

An Audit of the Routine Monitoring and Assessment of HIV Patients in SVUH



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Introduction and Methodology

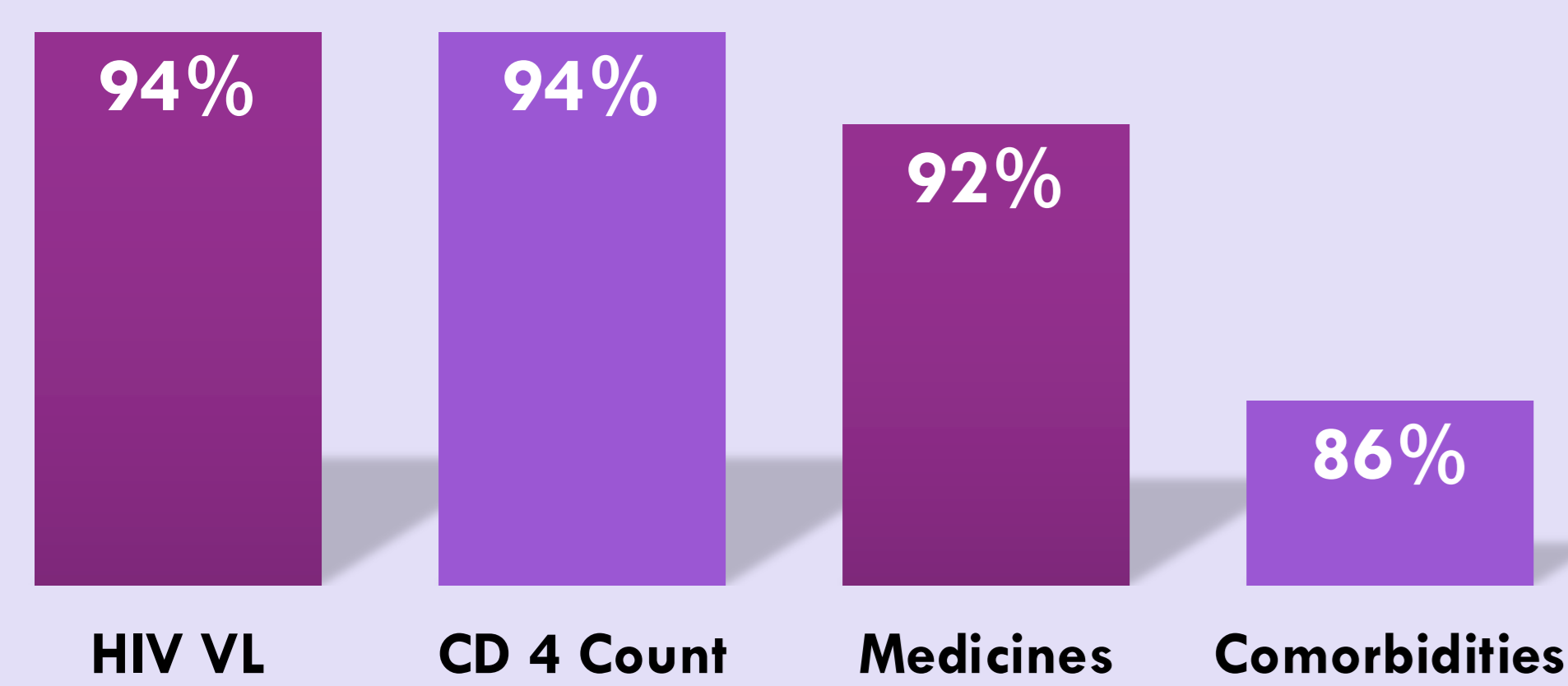
The European AIDS Clinical Society (EACS) guidelines were created to promote consistency and excellence in HIV care. HIV is a chronic but treatable condition however the key to active management lies in monitoring co-morbidities and complications of treatment.

An audit of 50 adults who attended SVUH for specialist HIV care over a three month period (1st September- 30th November) was performed. Data was collected manually and recorded using a Microsoft Excel spreadsheet. This retrospective study included demographic details (age and sex) and whether thirty-six pre-defined data points, as listed in the EACS guidelines were measured or recorded over the previous year. These included medications, co-morbidities, vaccination, social and occupational history, sexual and reproductive health, CD4 count, viral load, and assessment of bone and cardiovascular health.

