

e-Rostering an Emergency - How COVID-19 forced our Trust to implement e-Rostering within 2 weeks

Dr M Johnson, Dr S Gardner
Buckinghamshire Healthcare NHS Trust, UK

Background

Stoke Mandeville Hospital is a district general hospital in Aylesbury, Buckinghamshire. It is part of Buckinghamshire Healthcare NHS Trust. The project involved the Division of Integrated Medicine at the Trust.

During the initial COVID-19 pandemic, it quickly became apparent that the Trust's understanding of its medical workforce deployment was inadequate. With many doctors redeployed from other services, increased staff sickness and COVID-19 self-isolation, the existing manual rostering practices were insufficient. The Trust had no global overview of where doctors were deployed.

Method

Previously at the Trust, rostering was split between eight rota coordinators running separate spreadsheets with no visibility of each other's rotas. The initial response to the pandemic was emergency twice daily sitreps to review these spreadsheets, before e-Rostering was proposed to give full visibility of doctors' deployment.

The software chosen (HealthRota Ltd.) was previously reviewed by the Trust's Junior Doctors' Forum, which proposed the software to solve the deployment challenge. Trainees were reporting that unequal deployment during the COVID-19 pandemic was impacting their workload and morale. The solution offered limited contractual tie-in at low cost, so was approved by the Trust and rolled out quickly to support the COVID-19 response. A focus group comprised of Trust management, clinical leaders and trainees approved it.

The rollout was supported by the software developer, with the initial 'back end' rollout completed in 3 days. All medical on-call rotas and supplementary departments were online in this timeframe. Within two weeks, all end users had logins to view their rotas and the availability of the wider medical team.

Users of the new software and the rota coordinators had the opportunity to feedback on the previous manual rostering system and the initial implementation.

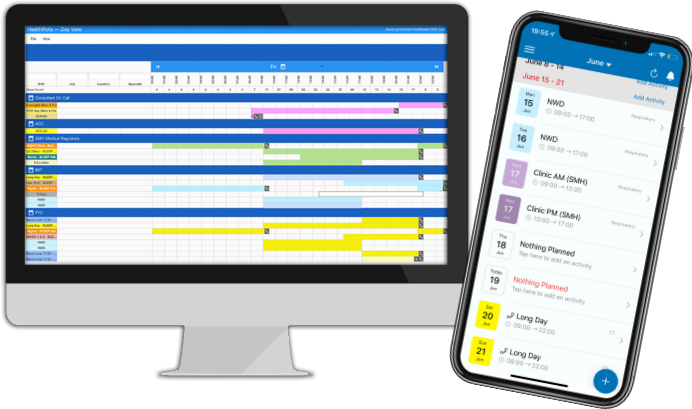
We plan to harness the full power of the new e-rostering software in the coming months. Key to this is the visualisation it offers of the workforce, enabling a more effective deployment of the permanent workforce, thereby reducing the dependency on temporary staffing. We aim to quantify the savings on temporary staffing made, but also review the qualitative data from trainee feedback. Features of the software such as annualisation, flexible rostering and swap requests should improve this feedback by increasing flexibility for medical trainees, improving morale and reducing locum spend.

Lessons Learnt

- Information governance clearance remains a challenge to cloud-based IT solutions and can delay rollout.
- Simple, clear contractual terms are refreshing for NHS organisations, allowing the implementation of new software at pace.
- e-Rostering saves time, but to fully benefit rota coordinators must be adequately resourced to adjust deployment daily. A Clinical Lead is useful for acute decisions on safe and suitable flexible staffing.

Messages for Others

- e-Rostering can be implemented at pace to reach a high-quality eventual solution.
- Early stakeholder and end-user engagement is crucial in IT projects to achieve the best final product.
- An agile healthcare organisation can act decisively to implement new IT solutions faster than previously thought possible.



HealthRota allows our Trust's doctors, managers and administrators easily to view the deployment of the workforce in real time on desktop and mobile. All sickness and absence is updated immediately.

Results

The effectiveness of the solution was determined through feedback from the rota coordinators, along with before-and-after questionnaires of clinicians using the software. 95% of junior doctors had used the system within one month of launch, with 60% using the mobile application.

Figure 1: HealthRota use on desktop and mobile application.



Doctors' understanding of their own and their colleagues' deployment (using a Likert scale, Mann Whitney U) was significantly improved. The change was well received by rota coordinators, who achieved a greater overview of the deployment of medical staff, anecdotally reducing their dependency on locum staff.

Figure 2: Responses to end user (Medical Trainees) feedback survey

