

# How well do we manage type 2 diabetes in HIV?

## A service evaluation

Dr H Smith, Dr P Hine, Dr M Beadsworth, Dr P Weston, Dr M Chaponda  
Royal Liverpool University Hospital, UK

### Background

- Studies demonstrate a higher prevalence and incidence of type 2 diabetes mellitus (T2DM) in people living with HIV.
- Both HIV and antiretroviral therapy (ART) are suspected risk factors.
- Poor management of T2DM may threaten the gains in healthy life expectancy offered by ART.

### Aim

- To assess prevalence and management of T2DM in people living with HIV attending a tertiary hospital.

### Materials and Methods

- **Study design:** Cross-sectional service evaluation
- **Setting:** UK teaching hospital 2018.
- **Inclusion criteria:** HIV-positive people with either
  - a) an established diagnosis of T2DM as recorded by their clinician;
  - b) high risk of developing T2DM as indicated by HbA1c levels > 42 mmol/mol.
- **Exclusion criteria:** T1DM, gestational diabetes.
- **Data extraction:** case note audit, electronic records.

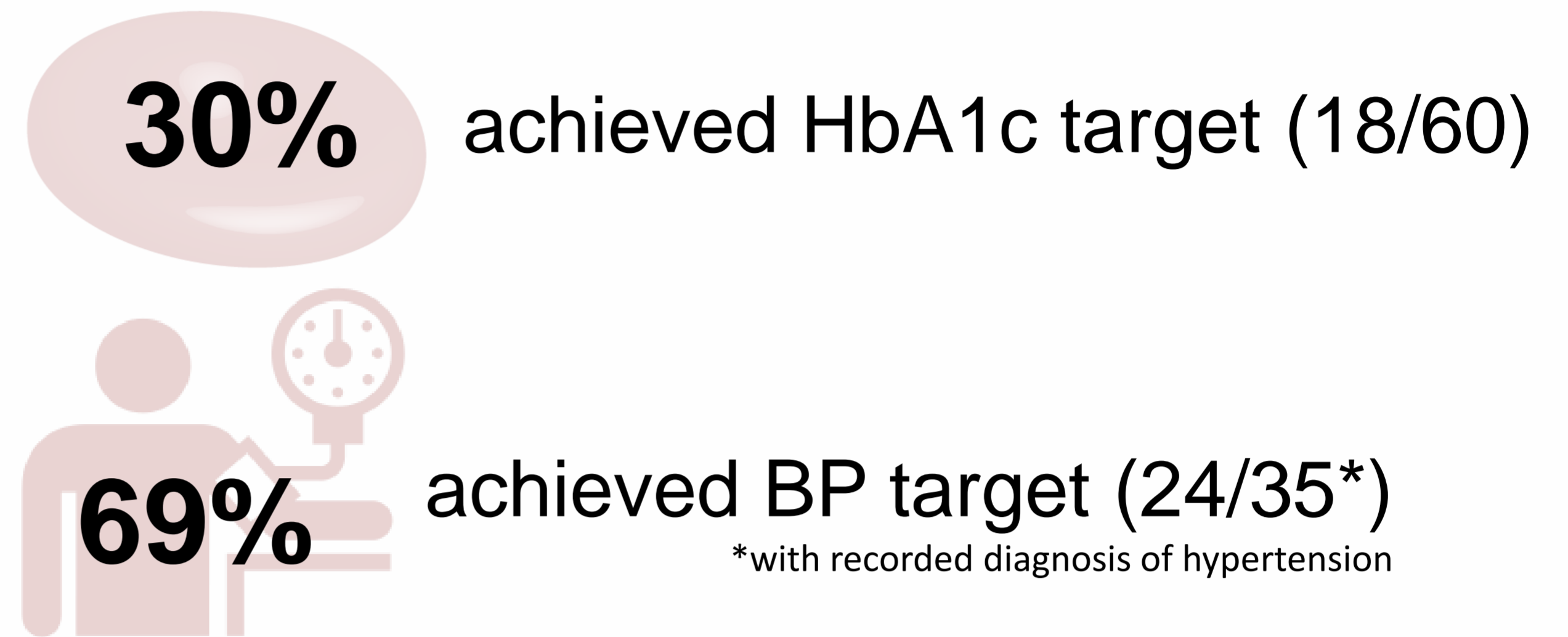
### Results

- Of 1123 patients in our cohort:
  - 53 patients had T2DM
  - 7 patients were high risk for T2DM
- Age adjusted prevalence of T2DM in our cohort = 3.4%
- For the 60 patients with T2DM / high risk:
  - Median age 53 (range 25 – 70)
  - n = 42 (68%) male
  - n = 48 (80%) were non-smokers
  - 60 (100%) prescribed ART
  - 59 (98%) had undetectable viral load

