At the Countess of Chester Hospital Foundation Trust, we have set ourselves the goal of becoming a more transparent organisation with more-visible operational processes, including workforce planning and patient flow. The trust comprises a 600-bed district general hospital in Chester and a 64-bed intermediate care service at Ellesmere Port Hospital. It employs almost 4,000 staff and, every year, provides services to more than 445,000 patients from an area covering Western Cheshire, Ellesmere Port, Neston and North Wales.

Like many trusts, we face the challenge of delivering high-quality nursing care against a backdrop of bed moves, outliers, delayed discharges, gaps in staffing and difficulties in recruiting nurses who have the appropriate training. As a result, in late 2016 we decided to create an automated coordination centre that would allow us to:

- Manage nursing rotas according to patient acuity (how ill patients are);
- Streamline bed allocations so patients would access the right bed at the right time more often.

**Aims**

We were experiencing delays in discharges and sharing information about bed occupancy, partly due to old processes relying on telephone calls and paperwork. These delays had a negative effect on how quickly new patients arriving in the emergency department could be allocated an inpatient bed, and whether they could be admitted directly to the right ward. As a consequence, patient flow and the patient journey were too slow, arduous and complicated.

At that time, for example, it was taking over 4.5 hours from the moment a patient was discharged until another patient could access the available bed. Reducing that time would allow us to speed up patients’ admission to the wards and maximise the use of our beds at a time when demand for urgent care services was increasing. In the face of these delays, our aims were to:

- Ease patient flow and get patients in the right bed the first time round.

**Key points**

- Digital tools for rostering and bed management can improve staff allocation and patient flow.

**Author**

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**Abstract**

In 2016, the Countess of Chester Hospital Foundation Trust decided to develop an automated coordination centre that would help improve its management of staff allocation and patient flow. Operational since October 2017, this digital coordination centre works in real time using both an acuity-based rostering tool and a bed management tool. Its implementation required an overhaul of work practices and culture, which was achieved by engaging with staff. The new system gives a better visibility of bed occupancy and patient flow, which allows delays in care and discharge to be reduced, thereby improving the patient journey. It also means nursing staff have more time for patient care and nurse managers have more time for clinical leadership.

**Citation**

Adapting to change

We had to adapt to the changing needs of our patients and the healthcare system. This required us to work with our partners, develop new technologies, and change our ways of working.

The coordination centre works in real time to manage patient flow. We use a system based on patient acuity that helps us allocate nurses and medical equipment. This system improves efficiency, focuses on patient care, and streamlines processes.

Advisory panel

The advisory panel provided guidance on patient acuity, which helped us to develop a patient-focused system. This panel is composed of experts in patient care, who provided valuable feedback on our system.

Outcomes

There have been several positive outcomes of the system. We have reduced the time between admissions and discharges, improved patient safety, and increased efficiency. The system has also improved patient satisfaction, as patients are able to receive care more quickly.

Next steps

We will continue to improve the system and make it more effective. We will also work with other organisations to share best practices and improve patient care across the country.

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