

Quarter 1 2021/22 RUNNER-UP

#400WORDS: KNOWLEDGE+ACTION (IMPLEMENTING EVIDENCE-BASED PRACTICE)

## A pager system as an aid to improve theatre recovery experience of children and patients with learning disability

Lynda Lloyd-Davies<sup>1</sup> and Cheridan Morrell-Davies<sup>2</sup>

<sup>1</sup>Staff Nurse - Theatre Recovery. Royal Cornwall Hospitals NHS Trust, TRURO, TR1 3LJ, UK. <sup>2</sup>Project Manager. Royal Cornwall Hospitals NHS Trust.

Email: [lynda.lloyd-davies@nhs.net](mailto:lynda.lloyd-davies@nhs.net)

Submitted for publication: 28 April 2021

Accepted for publication: 02 March 2022

Published: 29 July 2022

### Background

When emerging from anesthesia post-surgery, children and patients with a learning disability may experience high-levels of anxiety if they cannot immediately see the familiar face of a parent or other carer who can reassure them. This distress can lead to unsatisfactory recovery and can be particularly unhelpful if they need to return to theatre for further procedures in the future (Kain *et al.* 2006). As a specialist theatre recovery team responsible for immediate post operative care, we needed to establish a system to contact parents and carers in a rapid and reliable way. Often, the use of mobile phones, text messages or landline contact was unreliable. Dedicated pager systems have been used in various hospital and commercial settings for some time with good reliability (Bryn 2017).

### Method

We decided to trial the use of pagers in our department and developed a project plan in collaboration with the Information Technology department at the hospital. For paging to be activated from several theatre reception sites, it is reliant on a network of transmitters deployed extensively across the hospital sites, both indoors and out. After a survey was obtained, Pager Systems Ltd. created a bespoke system which allowed for a pager base in each site and 10 pagers with scope to expand if needed. Charitable funds supported the purchase of the recommended system that was installed. The system was fully installed for March 2020 and was about to go-live when the Covid-19 pandemic arose causing inevitable delays. It finally went live in August 2020.

Now when a parent or carer accompanies their patient to theatre reception, they are given a numbered pager with instructions to stay within the hospital site and be ready to return to that specific recovery area as soon as the pager is activated. Each pager allocation, time and patient's case record number are recorded on a whiteboard at the time. On return, the pager is logged back, sanitized and recharged.

## Results

Initial experience of the system has been very good. A survey of the first 30 carers using the fully functioning pagers indicated excellent scores for simplicity and reliability. Many felt reassured to have a hospital-based system rather than relying on their personal phones which family members are often using for updates. Children and patients with learning disability saw their carers quickly to offer support and reassurance post-surgery.

## Conclusion

This innovation has since escalated, and pagers are now being used more generally in audiology, ENT, pharmacy, and oncology departments. Our own system remains highly effective now having been almost two years since introduction.

## References

Kain, Z.N., Mayes, L.C., Caldwell-Andrews, A.A., Karas, D.E., McClain, B.C., (2006) 'Preoperative Anxiety, Postoperative Pain, and Behavioral Recovery in Young Children Undergoing Surgery', *Pediatrics*, 118 (2). pp. 651–658.

Byrn, G. (2017) 'Parent Pagers: Improving Patient Experience and Efficiency in Paediatric PACU', *Journal of Perioperative Practice*, 27(5), pp. 110–116.

## Acknowledgements

Thanks to the Royal Cornwall Hospital Trust Critical Care Charitable Fund and Friends of the Royal Cornwall Hospital Trust who provided initial funding for this project. Thanks also to Cornwall IT Services for their support.



This is an open access article distributed under the terms of the Creative Commons Attribution Non-Commercial 4.0 International (CC BY-NC-SA 4.0) licence (see <https://creativecommons.org/licenses/by-nc-sa/4.0/> ) which permits others to copy and redistribute in any medium or format, remix, transform and on a non-commercial basis build on this work, provided appropriate credit is given. Changes made need to be indicated, and distribution must continue under this same licence.