Results

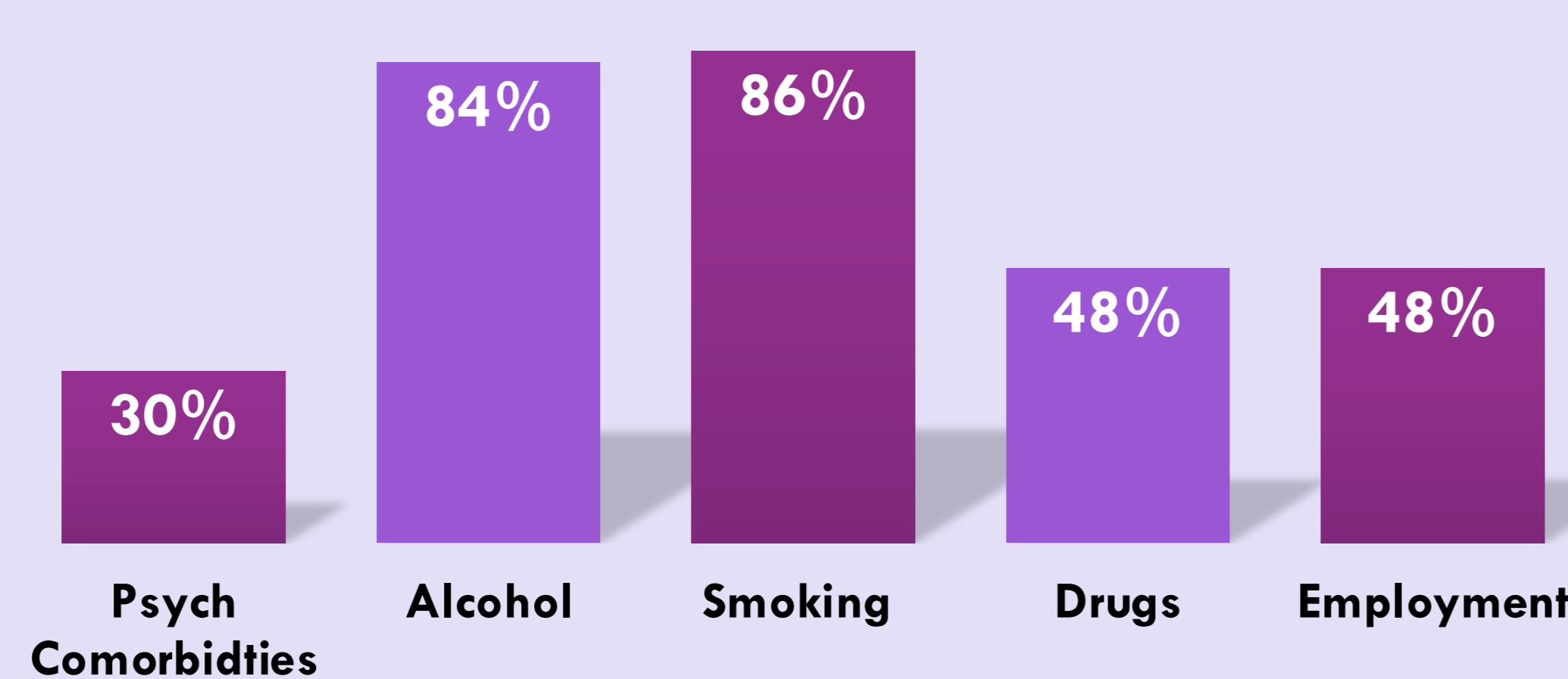
Data was collected on 50 patients attending SVUH for specialist HIV Care. 76% (n=37) were male and 24% (n=13) were female. The following figures relate to whether the pre-defined data points were recorded as opposed to performed. Listed hereafter are samples of the the thirty-six pre-defined data points studied in this audit.

Disease Activity



The HIV Viral Load and CD4 counts are important parameters used as a guide to clinical treatment. The CD4 count is a very reliable indicator of the immunological status hence determining the necessity for initiation of prophylactic treatment against opportunistic infections.

