 4492 PLWHIV (approximately 18% of estimated PLWHIV in Australia).
- The quality improvement program was delivered to 101 health professionals in 15 general practices with high and low caseloads of PLWHIV in Sydney and Melbourne.

MEDICINEINSIGHT DATA: POINTS FOR REFLECTION

- Compared to the non-HIV cohort, a lower proportion of PLWHIV were in the 18–29 and 75+ age groups (Figure 1).

Figure 1. Age profile of patients[b] by cohort



[b] patient inclusion criteria: aged 18 years or over in September 2017, alive and with three or more visits in the past two years to a primary care practice that contributes data to the MedicineInsight program

- Analysis revealed differences in monitoring of cardiovascular and renal risk factors for PLWHIV compared with best practice guidelines and people without HIV.
- Differences were also seen between high (≥ 400 PLWHIV) and low (< 400 PLWHIV) caseload practices.

Table 1. Rates of risk factor monitoring compared with best practice guidelines

In line with ASHM[c] guidance			In line with RACGP Red Book guidelines[3]	
Risk factor (timeframe)	**High-caseload practices (n=3361)**	**Low-caseload practices (n=1131)**	**Risk factor** (timeframe)	**Non-HIV cohort (n=1896034)**
Blood pressure (in last year)[d]	67.0%	51.2%	**Blood pressure** (in last 2 years)	70.8%
Smoking (ever recorded)	72.2%	90.6%	**Smoking** (ever recorded)	84.6%
Lipids[e] (in last year)	54.2%	34.0%	**Lipids**[e,f] (in last 5 years)	65.5%
eGFR (in last year)	65.5%	42.8%	**eGFR**[g] (in last 2 years)	63.7%

c. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine
d. Based on European AIDS Clinical Society guideline recommendation
e. Recording based on presence of total cholesterol OR LDL-cholesterol OR HDL-cholesterol
f. Excludes patients < 45 years
g. Excludes patients < 30 years

- Australian guidelines recommend more frequent monitoring for CV and renal risk factors in PLWHIV[4] 'compared with the general population.[3] (Table 1)
- A higher percentage of PLWHIV attending high caseload practices had their blood pressure, lipid profile and eGFR measured and recorded in the previous 12 months, compared with PLWHIV at low-caseload practices. (Table 1)
- Outcomes of those with a measurement available/recorded:
  - 73% of PLWHIV in both high and low-caseload practices, had a systolic blood pressure of ≤140 mmHg. (Figure 2)
  - 16% and 20% of PLWHIV in high and low-caseload practices respectively, had an LDL cholesterol < 2 mmol/L. (Figure 3)
  - 28% and 41% of PLWHIV in high and low-caseload practices respectively, had an eGFR ≥ 90 mL/min/1.73m^2. (Figure 4)

Figure 2. Systolic blood pressure

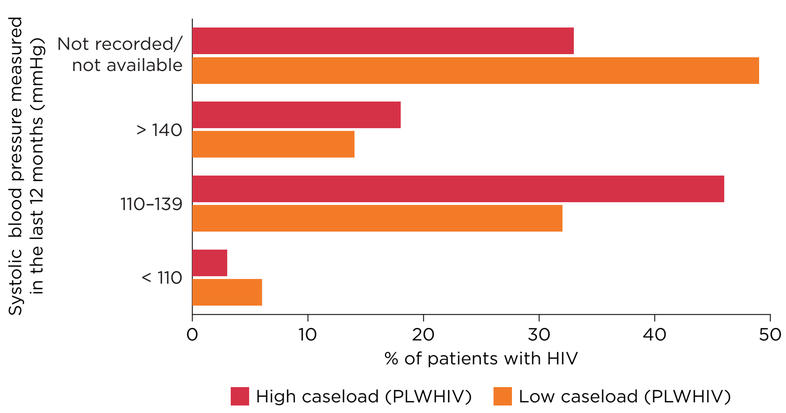


Figure 3. LDL-cholesterol

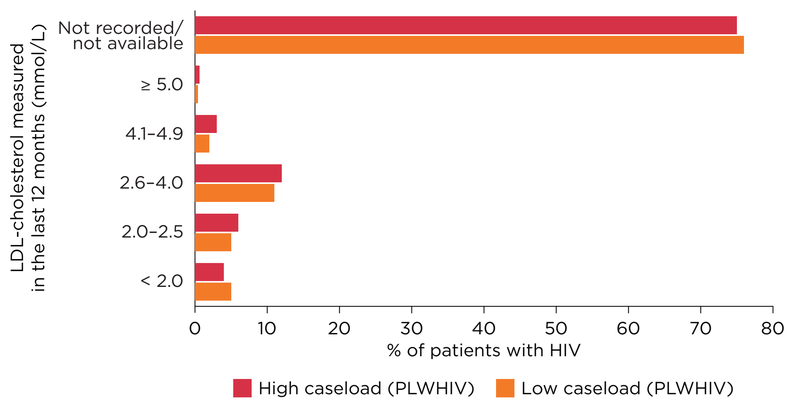
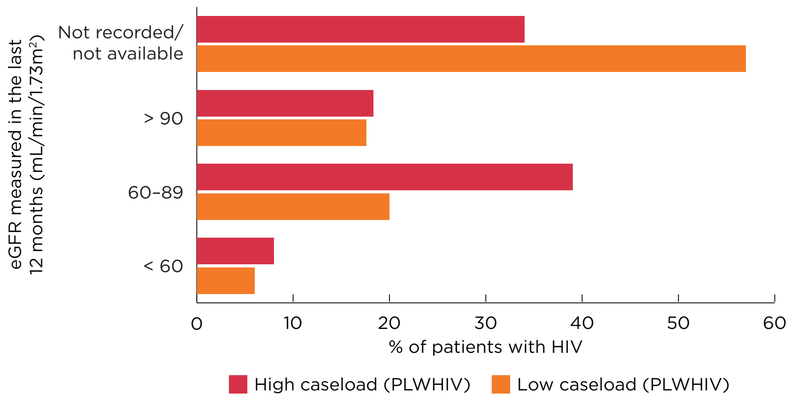


Figure 4. eGFR



INNOVATION AND SIGNIFICANCE

- The symposium informed a reflective quality improvement activity for general practices, aiming to improve clinical care for Australians living with HIV.
- When asked if they intended to change or had already changed their practice as a result of the visit, 50% of the GPs indicated intention to change and 10% reported they had changed their practice.
- Audit and feedback (A&F) is an effective intervention used widely in healthcare to monitor and change health professional behaviour to improve quality of care. Along with educational outreach, A&F is considered one of the most effective interventions to influence care.[5]
- Improvements in monitoring frequency of lipid profile, blood pressure and eGFR could lead to improved health outcomes and quality of life for PLWHIV.

DISCLOSURES

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