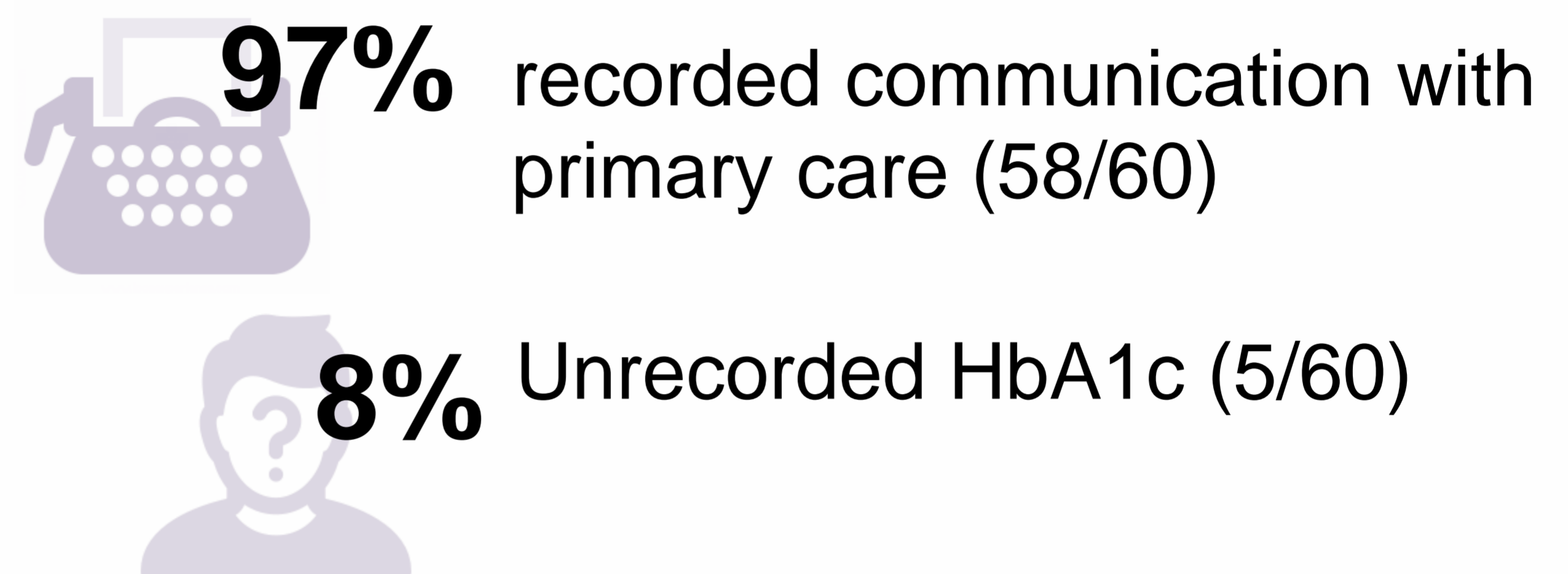
### Conclusions

- Prevalence of T2DM and non-diabetic hyperglycaemia was lower in our cohort than UK national average (6%), indicating possible under-diagnosis.
- HIV disease was well controlled in all but one patient. However, we identified suboptimal glycaemic and hypertensive control and suboptimal prescribing of ART in high-risk groups.
- We need to better manage diabetes in HIV to reap the benefits of gains in healthy life expectancy provided by antiretrovirals. This might be achieved through clinician and patient education, or integration of HIV and diabetes services.

### Outcome measures



### Process measures



### Prescribing: ART

13% received abacavir which may confer higher cardiovascular risk (8/60)

21% of patients with renal impairment received tenofovir-disoproxil or atazanavir (4/19)

1.7% received co-prescription of dolutegravir and 1g daily metformin (1/60)

### Glucose-lowering