Psychological & Social History

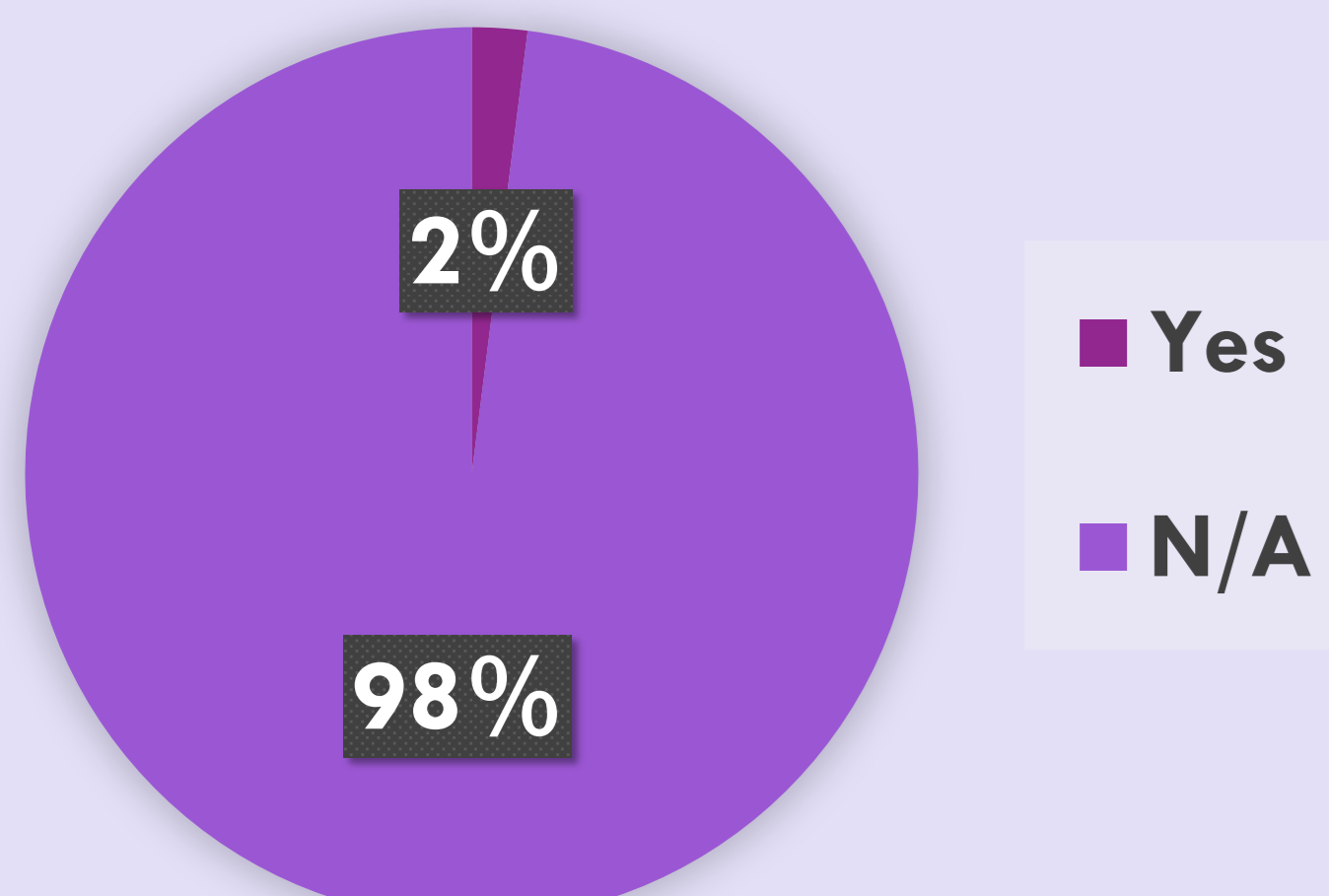


Some physicians refer to the "triple diagnosis" of HIV, psychiatric disorders and substance abuse. It is therefore of utmost importance that we obtain a thorough history in order to adequately treat all aspects of the patient's illness utilising integrated treatment services.

