

Utilisation of an electronic medication record (eMR) HIV Comorbidity Tool in a sexual health service in Sydney: Implications for service delivery

Authors

Miranda Schembri, University of Sydney
Denise Wong, University of New South Wales
Dr Rick Varma, Sydney Sexual Health Centre, SESLHD, Kirby Institute, Sexual Health Program, UNSW

Contact: Miranda Schembri, University of Sydney
Camperdown NSW 2006
miranda.schembri@health.nsw.gov.au

Acknowledgements

This research was undertaken on Gadigal land and is being presented on the land of the Gubbi Gubbi and Jinibara peoples. We acknowledge the Traditional owners of these lands and pay our respects to Elders past, present and emerging.

We thank the people living with HIV who participated in this research project. The fight against HIV and AIDS is indebted to people living with HIV both past and present.

Background

People living with HIV are at a higher risk of developing comorbid conditions. To facilitate identification of these risk factors, Sydney Sexual Health Centre (SSHC) uses a screening tool of 16 domains which is completed by clinicians in HIV+ patients ≥ 40 yrs. SSHC also introduced a new dedicated HIV Comorbidity clinic, which is a longer appointment to improve tool utilisation. The aim of this project was to analyse the use of the tool by SSHC clinicians and the utility of the new clinic type. A secondary aim was to characterise the mental health and alcohol use profiles of the cohort.

Methods

Demographic and tool usage data was collected retrospectively from SSHC's eMR for all HIV+ patients ≥ 40 yrs who visited between 17/12/20 - 9/11/21. Data was analysed using excel and online T-test/Chi-squared calculators. The tool could be completed in routine appointments or a dedicated clinic. Each element of the tool was considered complete if it there was a documented answer from during the appointment or if it had been answered in the last 12 months. It is important to note that the completion rate represents patients who were questioned about their most recent cancer screening, regardless of whether the patient was up to date or not. The "DARE completed when due" element of the tool is a measure of the percentage of patients who were identified to be overdue, and subsequently had a DARE undertaken during the appointment.

Results

266 tools were completed with only 9% of these consults being in a dedicated HIV Comorbidity clinic. Mean completion rate of all tool questions was 64%. Cancer screening questions had the highest completion rates as seen in Table 1.

Table 1: Overall completion rate of each element of the eMR HIV Comorbidity Tool

Tool Element	Completion Rate (%)
Direct Ano-Rectal Exam (DARE) due?	87
DARE completed when due	56
Breast screening due?	85
Colorectal Cancer (CRC) screening due?	85
Mental health screen	85
Smoking status	85
Alcohol frequency	79
Presence of Renal Risk Factors	77
Standard Drinks on a Typical Day	75
Frequency of >5 drinks	75
Alcohol intake score	73
Vaccination review	66
Weight	61
BMI	60
Blood Pressure	34
Fracture Risk Assessment Tool (FRAX)	9
Cardiovascular Disease (CVD) Risk calculation	4

Table 2: Statistically significant differences in completion rate between Dedicated and Routine Appointments. Appointments where no elements of the tool were completed were not included.

	Completion Rate when tool used (%)		
	Dedicated HIV Comorbidity Appointment	Routine HIV Monitoring Appointment	P value
Blood Pressure	61	37	0.03
FRAX	25	4.6	0.02
CVD Risk Calculation	30	1.1	0.03

The tool was more likely to be used by clinicians if a patient was booked into a dedicated comorbidity clinic rather than a routine HIV monitoring appointment (77% vs 54%). Additionally, overall higher completion rate of the tool was noted in dedicated HIV comorbidity appointments rather than routine HIV appointments (74% vs 71%). The difference between appointment types was most prominent in the completion of blood pressure, FRAX and CVD Risk Calculation, as seen in Table 2.

Of the total tools completed, 92% were by doctors and 8% by nurses. Nurses spent more time with the patient than doctors in the appointments (mean 43.5 mins vs 37 mins). Doctors were more likely to ask about cancer screening and medical risk factors, while nurses were more likely to complete clinical measurements and risk score calculations.

Table 3: Differences in completion rate between staff groups

	Completion rate by staff group (%)	
	Doctors	Nurses
CRC Screen	88	57
DARE	88	76
Renal Risk Factors	81	58
Blood Pressure	28	52
CVD Risk Calculation	1	31
FRAX	4	24

There was a high rate of mental health screening (85%) using the comorbidity tool, with 15% of patients reporting a mental health issue. Of those reporting an issue, 26% had a known history of mental illness, 17% reported a new depressed mood, 14% reported life stressors and 9% reported a loss of libido.

