

EVALUATION OF BARIATRIC BENCH/WHEELCHAIR RECLINER USAGE IN A UK DISTRICT GENERAL HOSPITAL; IS EQUITABLE ACCESS ACHIEVABLE IN THE COMMUNITY DENTAL SERVICE?

MEG KEDDIE SENIOR DENTAL OFFICER – EAST SURREY COMMUNITY DENTAL SERVICE

Background

An **ageing UK population** coupled with **increasing obesity** levels mean community dental services (CDS) must ensure **equitable access** for plus sized patients and wheelchair users alike.

- In the UK there are over 800 000 regular wheelchair users and **1.2million wheelchair users**¹.
- **Obesity** has doubled in England over the last 20 years and currently stands at **28% of adults**².
- Those **65-74yrs are most likely** to be **overweight or obese**² which impacts on gerodontology.

Despite growing demand, many CDS don't have access to bariatric bench/wheelchair recliners so are reliant on domiciliary care, hoisting or at worst occupying valuable theatre time to treat such patients. Inaction addressing such barriers fails in our duty to make reasonable adjustments to provide dental care comparable to that experience by non-disabled people³.

Recommendations

- CDS and Special care dental committees should advocate for population based, NHS funded provision of bariatric bench/wheelchair recliners as opposed reliance on charitable donations.
- Service level agreements could be arranged for neighbouring CDS to jointly procure recliners and transport to different sites negating lengthy patient travel.

Failing to address equitable access for plus sized patients and wheelchair users across the UK now will result in a legacy of poor oral health outcomes for many with costly consequences.

Aims

- To review **utilisation** of the newly procured bariatric bench/wheelchair recliner and explore potential **cost savings** this device offers.
- It is hoped this evaluation might **provide evidence for other services** without such a device to support procurement and improve access more widely across CDS.

Method

The bariatric bench/wheelchair **recliner audit log** was reviewed from July 2020 when the device was procured to October 2021 (**15-month period**). The following information was collated: wheelchair vs bariatric usage, patient ages, theatre hours and estimated theatre costs saved as well as dental treatments provided.



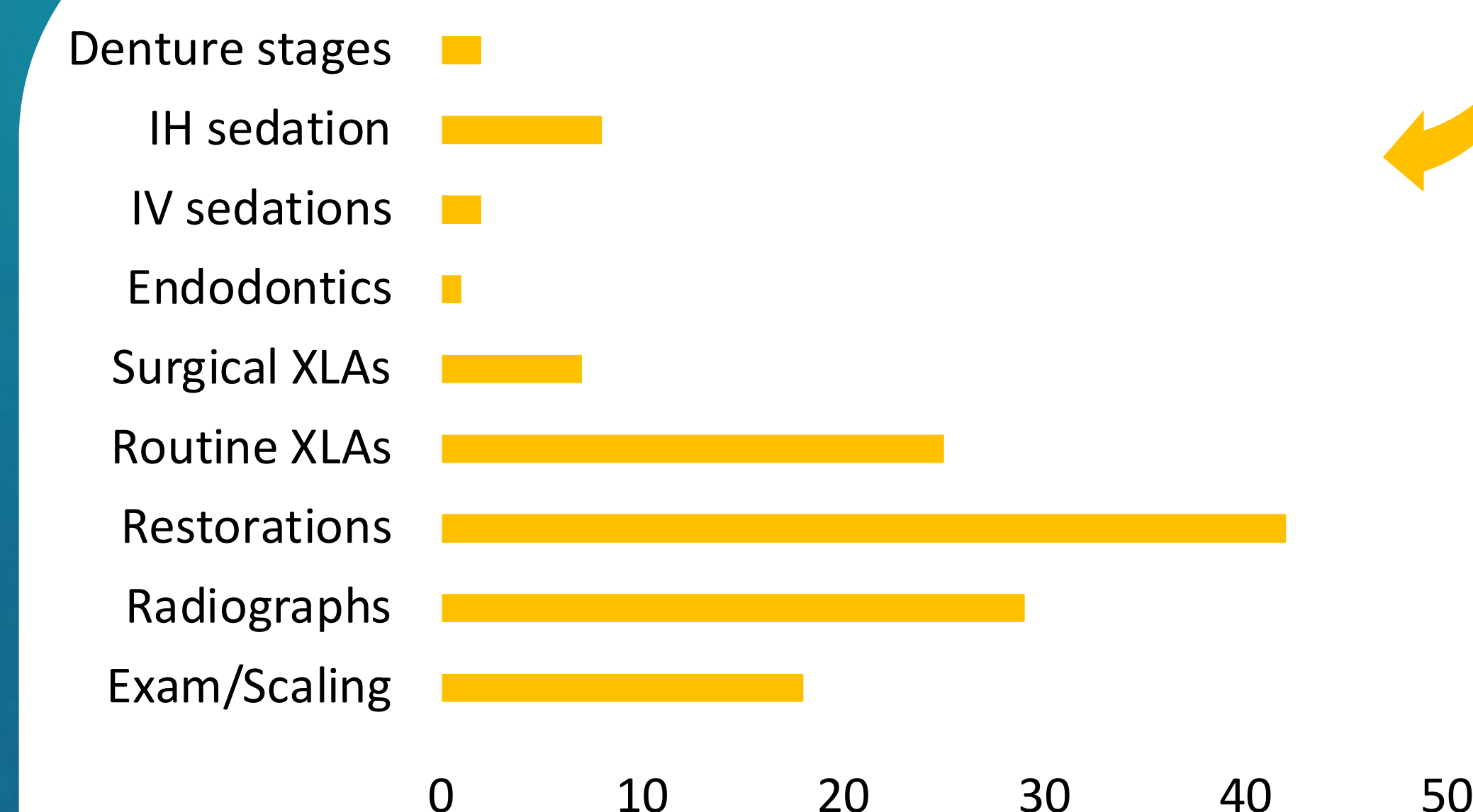
33 patients accessed treatment over **53 sessions**
64% Wheelchair users **36% Bariatric Bench**