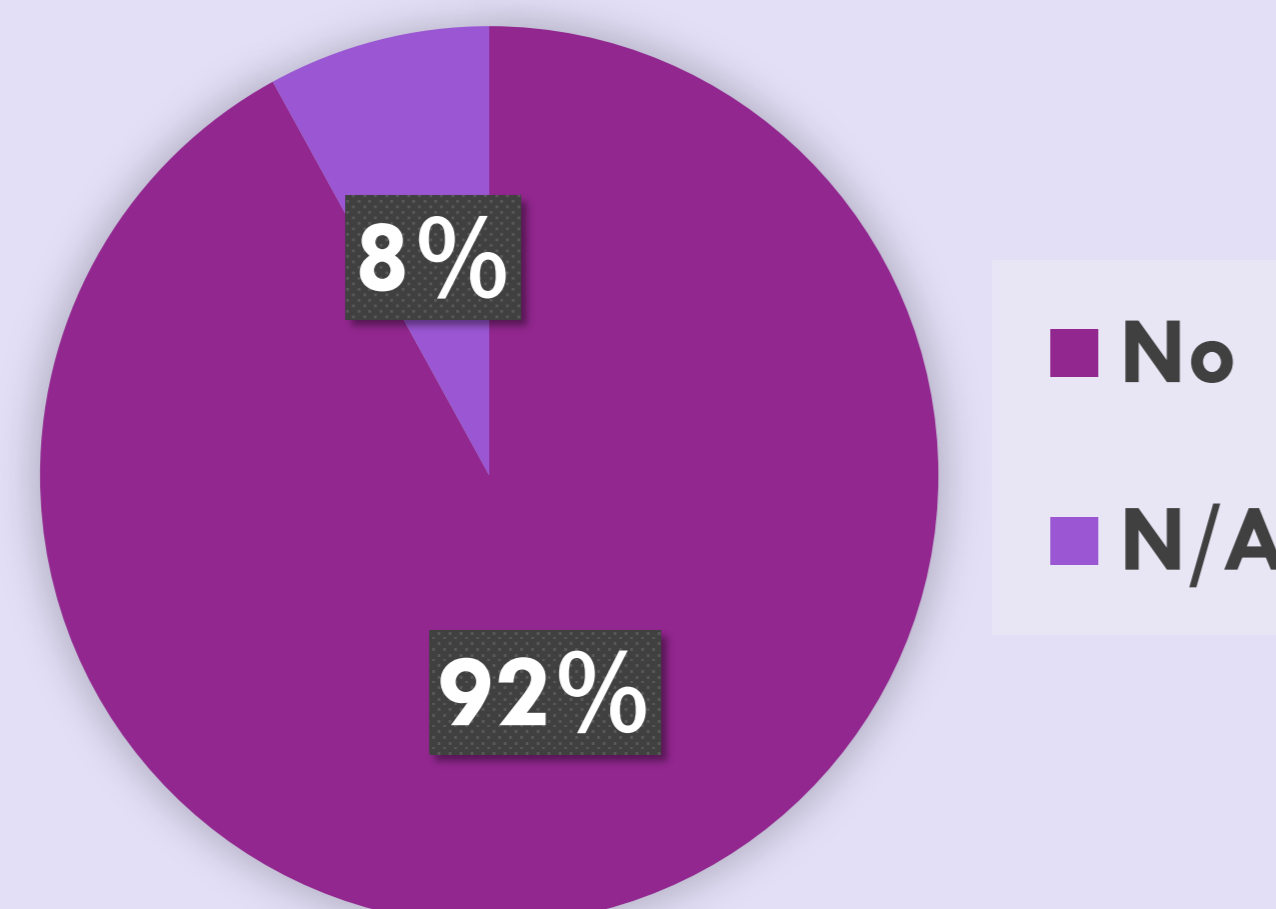
Liver Health

Liver-related disease has been estimated to account for 13–18% of deaths in HIV-infected patients and is one of the leading causes of non-AIDS-related death. Indinavir specifically can cause an increase in the amount of HMG CoA Synthase leading to increased cholesterol and ultimately NAFLD. Treatment with HAART may precipitate flares of hepatitis in up to 18% of patients and appears to lead to transient increases in liver enzymes, HCV replication rates and viral loads. Though often self-limited, these flares may lead to hepatic decompensation in patients with pre-existing cirrhosis

