

HIGH DOSE ANTIPSYCHOTIC TREATMENT (HDAT) - AUDIT WITHIN A COMMUNITY MENTAL HEALTH TEAM (CMHT)

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Background

The consensus statement (CR190) of The Royal College of Psychiatry states that the benefit of prescribing HDAT does not outweigh the risk of the increased side effect burden.¹ HDAT is defined as the “daily dose of a single antipsychotic exceeding the upper limit for that drug as stated in the Summary of Product Characteristic (SPC) or British National Formulary (BNF),” and as the cumulative daily dose of two or more antipsychotics (for combined prescription). The prevalence of HDAT has been shown to vary widely and protocols for monitoring poorly implemented.¹

In 2018, we completed a baseline survey of the prevalence of HDAT within our CMHT. We assessed our prescribing practice as compared to seven best practice audit criteria, which were subsequently adopted. Our aim is to resurvey closing the audit loop to 1) establish the current prevalence of HDAT and 2) assess the impact the intervention has had on prescribing practice.

Methods

Multi-disciplinary case notes for all registered patients were studied. A database was created including sociodemographic details, chart diagnosis, and medication. The proportion of patients prescribed antipsychotic medication was identified. The dose of each medication was converted into a percentage of BNF maximum recommended dose for that drug.³

For combined antipsychotic prescription, the cumulative dose was obtained adding the single percentages together. Exceeding 100% was regarded as HDAT. All HDAT patients were assessed against identified audit criteria as outlined by the Humber NHS Foundation Trust (Table 1). The ‘PRN monitoring’ criteria was excluded as not currently relevant after a review of the HDAT population.

Table 1. Audit Criteria²



Possible Audit Criteria for Clinical Audit / Medicines Use Evaluation of the Guideline

Criterion Statement	Standard	Exceptions
All patients who are prescribed high-dose antipsychotics are identified in the notes	100%	None
Each patient identified as being on high-dose antipsychotics has a completed high-dose antipsychotic monitoring form	100%	None
There is evidence that after initiation of high-dose antipsychotic therapy, there was a repeat ECG within 1 week and 1-3 monthly thereafter	100%	High-dose antipsychotic treatment discontinued. Reason(s) for not performing ECG documented in notes.
The ECG report can be examined for the presence/absence of: Ischaemic Heart Disease Left Ventricular Hypertrophy in addition to QT	100%	
There is evidence that ‘prn’ antipsychotic medication is under review	100%	None
The patients’ notes contain details of the treatment plan incorporating high-dose antipsychotic treatment and a rationale for treatment	100%	None
There is evidence of ongoing monitoring of urea, U&Es and LFTs during high-dose antipsychotic treatment	100%	None

Results

Of a total of 246 patients, 177 (72%) were prescribed antipsychotic medication. Of these, 14 (8%) were in receipt of HDAT. This is compared to 19 (9%) in the initial audit.

The average cumulative dose ranged from 1% to 168% (mean=70%) for oral antipsychotic (single/combined), 1% to 193% (mean= 50%) for depots and 20% to 257% (mean=95%) for combination of oral and depot. This compares with ranges of 1.6% to 215% (mean=70%) for oral antipsychotic (single/combined), 0.04% to 100% (mean= 25.8%) for depots and 21% to 425% (mean=119.6%) for combination of oral and depot in the baseline audit (Figure 4).

7/19 (36.8%) patients from the baseline survey remained on HDAT. Similar to the baseline survey, no patient met all seven audit criteria but there was better adherence overall with best practice guidance. Blood and ECG monitoring were the most consistent parameters measured.

