

A&E tackles capacity issues and expands after overhauling its rostering system

Case Study

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Learn how new ways of working and a self-rostering solution that is fit for the future, eliminated recruitment challenges, optimised deployment and significantly improved work-life balance for emergency teams at Sheffield's Northern General Hospital.

Hospital Profile

The Northern General Hospital (NGH) is a large teaching hospital in Sheffield with an adult-only emergency department that sees approximately 115,000 new attendances each year. It also acts as the major trauma centre for South Yorkshire.

Introduction

In recent years, the NHS has been under pressure in ways never seen before in modern times. As the Covid-19 pandemic raged around the world, staff were pushed to their limits and NHS organisations battled to maintain adequate staffing levels. Even today, as many hospitals try to recover the backlogs, demand continues to outweigh capacity and managing the number of patients that need care and treatment in hospital is unsustainable.

Ineffective resourcing and rostering solutions has stifled progress in many organisations. The emergency department at the Northern General Hospital (NGH) in Sheffield has faced similar

challenges. However, new ways of working pioneered by Emergency Consultant, Dr Thomas Bircher, supported by the e-rostering solution - HealthRota, has enabled the department to break free from these challenges while empowering staff to thrive.

Here's how they did it.





Challenges

Up until 2018, medical rotas for the emergency department were historically managed on Excel and Google worksheets. As well as being inefficient and time consuming to produce, it also compromised patient safety.

Without the functionality to consolidate rotas to provide a real-time view of the staffing situation,

shifts and workforce teams could not be easily flexed to match the current demands of patient care. Furthermore, insufficient capacity made it impossible to fill shifts, and the challenging and unpredictable schedules made attracting and retaining staff within the department an unrealistic prospect.

Solution

With overall responsibility for the deployment of 82 staff including consultants and registrars/ SHOs, Dr Bircher introduced the concept of self-rostering using a paper-based flip chart system. After several months of piloting the approach, the benefits were clear and he opted to digitalise the process with HealthRota. This immediately enhanced the flexibility of scheduling, increased staff utilisation and provided teams with a better work-life balance.

As a rota planning application for NHS healthcare trusts, HealthRota offers leading-edge rostering solutions to ensure a fair, transparent and sustainable working schedule for the long-term. The team began the implementation using a carefully planned approach:

1. Analyse current and historic trends in demand on the emergency department
2. Configure the rotas to align the right staff, with the right skills, for each shift
3. Trial self-rostering as a proof of concept using a paper-based format
4. Digitalise the entire process with HealthRota
5. Add the consultant and registrar contracts onto the HealthRota platform, including any contractual obligations and programmed activities (PAs)
6. Use templating to generate multiple rotas at one time
7. Enable staff to select their own shifts using the mobile HealthRota application.

Benefits at a glance



Optimised allocation



Demand planning



Generating savings



Autonomy & transparency



Recruitment opportunities



Positive working environment



Time saving & efficiency



PA Calculations

Results

New ways of working and the adoption of HealthRota's e-Rostering platform has seen the team reap substantial benefits:

Recruitment and Retention: the emergency department is a great place to work

For the first time, clinical teams have achieved a more optimal work-life balance. The emergency department has been expanded, with a mix of full and less than full-time employees who have greater flexibility and access to valuable professional development opportunities.

Other benefits have also included:

- significant savings leading to a successful business case for recruiting a tier of eight junior clinical fellows (something that they had not been able to achieve for the previous four years);
- additional margins to increase the number of SHO's by 18 full-time positions (from 27 to 45), allowing the team to reduce the weekend frequency limit to one in three, which is the legal maximum in the UK;
- the elimination of earlier recruitment and retention challenges, enabling the department to attract more highly trained and experienced staff; and
- better flexibility and greater work-life balance with staff able to select shifts around their other commitments.

"We're able to support personal development and Sheffield becomes a more interesting and attractive place to work."

Dr Bicher explains, "We had someone who did anatomy demonstrating for one day-a-week and so, only wanted to work 60%. Fitting someone like that into a rolling rota was impossible before, but with self-rostering and the allocation of shifts that staff can put in themselves, it actually becomes really easy."

"Previously, we tried to attract SHO's on a variety of different contracts - and even offered a trip to South Africa to undertake trauma work, but no-one would really take us up on it because essentially the work-life balance wasn't right. Now, skilled staff are coming to Sheffield and they are staying here."

Capacity and demand management: Optimising staff allocation and demand planning

The rotas have been configured to generate sufficient capacity in line with the demands on the emergency department. This has protected patient safety and provided the ability to:

- highlight hotspots and allocate staff with the right skills to each shift
- easily view where individuals are deployed i.e., by filtering the grid view by location, day, week, month, or for the entire rota period
- flex the rota to easily redeploy resources in real-time
- significantly improve the rota fill-rate and reduce the reliance on temporary locums
- remove the bureaucracy associated with allocating shifts by enabling staff to pick when they want work
- create complete rota transparency with shifts and activities available in one easy-to-read schedule, viewable on desktop, tablet and the mobile app
- monitor individual and contractual compliance for admin teams
- seamlessly calculate and record scheduled/unscheduled absence and programmed activities (PAs), saving admin time and removing the expensive surplus associated with creating false redundancy to accommodate annual leave.

