

### Introduction

The current UK Drugs Strategy (2017) Recovery Model aims to help opiate users become abstinent from opiate substitution therapy (OST). An ACMD review (2015), highlighting the difficulty of achieving this, noted that patients prescribed 60-100mg methadone daily are more likely to succeed than patients prescribed lower doses. 6.7% of opiate users were discharged drug-free from drug treatment services in England in 2015-16 (NDTMS 2017), but there is no data about the process of detoxification to zero. This study addresses this gap

### Method

Luton Drug Service (LDS) is a community based service treating Luton residents with drug problems. The clinical diagnosis of almost all patients is the opiate dependence syndrome (ICD-10 code F11.2). They receive OST, psychosocial intervention and recovery activities such as assistance with accommodation and occupation/employment. Around 500 patients are in treatment at any one time. LDS provides contractually mandated data to the Luton Clinical Commissioning Group about successful discharges from treatment.

In this study, patients successfully discharged in 2015-16 were identified from the Illy computerised record system. Sequential prescriptions of OST doses collected from successfully detoxified patients allowed calculation of the time till reduction started and detoxification was completed.

As the data was collected in the course of routine clinical practice, the Trust Senior Research Fellow advised that the approval of the Trust Research Ethical Committee was not required. Because numbers are small, no statistical analysis has been undertaken

### Results

82 patients were identified as having been successfully discharged. Of these, 28 patients had reduced the medication to zero. Data were available for 26 of these patients. 9 (34.6%) were female; age range 25-55 years (mean 33.8) with no sex differences. The time between starting treatment and reaching zero showed a bimodal distribution (Figure 1). 19 patients' treatment lasted between 0 and 3 years (12 less than 1 year) (short term group); 7 patients took 6-12 years. The highest daily dose prescribed to people in the short term group was 65mg, and the mean was 46mg; for the long-term group it was 100mg (mean 79mg) (Table 1).

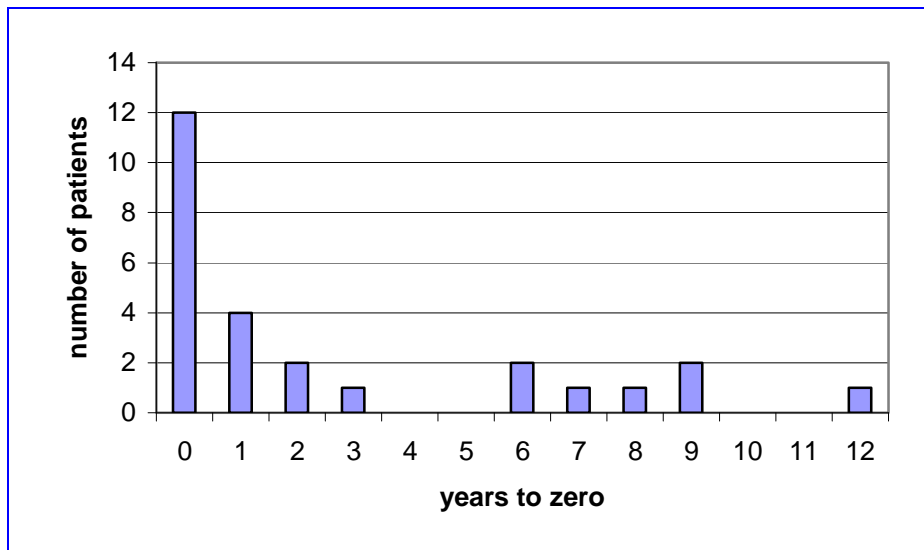


Figure 1: total time of treatment – distribution of patients

### Discussion

This study suggests that there are 2 modes of reaching zero in OST; either the patient has short treatment lasting around 1 year, consisting of early stabilisation followed by detoxification; or the patient is in treatment for years before eventually embarking on a successful reduction. Higher doses are required in the second group during the long phase prior to reduction.

The small number of completed reductions to zero in our study fits other studies. Calsyn (2006) studying patients on indefinite agonist treatment found none of 30 trial patients completing reduction. As in this study, Nosyk et al (2012) found that the advised higher doses (eg methadone dose between 60-100mg daily) are associated with a 44% lower likelihood of reaching zero, and an odds ratio of 3.58 for successful taper in patients in treatment between 12 and 52 weeks, increasing to 6.68 over 52 weeks, compared to those in treatment for <12 weeks.

The findings in our small study suggest that completed reduction is not common, occurs in 2 distinct clinical patterns and does not require high doses of OST.

Current contact details: Dr R Cohen, ResoLUTIONs, CGL, 12 Victoria Street, Luton LU1 2UA

### References

- Advisory Council on the Misuse of Drugs (ACMD). (2015) How can opioid substitution therapy (and drug treatment and recovery systems) be optimised? London, ACMD. ([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/470399/ACMD\\_RC\\_OPTIMI\\_SING\\_OST\\_REPORT\\_231015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/470399/ACMD_RC_OPTIMI_SING_OST_REPORT_231015.pdf), accessed 22 March 2017)
- Calsyn DA et al. (2006) Slow tapering from methadone maintenance. JSAT 2006; 30:159-63
- HM Government (2017). UK Drug strategy 2017. ([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/628148/Drug\\_strategy\\_2017.PDF](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/628148/Drug_strategy_2017.PDF), accessed on 4 October 2017)
- National Drug Treatment Monitoring Service. (2017) Key indicators for England. (<https://www.ndtms.net/default.aspx>, accessed 22 March 2017)
- Nosyk B et al. (2012) Defining dosing patterns of successful tapers following methadone maintenance treatment. Addiction 2012; 107:1621-9

### Declaration

I declare that no conflict of interest exists

### Acknowledgements

Thanks to Ms Debbie Liverpool, Mr Rehan Tariq, Dr Paula Waddingham and Dr David Vickers for support, advice and guidance in this study.

Current contact details: Dr R Cohen, ResoLUTIONs, CGL, 12 Victoria Street, Luton LU1 2UA (robert.cohen@cgl.org.uk)

Years to zero	% not returned by 1 year	Mean (range) highest (range) daily methadone dose (mg)	Mean (range) time from start of treatment to start of reduction (weeks)	Mean (range) time from start of treatment to reduction to zero (weeks)
0-3	57.9	46 (20-65)	20.7 (0-123)	57.5 (6-199)
6-12	71.4	79 (60-100)	246.6 (73-541)	453.3 (332-627)

Table 1: Data about dose of methadone, time to reduction, time to zero and % not returning in 1 year