Figure 1. Number of antipsychotics prescribed per patient (N=177)

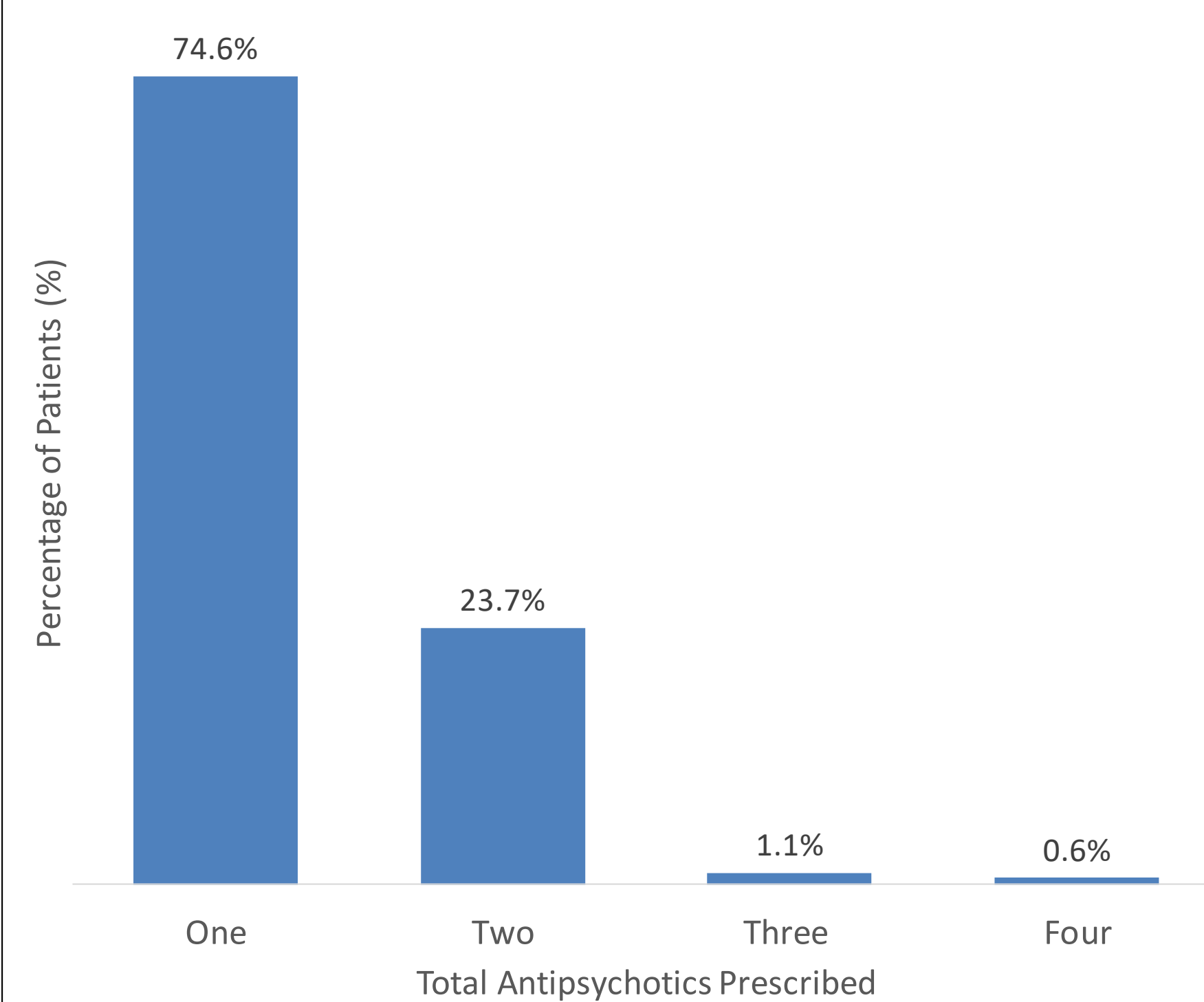


Figure 2. Antipsychotic medication formulation in Survey 2 (N=177)