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Dr Bircher said, "We moved from a situation where if we were lucky, we had one registrar overnight, a consultant acting down as a registrar to cover the shifts, and a post F2 doctor on the middle grade rota. Now, the only people on the registrar rota are the people that have the appropriate level of experience."

"It meant that I could push more doctors to work during the afternoon and evenings when there are more patients to see while at the same time, allowing staff to have all of their annual leave when they want it."

He added, "Most other competitors that report to allow self-rostering have got the process a little wrong. I email everyone on the rota, they login and self-allocate their shifts. With other systems, I would have to 'ok' each request and when you're looking at almost 2000 shifts every two months, that's just not possible. The fact that HealthRota almost crowd sources this part of it, makes things really quite simple."



Improving workforce development and staff deployment

There's no doubt that the self-rostering functionality has been ground-breaking for clinical teams. "Doctors used to be infantilised and were not used to having control over their time, but this changes that", says Dr Bircher.

Empowered with the ability to select their own shifts 'on-the-go' using the mobile app, staff have greater autonomy, flexibility and transparency. This proved to be crucial during the Covid-19 pandemic when rotations were forced to stop, and the 23 SHO's assigned to the department were required to extend the current schedules for a further four months.

"Every single SHO said that self-rostering with HealthRota allowed them to 'hang in there' during the first phase of the pandemic because they had more autonomy over when they worked. At that point, I realised that we were onto something", said Dr Bircher.

Self-rostering has transformed workforce development and deployment, by:

- creating capacity, contingency and flexibility in the rostering system
- allowing staff to plan their time more effectively and easily see where they are deployed in advance using the mobile app
- reducing pressure on individuals and improving communication, giving staff one less thing to worry about on their shifts

- making it easier for the operational director to assess the rare need for locum staff
- leading to the creation of a rewarding development programme with secondments at Sheffield Children's Hospital and ICU (anaesthetics) to support the completion of staff competencies
- creating more clinical education time for SHO's and clinical educator time for senior staff.

From a peer perspective, HealthRota has supplied the functionality to create a supportive working environment. This has proved to be extremely valuable for junior staff.

Dr Bircher said, "We have a trainee that is marked in bright red. That means all the doctors and consultants know where she is, and they can take responsibility for providing support if she needs it. That's because the grid view works really well and I've not seen anything like that from anyone else."

In terms of their professional development, Dr Bircher added, "We have sufficient staffing that we can absorb the loss of someone going to paediatrics or anaesthetics, and they can also come back to us which makes them happier too! We're able to support their development and Sheffield has become a more interesting and attractive place to work."

Key features used in Sheffield



e-Rostering



Annualisation



Rota organiser



Mobile app



Contracts + totals
functionality



Swaps
(consultants only)



Live compliance
checker



Grid view

Conclusion

Over two years, the emergency department has been unshackled from the vicious cycle of shortages and increased pressures on staff. Led by Dr Bircher, workforce management has been revolutionised with new ways of working and a rostering system that is fit for the future. As a result, outdated systems and processes are a thing of the past and staff are appropriately allocated to provide high quality and efficient patient care.

Capacity has increased across the department, which Dr Bircher says has made it “easy to innovate.” The department has filled 18 full-time positions to create a full registrar rota, leading to a happier team who are empowered with the freedom and flexibility to manage their work alongside achieving their personal and professional goals. This has allowed staff to take time off when they need, and allowed seven clinical fellows and eleven higher speciality trainees to pursue their training with the

Sheffield deanery, with others also able to fulfil secondments and rotations in other areas.

The journey to self-rostering has been extremely rewarding for the NGH’s emergency team. “Self-rostering is easy to do”, concludes Dr Bircher. “It allows us to accommodate lots of complexities that would otherwise create gaps. And, because the direction of travel in the future will be more doctors being less than full-time, or with more longitudinal training required, HealthRota is able to manage that level of complexity while other systems or even knowledgeable rota coordinators with Excel spreadsheets, won’t be able to manage - so, it is very, very beneficial.”

He adds, “Consultants like it, registrars love it, and 90% of SHO’s say that self-rostering is better.”



Benefits summary

Departmental

- Rotas filled with staff that have the right level of experience and skills
- More attractive employment opportunities that also help to retain staff for longer
- Improved staff utilisation with live PA calculations and the removal of excess scheduling for leave redundancy
- Ability to assess and plan for gaps and increases in demand
- Increased the number of SHOs by 18 full-time positions
- Reduced the weekend frequency to 1 in 3 (the legal maximum)
- Filled 18 full-time positions
- Reduced the need for temporary locum/ agency staff

- Capacity and demand planning fulfilled
- Savings generated for recruitment, training and innovation
- Safer staffing levels
- Demand planning.

Staff benefits

- Self-rostering leads to greater autonomy and improved work-life balance
- No more bureaucracy associated with shift allocation
- Increased professional development and mentoring opportunities
- Greater staff satisfaction and utilisation
- Ability to easily select shifts on-the-go using the mobile app.