



Maidstone and Tunbridge Wells NHS Trust works with Northdoor and Microsoft to boost cross-county BI and reporting capabilities

Feeding the appetite for BI

During early 2020, Maidstone and Tunbridge Wells NHS Trust (MTW) and several other local healthcare organisations recognised the need to improve their analytics and business intelligence (BI) reporting capability, which their legacy tools were not satisfying.

In addition to standard patient reporting requirements, the Covid-19 pandemic had generated an urgent need to produce daily reports for the hospital management teams, who used this critical data to manage hospital resources. MTW therefore conducted a vendor/product selection process to choose a BI tool that would meet both immediate and longer-term needs. After careful deliberation, the organisation selected Microsoft Power BI Premium Service.

MTW internal developers started to build out a small number of basic Power BI reports and dashboards, but found that they required guidance on how to set up and configure the Power BI Premium Service to achieve best practices at the enterprise level. They also wanted assistance in developing more complex reports and dashboards, with the ability to easily publish these to a wider audience once created. To fulfil these requirements, MTW turned to award-winning data consultancy firm Northdoor plc.

Selecting a best-in-class solution

Through the introduction of the Integrated Care Partnerships and Systems initiative, the Kent and Medway Integrated Care System was formed and collaborated to provision new infrastructure for a shared data warehouse to ensure data was stored centrally, ready to be accessed for reporting purposes. However,

the individual Trusts were still using Excel and legacy BI tools, which had historically served their purpose, but which no longer satisfied more urgent and dynamic reporting needs. The hospital BI teams, alongside the management teams, recognised that they were not able to interrogate, model and share their data to the standard and at the speed the hospitals now required. Recent advances in analytics and BI meant that if they had access to the latest BI tools they would be able to greatly improve report generation and publication, providing the critical insights now required.

Supporting intuitive reporting processes

The Trusts chose Microsoft's Power BI Premium Service as its BI tool of choice to satisfy both the self-service and enterprise data analytics and modelling needs, delivered from a single shared platform. As the global market leader, sitting top right in Gartner's Magic Quadrant for Analytics and BI, Power BI catered for MTW's need for powerful semantic models, an application lifecycle management (ALM) toolkit, and an open connectivity framework. In addition, the Trust knew that anyone familiar with Microsoft 365 could easily connect Excel queries, data models, and reports to Power BI dashboards, helping to quickly gather, analyse, publish, and share Excel business data in new ways, which was important to them. Power BI would also provide dynamic "drill-down" and "drill-through" capabilities enabling report consumers—including the hospital's management team—to interrogate specific data and make more informed decision making, which in turn would directly improve hospital services and patient care.

The Microsoft solution also satisfied other requirements, including the ability for consumers to view reports from any location or device using the Power BI app, to

automate refreshes of reports, to migrate existing Excel reports into Power BI, and to extract insights from large datasets whilst re-using datasets across different reports and dashboards.

Northdoor as the partner of choice

Having chosen its preferred technology, MTW undertook workshops with Northdoor consultants who advised on how best to provision and configure the Power BI Premium Service. This included ensuring secure data transfer, satisfying cyber security and information governance requirements, workspace creation, report generation, report distribution and training so that the Trusts could self-serve the management of the service. This meant MTW required only limited ongoing support from Northdoor for more complicated items. Subsequently, Northdoor was also commissioned to develop reports, dashboards and templates for reusing the numerous reports that were being requested, saving precious time and money which could then be re-directed elsewhere within the Trust.

Sharing the Power BI Premium Service allowed the Trusts to reduce their costs to a level where the service became affordable, which may not have been the case if a single Trust had to pay for the solution independently.

In addition, access and use of the Microsoft Power BI Premium Service has enabled the Trusts' BI teams to quickly build and safely distribute complex data models, more detailed reports and dashboards designed and presented in a dynamic format that was not previously possible, providing end users with the information they require to better fulfil their tasks. Ultimately this drives better patient experiences and care outcomes. The organisations involved conduct a monthly "collaboration meeting" to share ideas and showcase new Power BI reports with each other, benefitting one another and improving the overall reporting capability across the Kent and Medway Integrated Care System.

A strong relationship

James Jarvis, Assistant Director of Business Intelligence at Maidstone and Tunbridge Wells NHS Trust, comments: "We have developed a really strong relationship with Northdoor and have found them to be a very supportive and knowledgeable strategic partner. They quickly understood what we were trying to achieve and were able to provide options to us to realise our ambitions. They were friendly and approachable, but very professional and definitely experts in the technologies that we had selected. They have always been very

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responsive to our needs as a customer and very fair in terms of how they have managed our account, being very aware of the pressures on the public sector throughout the pandemic and as we recover from it. I have recommended Northdoor to other colleagues and partners in the region and by virtue of the fact that many of them are now sharing the infrastructure we have put in place, I feel that this has been a success."

Using Power BI to share the benefits of data

James Jarvis says, "We selected Power BI as our BI tool of choice because it has been heavily adopted within the NHS and in other industries and continues to grow in reputation and functionality. Being a Microsoft tool, it has a familiarity which makes the adoption easier for BI users developing reports as well as other colleagues viewing reports. The variety of visualisations the tool offers is impressive and the constant development of the product means it never stagnates. Being able to share reports with users from any location via their smartphone or tablet is also a really benefit, as that is how many are used to consuming information. The infrastructure we have built with Microsoft and Northdoor also allows us to share information securely with partners working across the local health system, which is something we are required to do increasingly as the health and care landscape evolves. We are still early in our adoption, but there is a real excitement and enthusiasm for using data and analytics in close to real-time, using Power BI."

Richard Hartill, Client Manager for Public Sector at Northdoor plc, comments: "We have been successfully delivering support services and bespoke project work relating to data analytics and business intelligence to the NHS for over a decade and have built up an enviable reputation within the industry. The successful delivery of this project was another valued experience for our team, working with NHS employees who are clearly passionate about improving the services for which they are responsible, with the sole aim of improving patient care. It's been a pleasure being part of that journey and we look forward to providing on-going support."