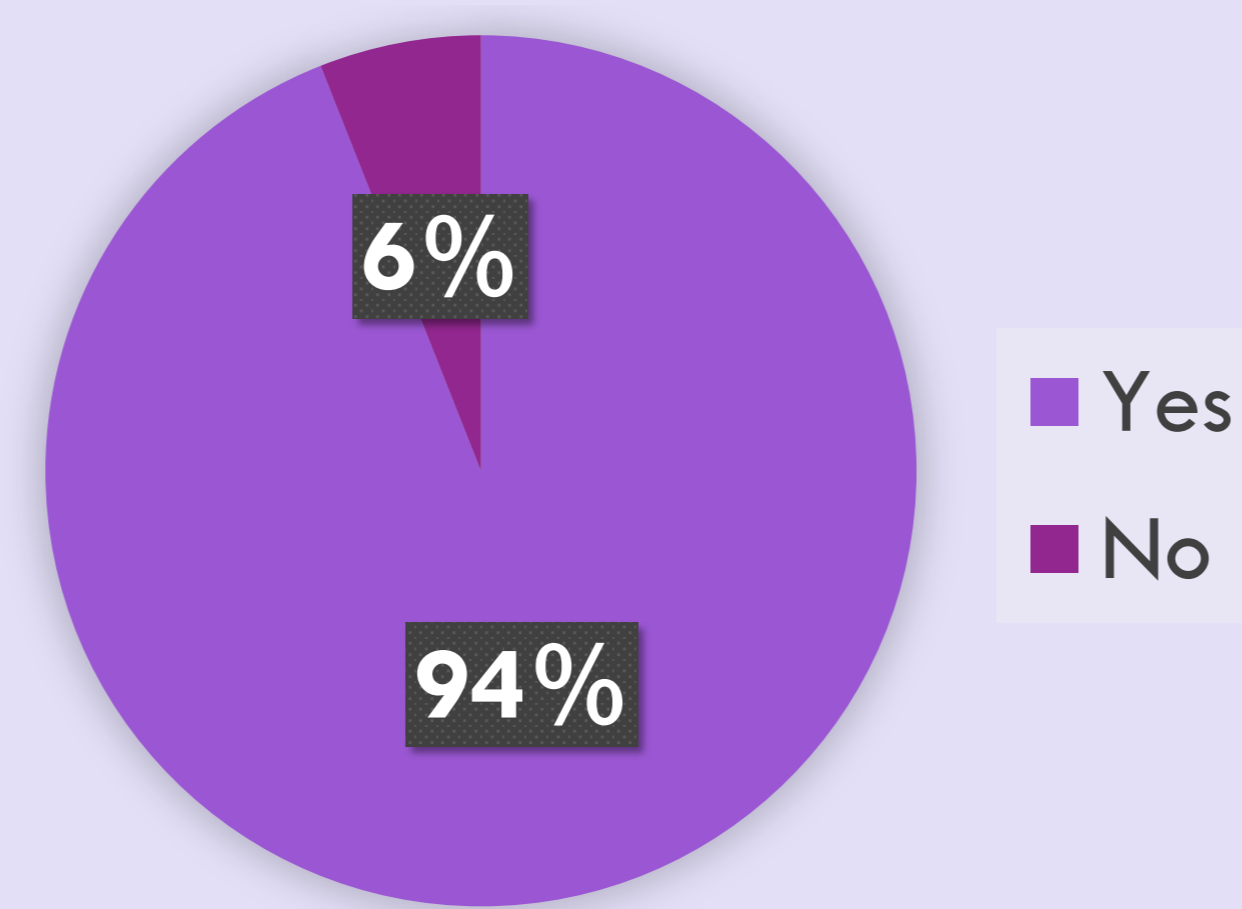
US if cirrhotic



Fibroscan if Hep B/C

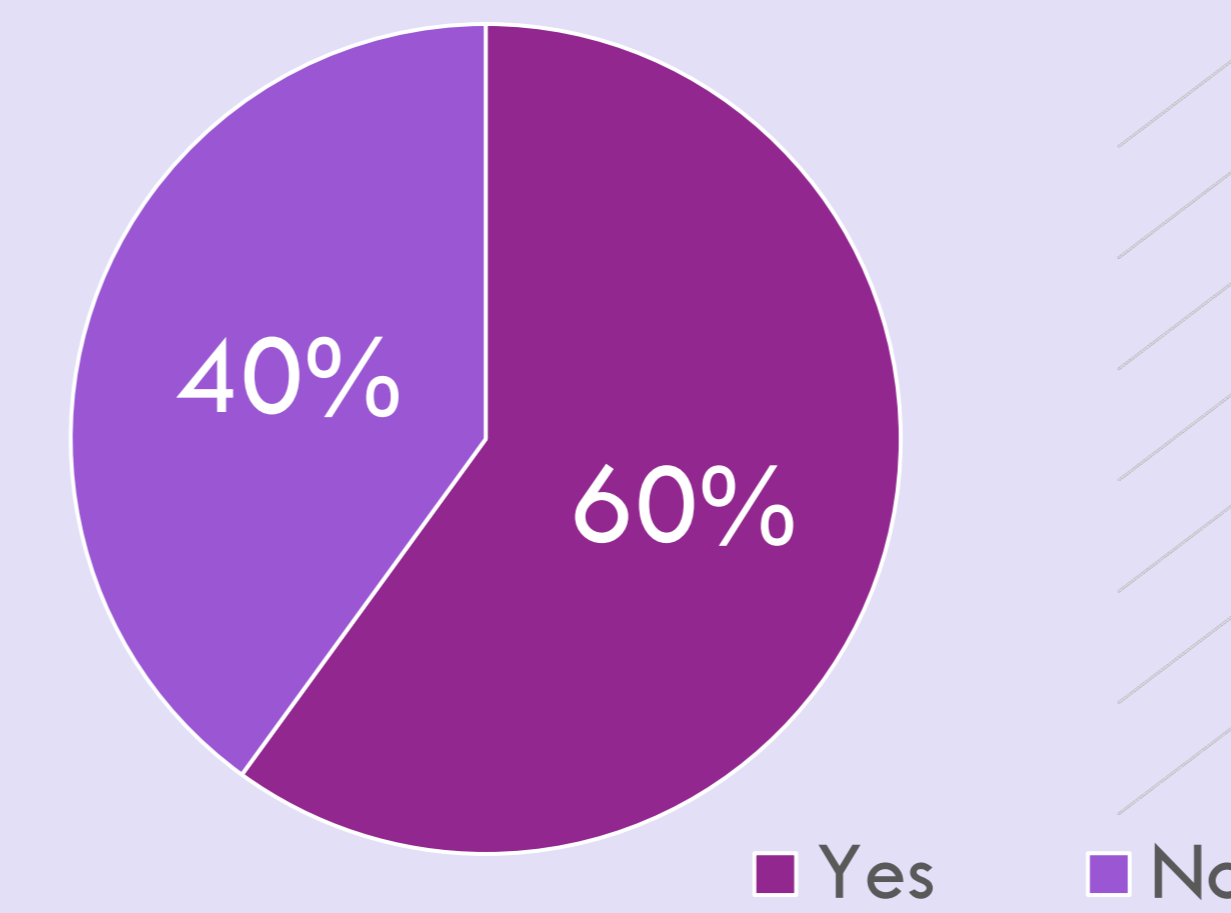


Liver Function Tests

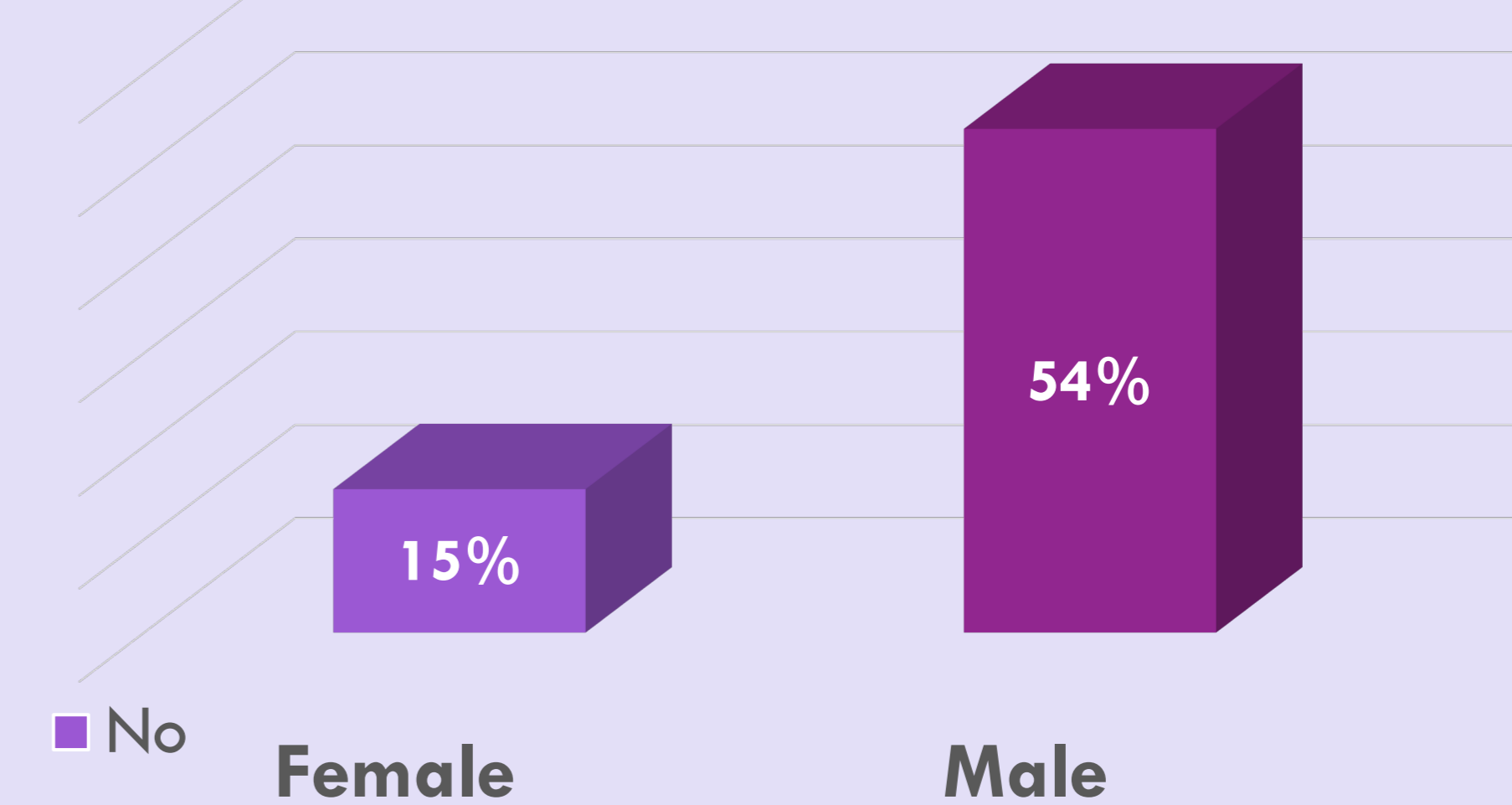


Women's Health

