#471 A Multi-Bed Acupuncture Clinic for the Management of OAB: Reducing the Referral to Treatment Time

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Introduction

Overactive bladder syndrome (OAB) is a common pelvic health complaint effecting 11.8% of the population with it's prevalence increasing with age. OAB, which is associated with increased levels of anxiety and depression, is shown to have a detrimental impact on an individual's quality of life (1).
A recent Cochrane review demonstrates that the effects of acupuncture on symptoms of OAB are comparable with medication with reduced incidence of side effects (2). Currently, acupuncture is not recommended within the NICE (3), EAU (4) or AUA (5, 6) guidelines for the management of OAB. However, the EAU acknowledge that acupuncture may be effective in reducing symptoms of OAB as per the current but limited evidence base. The AUA recommendations are tiered based on the risk of adverse events of each treatment modality. Behavioural therapy alone has been listed as a first line treatment highlighting a need for further non-invasive and low-risk treatment options for this patient group.
In 2007 the national annual cost of OAB in the US was $65.9 billion and this was expected to rise to $82.6 billion by 2020 (7). Jenks et al (8) demonstrated that although acupuncture was shown to be clinically effective at significantly reducing symptoms of OAB, six months of acupuncture treatment was seen to be more expensive in comparison to other first line treatment options.
Aim: To investigate a multi-bed clinic structure as a novel service model to improve capacity and enhance cost effectiveness of acupuncture as a treatment option for OAB.

Methods and Materials

Setting: Data was collected between August 2022 and March 2023 at a secondary care NHS Trust in England.

Ethics: Ethical permission was not required as the mode of delivery was the subject of the study, intervention was unchanged.

Funding: No external funding was required or sourced for the implementation of this model as it was delivered within the existing pelvic health physiotherapy service with all training requirements completed in advance of the study.

Delivery: Prior to this study, acupuncture for OAB symptoms was delivered by a senior physiotherapist with appropriate skills and training in acupuncture within general pelvic health physiotherapy clinics on an individual basis. A quality improvement approach utilising the model for improvement was adopted to establish a driver diagram and identify required changes (figure 1). Upon implementation of the model, acupuncture was delivered by two physiotherapists in a four bedded treatment room at staggered times.

Primary Outcome: Mean time (days) between referral and the first treatment.

Secondary Outcomes: Clinic capacity, patient satisfaction via survey and treatment response via the ICIQ-OAB and ICIQ-OABQOL.

