



Radiology service review at The Mater Misericordiae University Hospital

Pathway analysis, demand capacity modelling and
estates review to support strategic planning

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Optimising the delivery of radiology services

With expansion plans set to transform ways of working, The Mater Misericordiae University Hospital needed support with strategic operational planning

Context

The Mater Misericordiae University Hospital (MMUH) in Dublin, is a leader in complex care and specialist services with a global reputation for education and training.

While radiology at MMUH underpins service provision, increased demand across inpatient and outpatient diagnostic services was impacting capacity. Expansion plans at MMUH, including a Major Trauma Centre and a new 96-bed wing, were set to increase diagnostic demand further.

MMUH turned to Siemens Healthineers Consulting for support in developing a new model of operations to match the growing demand for radiology services.

What we did

Siemens Healthineers Consulting partnered with The Mater Misericordiae University Hospital to deliver a review programme for the Radiology Department.

This programme included an in-depth onsite analysis of all modalities across the department including workflows, staffing and facilities. The purpose of this event was to establish the current state of operations and identify impactful, deliverable improvement opportunities to ultimately streamline and enhance radiology services.

Alongside this, the consulting team developed an interactive demand and capacity model. This model provided a data-driven source of insight to forecast the impact of radiology service demand over a five-to-ten-year period on resource requirement.

How we did it

To achieve a detailed review of pathways, workflows and estates the consulting team ran an 'analysis week' with department staff.

Focusing on patient pathways for CT, IR, MRI and US, the event aimed to identify the challenges and opportunities in each process, while co-designing potential solutions, and eliminating bottlenecks and challenges in pathways.

An interactive demand and capacity model was developed to examine the relationship between

increasing demand and corresponding staffing and equipment requirements over a five-to-ten-year period.

Future demand projections were extrapolated to test and model variables including changes to opening hours, length of the working week, and the potential impact of planned expansions.

Results

The consulting team worked collaboratively with stakeholders from across MMUH to understand the forecasted increase in demand for radiology and develop a future-proof strategy rooted in best practice.

Senior management at MMUH were engaged with to relay the current state of operations, and present strategic improvement opportunities co-created during the 'analysis week' with staff.

The programme's achievements include:

- Strategic identification of 199 process and workflow challenges and opportunities
- Eight 'quick wins' to achieve short-term strategic goals identified
- Assessment of current capacity and demand for diagnostic imaging services
- A three-fold projection in radiology demand over ten years identified
- Recommendations and timeline for eliminating current waiting lists for scans
- Future staffing and equipment requirements modelled in line with demand projections
- Development of an in-depth report to inform future strategy for radiology at MMUH with CEO sign-off

Testimonial

"Our experience was wonderful. The week that the team spent within The Mater had huge engagement from our staff. I think our main finding was the validation of our current resource capacity and how engagement with senior management needs to be part of the strategy of the hospital going forward."

Ann Dolan, Radiology Directorate Manager
Mater Misericordiae University Hospital, Dublin