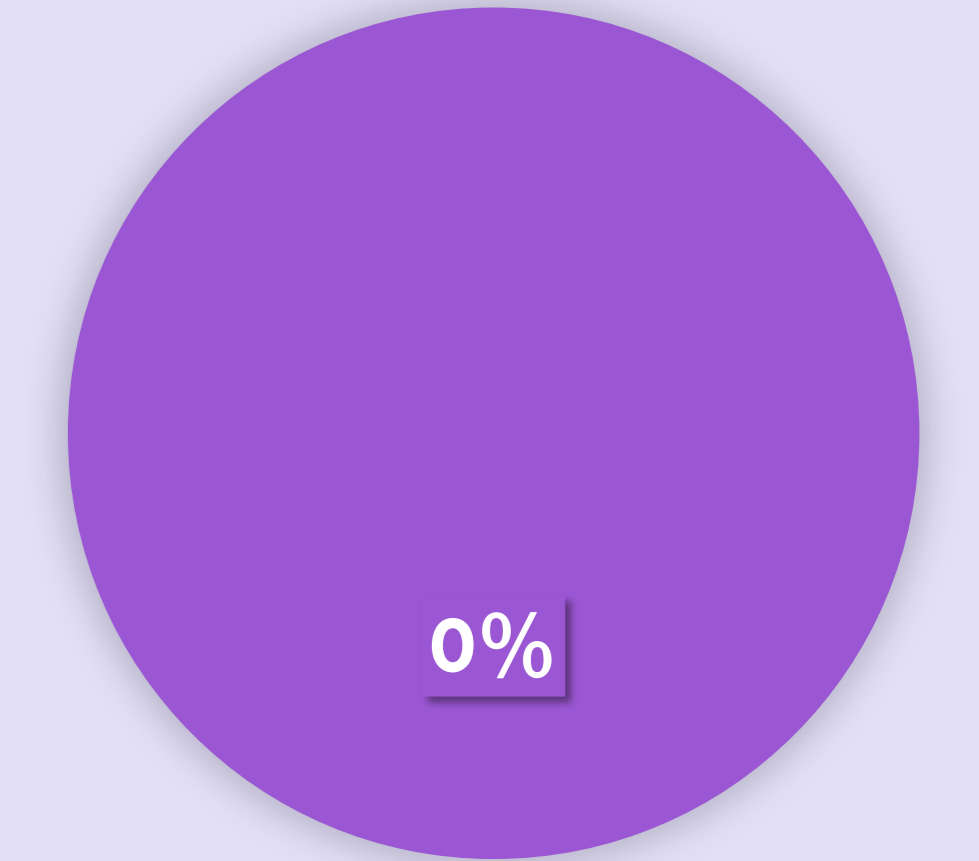
Cervical Smear Test



STI Screening Comparison



Mammography

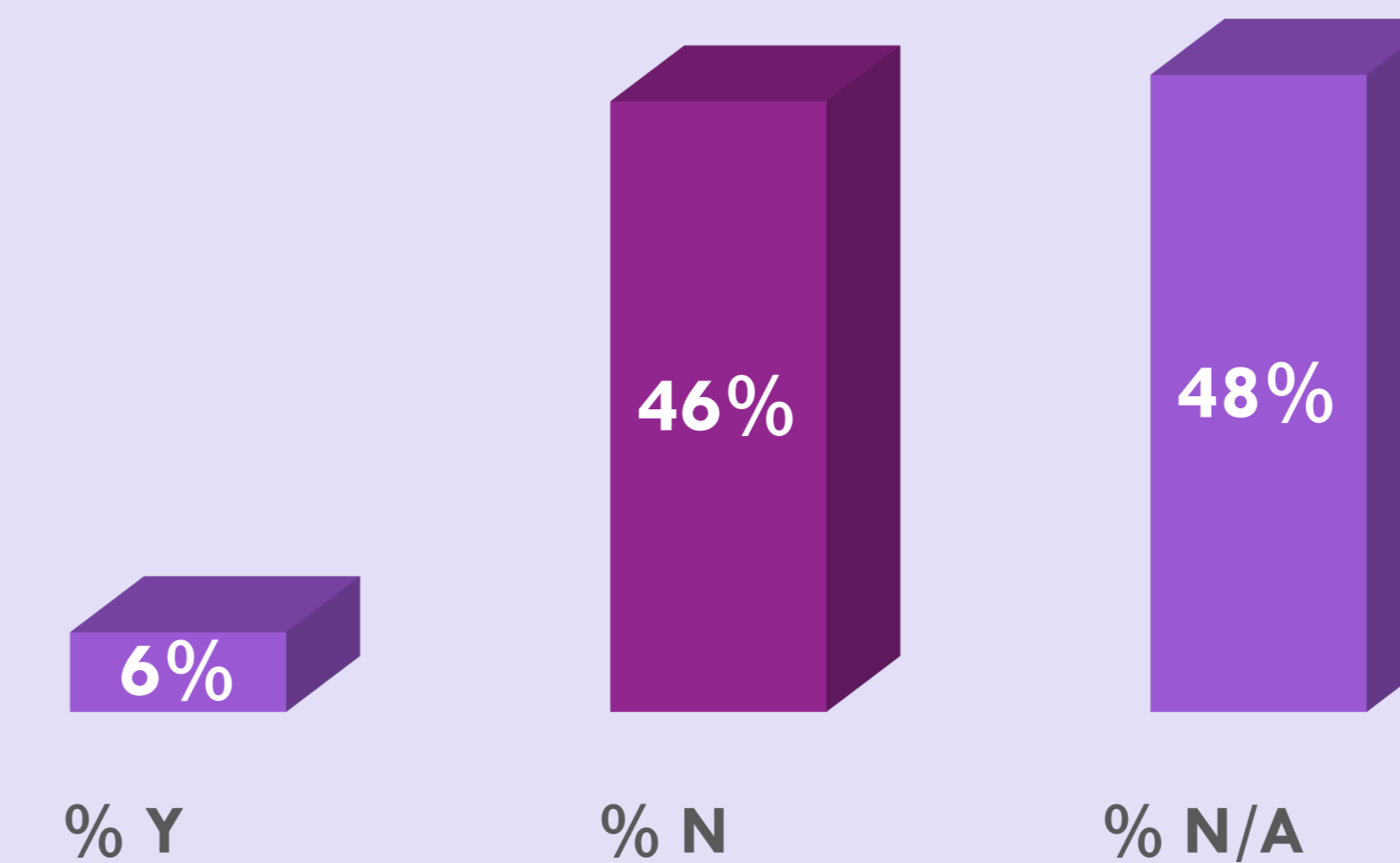


Despite more men being infected with HIV the classic risks posed to all women remain. Cervical screening in particular is vitally important as HIV causes increased rates of cervical dysplasia. Women with HIV are more likely to be infected with HPV, and more likely to harbour multiple concurrent HPV infections