52% of cases treated were >65years old

71 Theatre hours were saved. Equivalent to **9 full theatre days**

~£85,200 Theatre costs saved

Results - Treatments Provided



Based on the NHS Institute for Innovation and Improvement 'The productive operating theatre' document, an **hour of theatre time equates to ~£1200**⁴.

Our device was procured by hospital **charitable funds costing ~£27,000**. By the **17th treatment session** (6 months into this service evaluation) the theatre **savings accrued** had already **covered the cost** of the device.

Discussion

An alternative to this device includes hoisting of patients which can be time consuming and reliant on access to hoists/slings as well as appropriate places to store such items as well as appropriately trained and experienced staff. Many patients find hoisting uncomfortable at best and places unnecessary manual handling burden on staff. In 2019-2020 alone there were **'8.9 million working days lost due to work related musculoskeletal disorders'**⁵ and **'the main causes were manual handling'** so the cumulative harm caused to CDS staff using less than ideal equipment should not be ignored.

Given that the theatre savings accrued in the first 6months of use covered the initial charitable spend, this demonstrates the initial investment has proved good value for money thus far. Safeguarding NHS theatre time is critical especially in the wake of the pandemic where theatre session scarcity across the NHS is rife.

It is worth noting this evaluation spans the Covid-19 pandemic where services were reduced and many CDS patients requiring this device were shielding. Data collected is therefore likely to be vastly underestimated. A further evaluation in a post-pandemic era will provide more insight into probable usage of the device. A health economics led analysis as to the cost savings accrued across the wider CDS with such devices could support further funding of more recliners rather than reliance on charitable donation.

Our patients were delighted to be offered this mode of treatment as opposed to lengthy and unnecessary waits for theatre slots. Anecdotally, clinicians felt it preserved the dignity of those above the weight limit of the regular dental chairs and allowed for a broader range of treatment options for those with mobility difficulties.

Acknowledgements

Many thanks to Surrey and Sussex Charity for funding our wheelchair/bariatric bench recliner and our patient willing to demonstrate and be photographed during its use.

References

1. <https://www.england.nhs.uk/wheelchair-services/> - Accessed Oct 2021
2. <https://researchbriefings.files.parliament.uk/documents/SN03336/SN03336.pdf> - Accessed Oct 2021
3. Hansen C, Curl C, Geddis-Regan A. Barriers to the provision of dental care for people with disabilities. *BDJ In Practice* 2021; Vol 34, 30-34
4. NHS Institute for Innovation and Improvement. The productive operating theatre, building teams for safer care – Scheduling. Version 1, page 32
5. <https://www.hse.gov.uk/statistics/causdis/msd.pdf> - Accessed Oct 2021