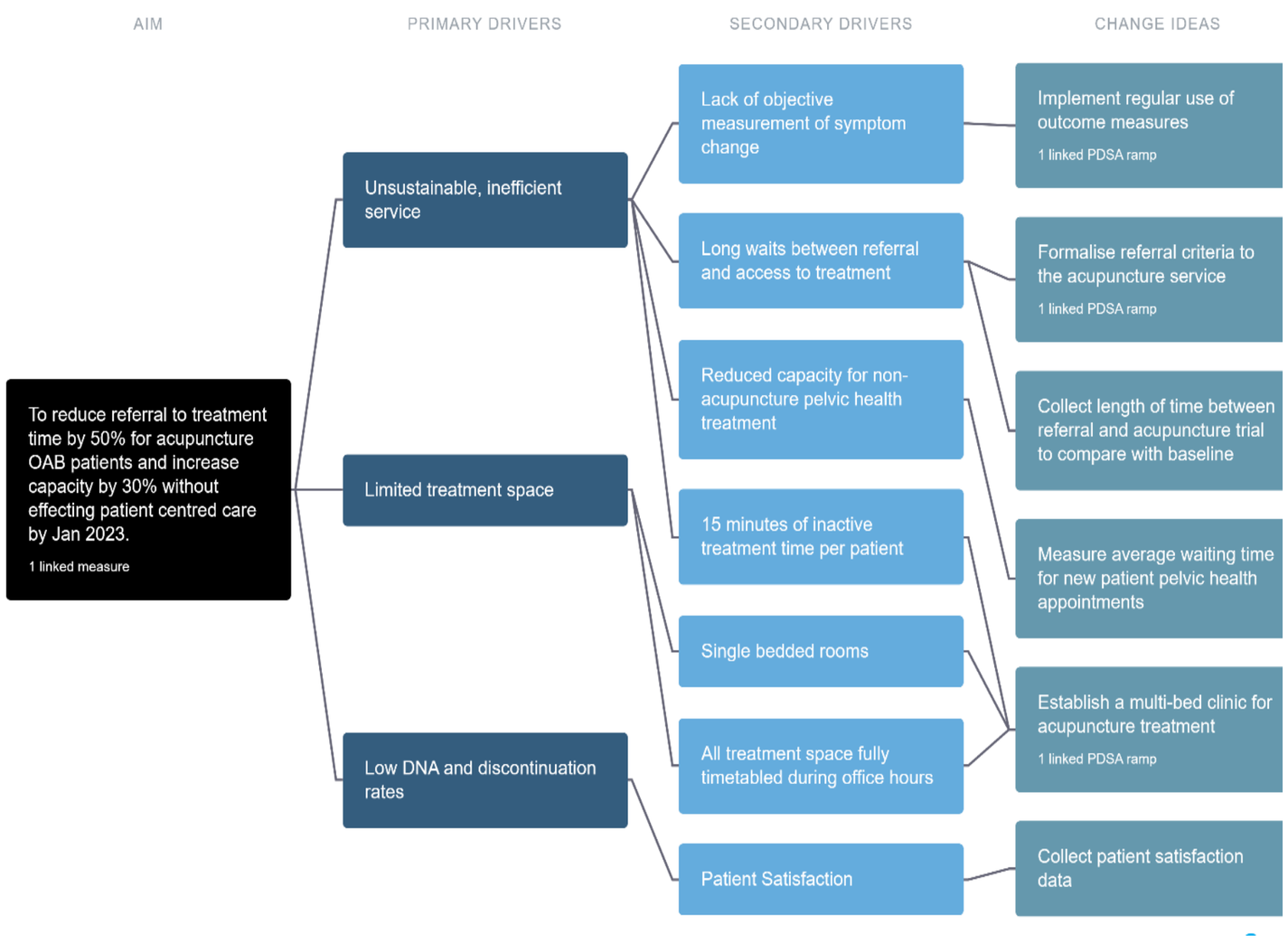


Figure 1: A driver diagram identifying the aim and primary and secondary drivers to establish required change ideas.

Results

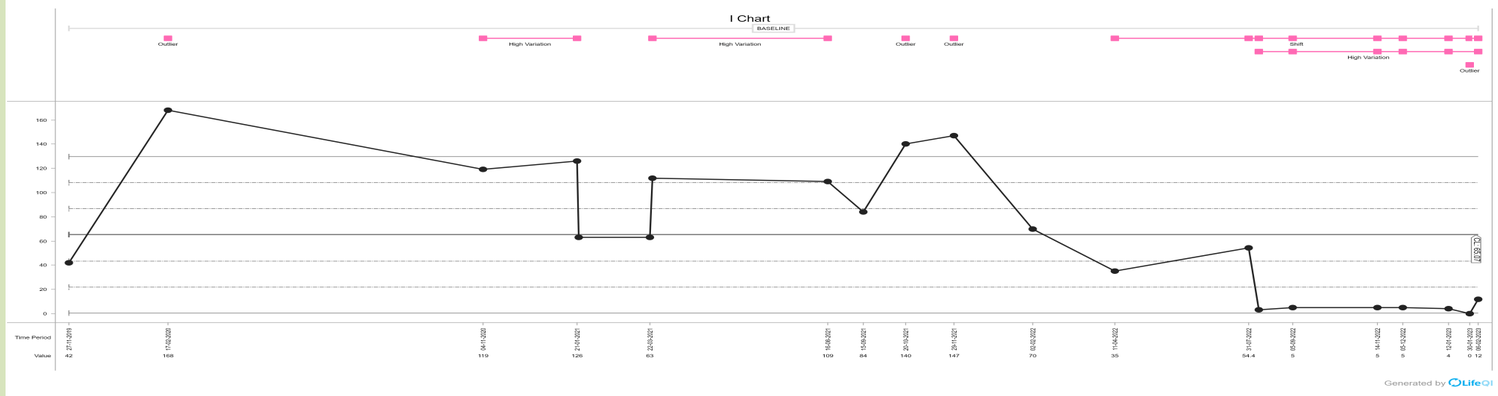


Figure 2: A run chart demonstrating a reduction in the average referral to treatment time to 4.7 days from 51.3 days following implementation of the multi-bed clinic (primary outcome).

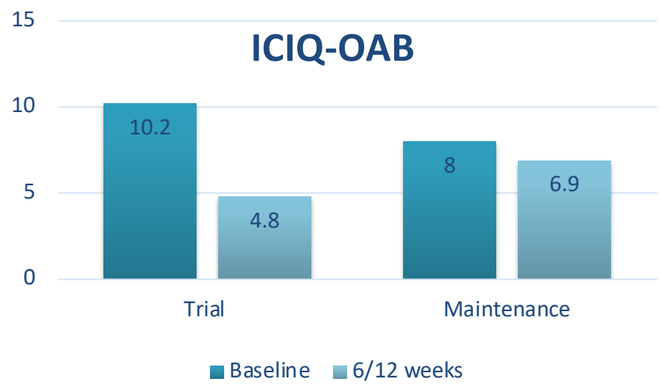
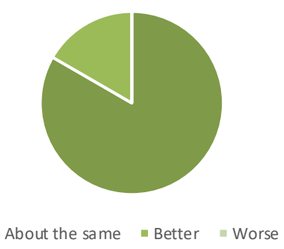
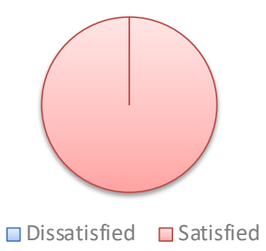