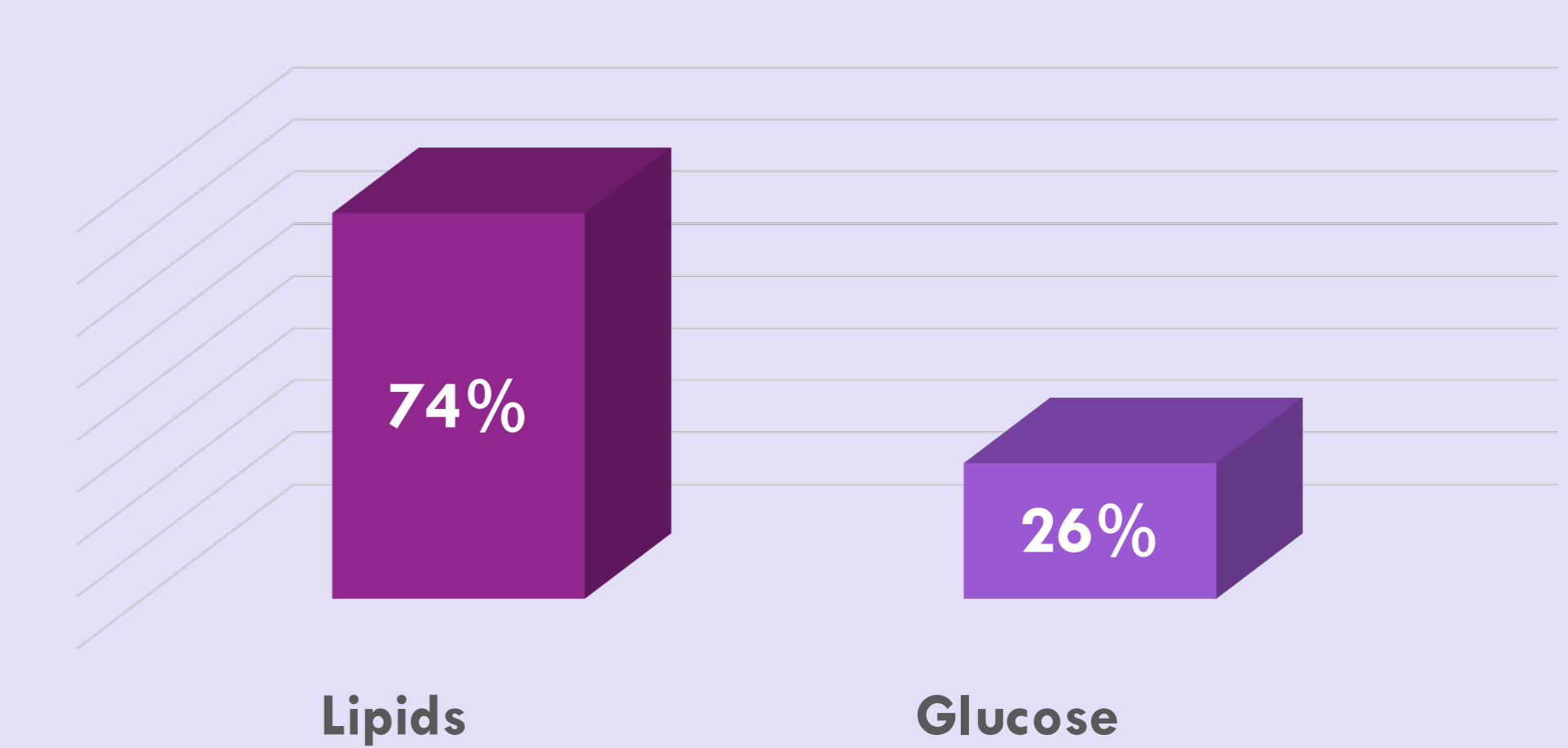
Cardiovascular Health

Cardiovascular health is extremely important in HIV patients as they have a 1.5 – 2 fold risk of acute Myocardial Infarction or Coronary Artery Disease. Studies have found that HIV patients develop clinical cardiovascular disease 10 years prior to the control population – the cause of which is multi-factorial involving traditional CVD risk factors and factors associated with the virus itself; namely immune activation and chronic inflammation as well as the metabolic disorders relating to ART therapy particularly protease inhibitors

CVD Risk - 2 Years (over 40M/50F)



Lipids and Glucose



Areas documented well

- ❖ CD4 Count- 95 %
- ❖ Viral Load- 94 %
- ❖ Medicines - 92 %
- ❖ Co-morbidities- 86 %
- ❖ Haematology/ Biochemistry:
 - ❖ FBC- 98 %
 - ❖ U and Es- 98 %
 - ❖ LFTs- 94 %
 - ❖ Bone Profile – 80 %

Areas requiring improvement

- ❖ **Cardiovascular Health**
 - ❖ CVD Risk – 11.5 %
 - ❖ Glucose - 26 %
- ❖ **Renal Health**
 - ❖ Urine Dipstick-10 %
- ❖ **Mental Health**
 - ❖ Psychological co-morbidity- 30 %
- ❖ **Bone Health**
 - ❖ 0 % Frax Test
- ❖ **Women's Health**
 - ❖ Smears – 60 %
 - ❖ STI Screening- 15 % (44% overall)
 - ❖ Mammography- 0 %

Conclusion

This audit highlights various areas that require improvement in documentation and monitoring of HIV patients attending SVUH including STI testing in females and assessment of cardiovascular health. HIV is a chronic but treatable condition however the key to active management lies in monitoring co-morbidities and complications of treatment.