



Pathology service expansion review at The Mater Misericordiae University Hospital

Pathway review workshops and demand capacity
modelling to support strategic planning

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Strategic planning for pathology services

Following expansion plans, The Mater Misericordiae University Hospital needed support to forecast demand and inform their ten-year strategy

Context

The Mater Misericordiae University Hospital (MMUH) is home to a leading Pathology Laboratory providing complex and diversified pathology services. Expansion plans at MMUH, including a Major Trauma Centre and a new 96-bed wing, are set to redefine ways of working across the hospital. As part of this expansion, pathology services will be relocated to a new facility, offering the pathology management team an opportunity to tailor the facility to meet projected demand growth.

Following positive feedback from a review programme led by Siemens Healthineers Consulting at MMUH's Radiology Department, the pathology management team looked to Siemens Healthineers Consulting to support strategic planning for expansion, and future capacity planning for pathology services.

What we did

The consulting team ran a three-month review programme in partnership with the MMUH. Pathway review workshops were facilitated as part of a 'pathology analysis week' with all ten laboratories in the department. The purpose of these workshops was to establish the current state of operations and identify improvements and resourcing needs in line with expansion plans.

In collaboration with the pathology management team, the consulting team developed in-depth demand capacity modelling covering a ten-year period. Future demand projections were extrapolated to incorporate changes in population, demographics and the impact of planned expansions on the pathology service at MMUH.

How we did it

In each pathway review workshop, key pathways from the corresponding laboratory were reviewed with representation from all staff roles involved in day-to-day operations, including medical scientists, biochemists, clinical scientists, pathologists and managers. This gave a range of staff a platform to share current challenges and best practices, as well as identify opportunities to improve processes and workflows.

Requirements and expectations for the future Pathology Department across resourcing, equipment and

laboratory design, were also captured. Demand capacity modelling for each laboratory was developed using the insights from the workshops, along with growth assumptions agreed between the pathology management team, The Mater Transformation Office and the senior leadership team.

Results

Based on findings from the programme, the consulting team created an in-depth report. The report included an outline of the key factors that could affect each laboratory team over a ten-year period, and the year-on-year uplift in demand these key factors would create.

To support the pathology management team in understanding the rhythm of demand, and plan minimum staffing effectively, the consulting team developed a flexible model to aid future resource planning for the Pathology Department.

The programme's achievements included:

- Assessment of current capacity and demand for pathology services
- Mapping of future demand projections for each pathology specialty over ten years
- Strategic identification of 201 process and workflow challenges and opportunities
- 22 'quick wins' to achieve short-term strategic goals identified
- Data-driven solutions offered for staffing, recruitment and upskilling challenges
- 219 improvement recommendations identified in a detailed expansion review

Testimonial

"We are very pleased with the final report, the growth projections focusing on a ten-year horizon are reshaping our thinking as we embark on the design and planning of our new pathology build. The data-driven approach will hopefully allow us to ensure that we 'right-size' our new infrastructure giving cognisance to the projected scale of our service over the next decade and beyond."

*Paudy O Gorman, Laboratory Manager
Mater Misericordiae University Hospital, Dublin*