



Radiology Review: Golden Jubilee University National Hospital

Optimising efficiency in radiology service delivery

Optimising service delivery

With NHS Golden Jubilee making expansion plans, Siemens Healthineers was selected to build an interactive service model to enhance productivity and equip the radiology department for growth

Context

The Golden Jubilee University National Hospital (GJUNH) in Glasgow is Scotland's flagship Hospital for reducing waiting times in key elective specialties. As one of the UK's largest heart and lung centres, it carries out the greatest number of thoracic surgeries in the UK and Ireland with support from its major diagnostic imaging centre.

The Radiology Department was under increased pressure due to greater demand for inpatient and outpatient services, the healthcare capacity crisis triggered by COVID-19, and planning for the NHS Golden Jubilee Phase 2 expansion project.

The leadership team needed a better understanding of the maximum potential capacity of its existing radiology resources. They could then compare this with current activity and determine how capacity and efficiency could be optimised as the service grows.

The Siemens Healthineers Consulting team was tasked with identifying immediate opportunities to increase efficiency and productivity by reviewing existing resource use. They were also asked to take a longer view, assessing the department's future potential and how this could be maximised.

What we did

Siemens Healthineers is experienced in helping customers address capacity and demand challenges. The consultancy team ran a hybrid programme with specialists working on-site and virtually. The team has strong clinical and management NHS experience to ensure effective support in refining patient pathways.

The programme was divided into 2 stages: Stage 1, capacity and workforce modelling and Stage 2, onsite analysis programme for selected imaging modalities.

How we did it

During Stage 1 of the review, the Consulting team analysed maximum activity levels that could be delivered using the existing installed equipment base

(within specified working hours). The resulting model was interactive, meaning that the Golden Jubilee team could make adjustments and review the impact.

The 'department demographic' section of the model allows the team to include weekends and/or select working hours for each day. On the activity tab, they adjust the use of contrast and non-contrast scanners to see how this would affect total scan time. The final part of the model depicts how many staff members are needed for each modality, accounting for factors such as annual leave, sick days and national holidays.

Stage 2 consisted of a two-week on-site analysis of referral-to-report pathways, process mapping, and each chosen modality, including CT, MRI, plain film, etc. The Consulting team also assessed factors such as space utilisation, staffing arrangement, and modality training/competency programmes.

Results

Siemens Healthineers shared the detailed capacity and workforce model with the executive team. A summary of the findings and recommendations from the two-week analysis were also shared with radiology staff during the final project briefing session.

The report provided reassurance to the Board that the department was operating within agreed efficiency and productivity levels, supporting the delivery of excellent patient care. Opportunities for improvements were also identified, particularly in relation to processes for the department's major modalities. A programme of work is now ongoing to enact these recommendations.

Testimonial

"We commissioned Siemens Healthineers to make sure that our radiology department is always getting the best results from its resources. We can use the model built by the team to grow our capacity confidently and provide our patients with an optimal service."

Caroline Handley, Deputy Director of National Elective Services at NHS Golden Jubilee