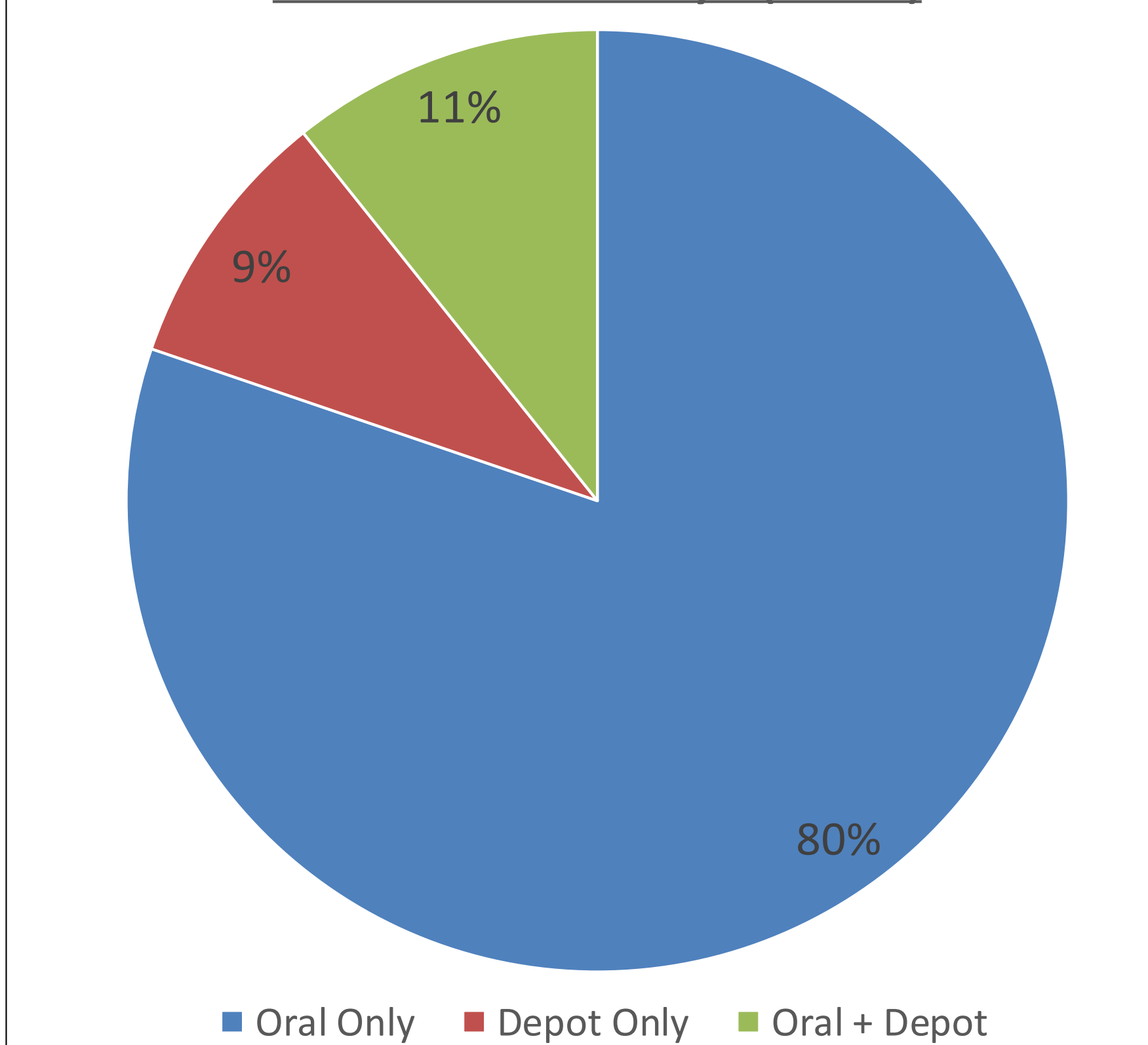


Figure 3. Antipsychotic prescribing in total population

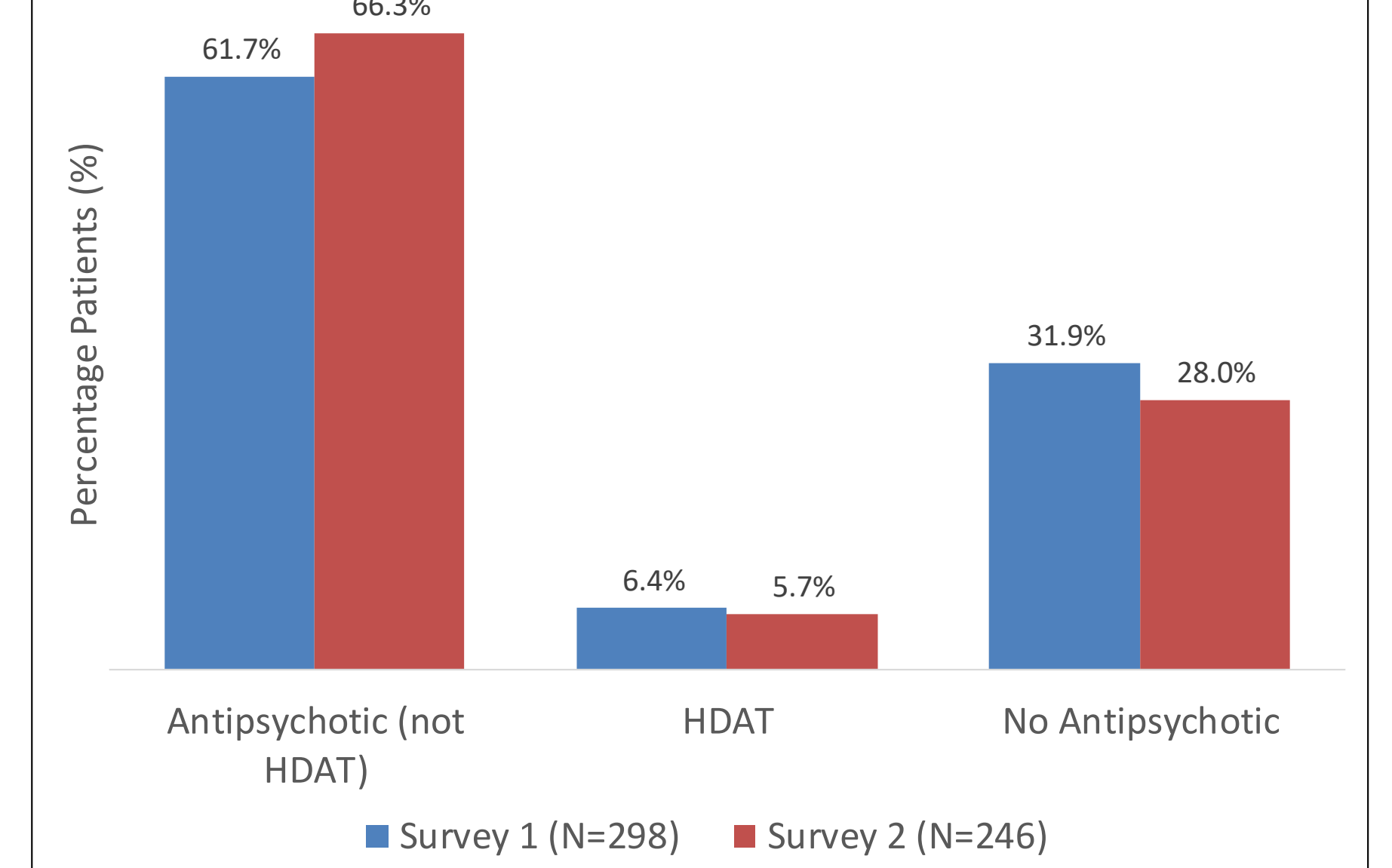


Figure 4. Average cumulative antipsychotic dose per formulation

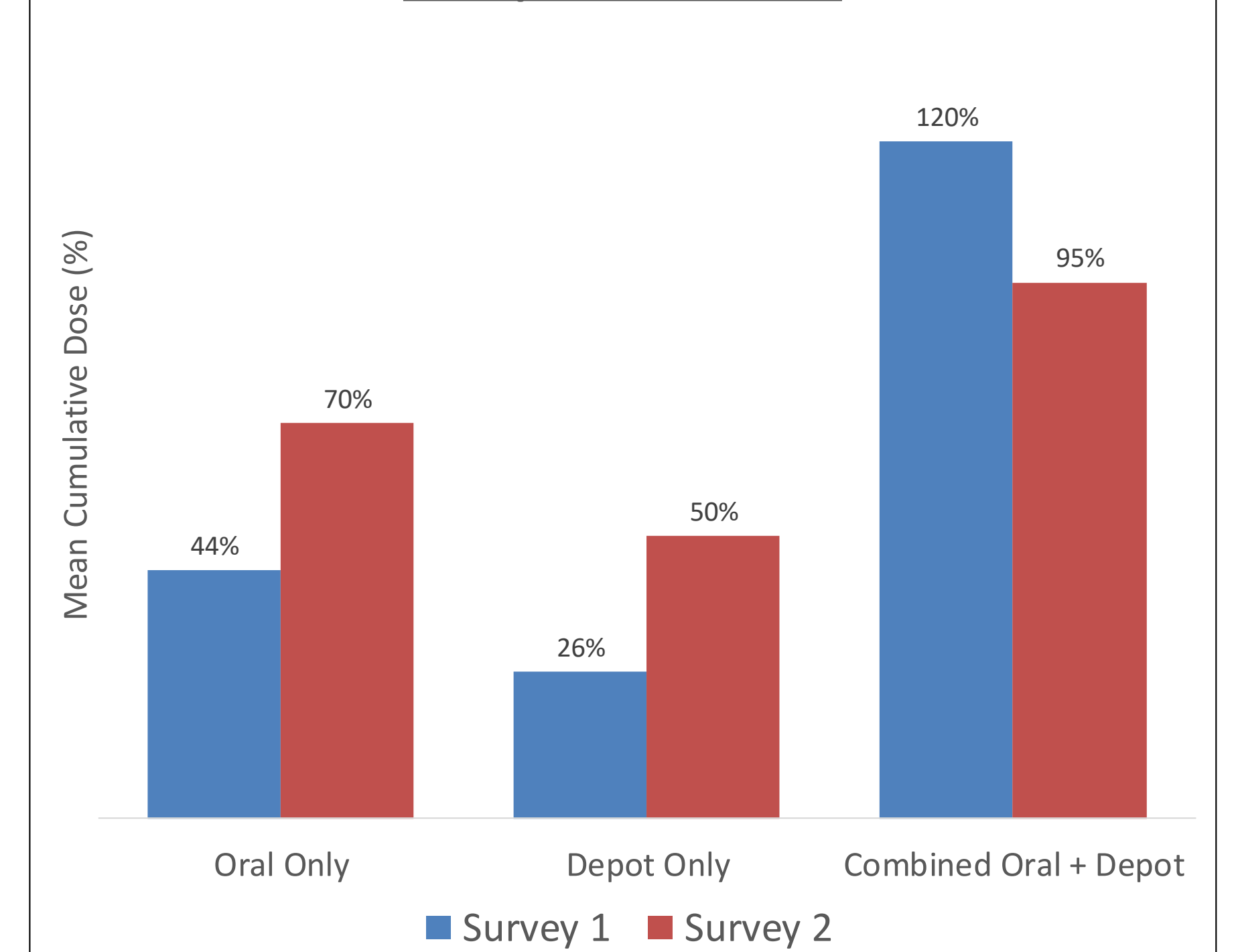
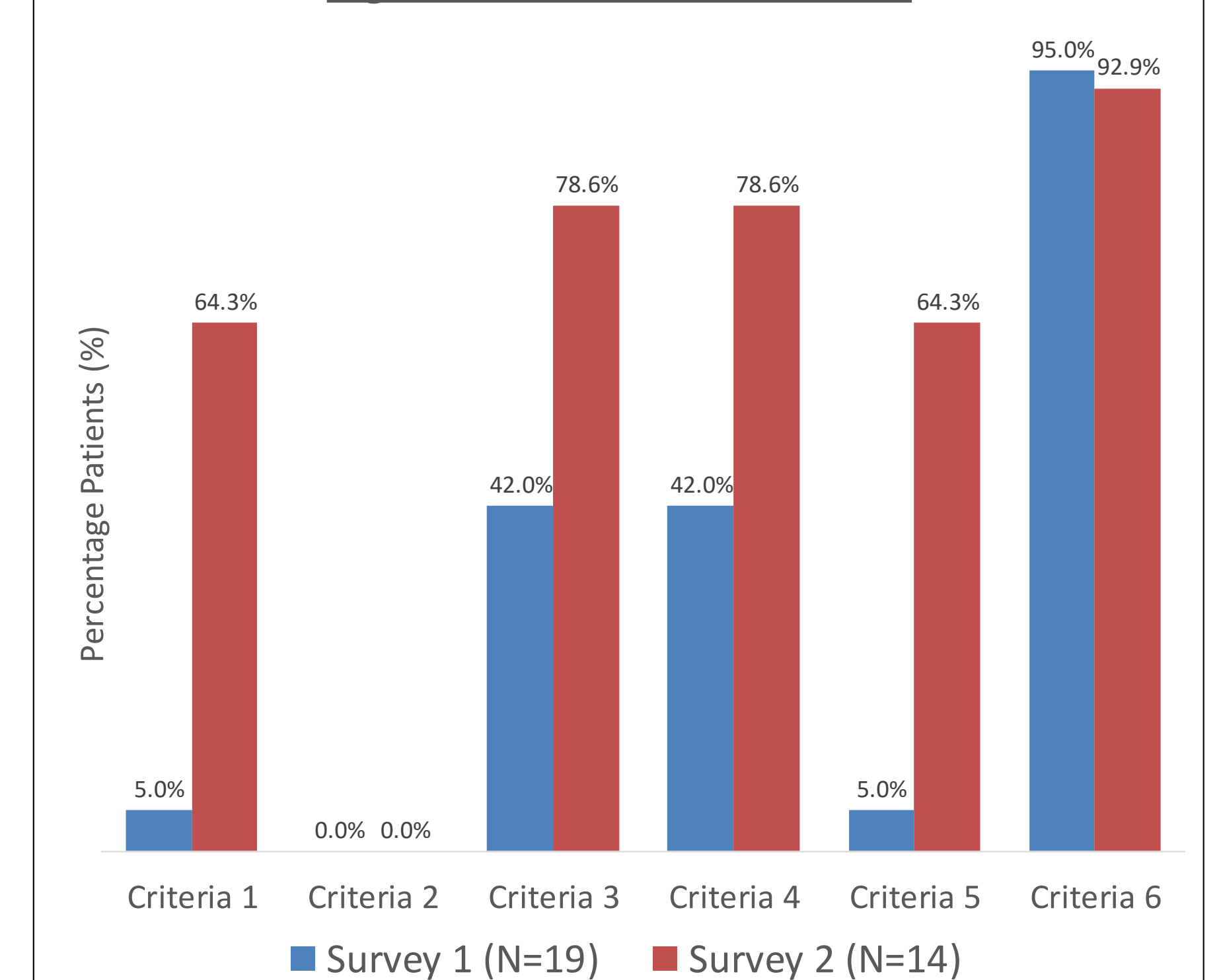


Figure 5. HDAT Audit Criteria



Conclusions

HDAT requires very close monitoring of patients to ensure prompt management of risks and side-effects.^{1,2} In our audit, although the high dose antipsychotic monitoring forms were not used at the onset of the second survey, there has been an increased awareness of antipsychotic prescribing in our team with improved documentation, physical monitoring and efforts to provide psychoeducation to the patients while reducing the number of patients on HDAT. Our results indicate the need for ongoing audit to maintain best practice standards.

References

- Royal College of Psychiatrists (2014). Consensus statement on high-dose antipsychotic medication. College Report CR190. London: Royal College of Psychiatrists.
- Humber NHS (2012). High Dose Antipsychotic Therapy Guideline. NHS Foundation Trust.
- Hertfordshire Partnership (2019). High Dose Antipsychotic Therapy (HDAT) (in patients 18 and over). University NHS Foundation Trust.

Permission for this survey was obtained from Dr. Margaret O’Grady, Clinical Director of the AAMHU, University Hospital Galway