Alcohol-use was also well screened (73%), with 31% of the screened cohort at increased risk of harm due to alcohol intake.

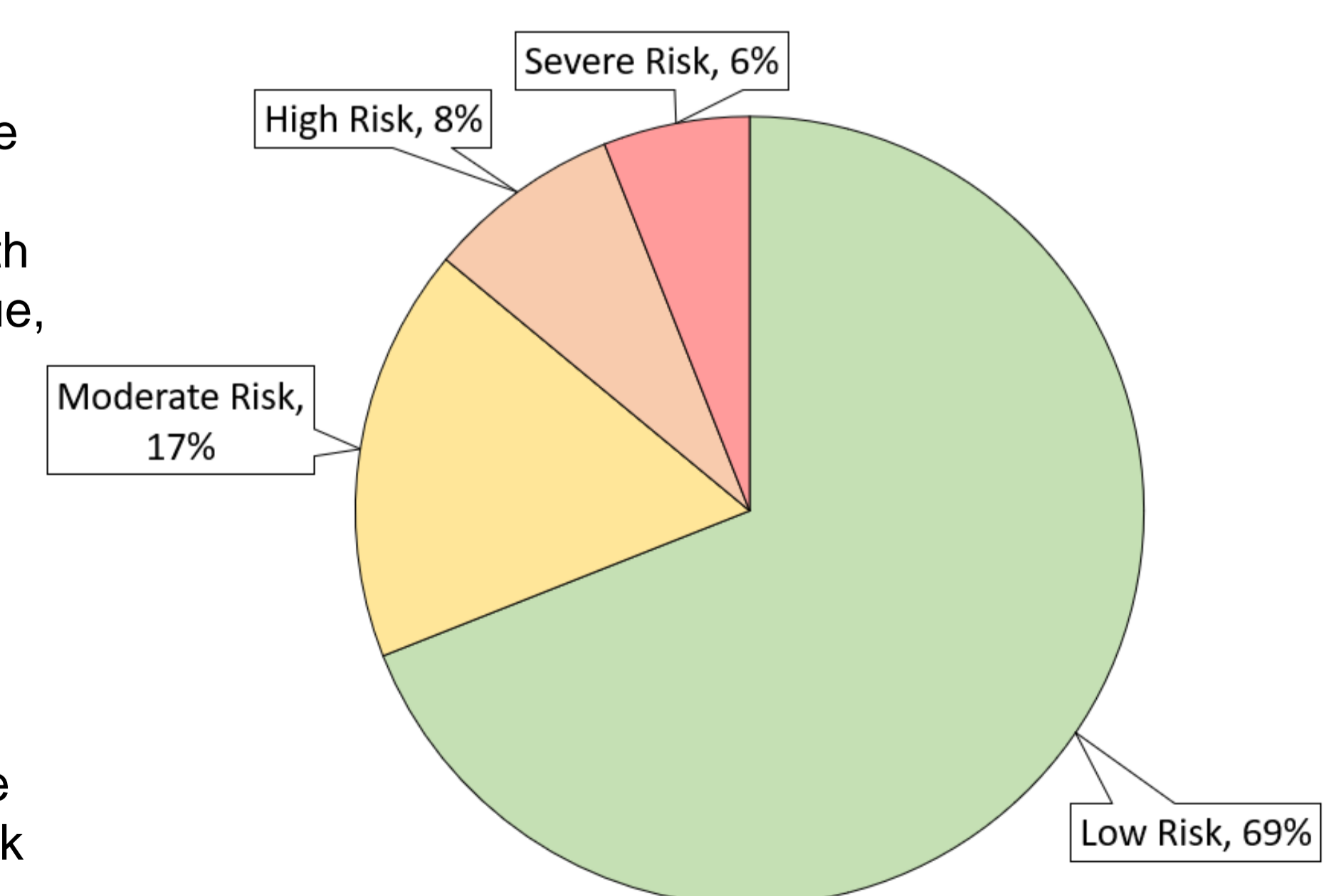


Figure 1: Patient alcohol-intake risk categories based on the AUDIT-C scoring system

Conclusions

Overall, we identified high completion rate of the tool by clinicians and were able to identify specific elements which were poorly completed – particularly aspects relating to CV risks and implementation of risk calculators. Further investigation will be required to identify barriers to completion, such as clinician time and engagement in the process and to assess impact of the dedicated comorbidity appointment on tool completion rate, holistic care, health outcomes and ultimately quality of life.