Figure 5: A reduction in ICIQ-OAB scores by 53% in the trial group and 14% in the maintenance group after implementation of the multi-bed clinic (secondary outcome).



Figures 3&4: Pie charts demonstrating 83% of maintenance patients found the experience in the multi-bed clinic about the same while 13% thought it was better than the previous individualized treatment. 100% of patients were satisfied with their overall treatment (secondary outcome).



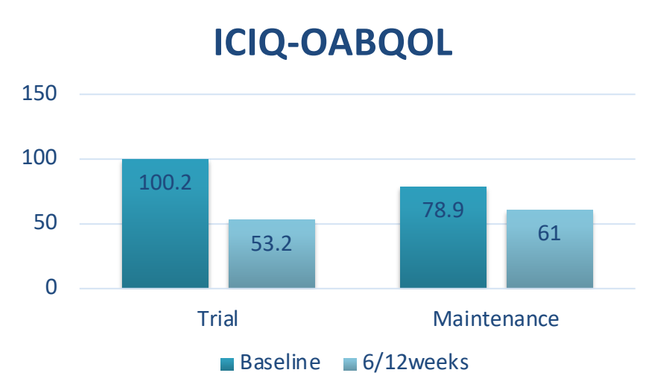


Figure 6: A reduction in ICIQ-OABQOL scores by 47% in the trial group and 23% in the maintenance group after implementation of a multi-bed clinic (secondary outcome).

Discussion

Time from the decision to use acupuncture to first treatment was reduced by 91%, indicating greater efficiency of the studied service model. Having a dedicated clinic has increased capacity to offer treatment and improved sustainability of the service. PROMs show a reduction in bothersome symptoms in 71% of patients who completed a treatment trial, however this figure is based on a very small sample size. All patients who completed a trial went on to request maintenance treatment.

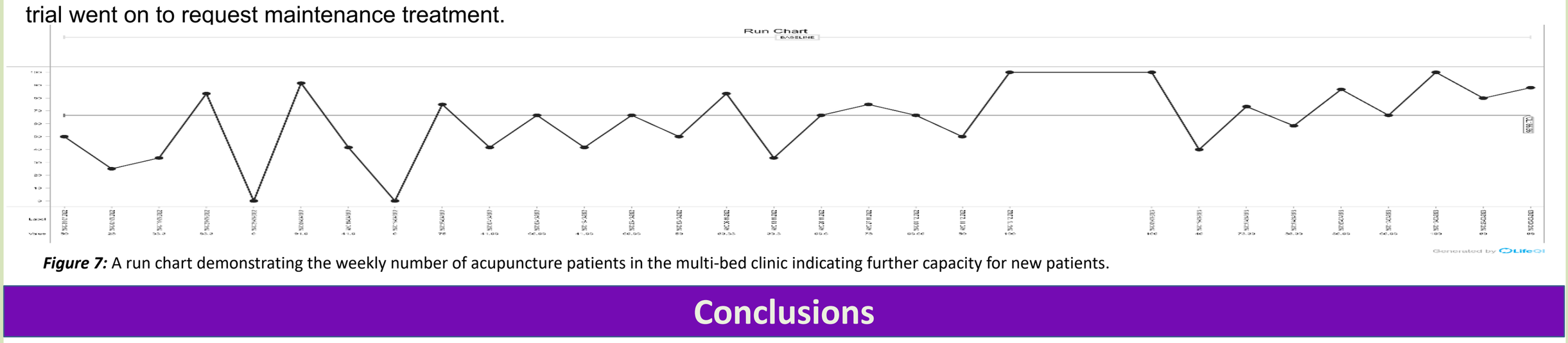


Figure 7: A run chart demonstrating the weekly number of acupuncture patients in the multi-bed clinic indicating further capacity for new patients.

Conclusions

This small-scale study has demonstrated that implementation of a multi-bed clinic to offer acupuncture for OAB symptoms has benefits in terms of efficiency, patient satisfaction and the effect of treatment. However, the number of patients involved is currently very small and the cost implications of a multi-bed clinic model have not been studied. Further data collection is required over an extended time frame to validate or challenge these preliminary findings.

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