CLIENT SUCCESS Royal Devon University Healthcare

NHS Foundation Trust

Empowering Predictive Analytics in Epic EPR



The Client

In 2020, Royal Devon University Healthcare NHS Foundation Trust (RDUH) went live with the Epic **Electronic Patient Record** (EPR) system.

With a growing amount of data at their disposal, they sought to leverage predictive analytics to enhance patient care and operational efficiency.

Recognising the complexity of developing predictive models and fully utilising the data analytics potential of their Epic system, the Trust sought advisory services to guide them through the process and explore future implementation possibilities.

Key objectives

Scope the feasibility of creating a predictive analytics model to reduce DNAs.

Gain guidance on using Epic more effectively for advanced data insights.

Receive support in building a roadmap from project initiation to longterm maintenance and adjustments.

Challenges 3



Royal Devon faced several key challenges, including:

Limited experience in predictive analytics: While the Trust had strong technical capabilities, there was no prior experience in predictive analytics, making it difficult to know how to translate raw data into actionable insights.

Data complexity: While they had a wealth of data within Epic, managing this data and extracting meaningful insights posed a significant challenge.

Long-term sustainability: The Trust needed a solution that could be sustained internally after our advisory engagement ended, requiring a heavy focus on structured frameworks.

Our approach

CereCore International was brought in during the advisory stage to provide Royal Devon with a structured, strategic plan to move forward. Our approach consisted of the following key steps:

- 1. Roadmap development: We created a detailed, five-step roadmap to guide the Trust from the early scoping stages of their predictive analytics project through to implementation and maintenance. The roadmap included:
 - Scoping potential data sources.
 - Establishing a data pipeline within Epic and external sources.
 - Building and validating predictive models using Epic's Clarity and Caboodle data warehouses.
 - Testing interventions using A/B testing and real-time adjustments.
 - Long-term monitoring and iterative improvement of the model.
- 2. Stakeholder engagement: We identified key internal teams such as the Epic analysts, Cogito data warehouse administrators, and clinicians to ensure proper integration of the predictive model with existing workflows. Our work involved equipping Royal Devon's internal teams to sustain this project, providing them with the skills and knowledge to manage and expand their data capabilities, ensuring long-term sustainability.
- **3. Epic-specific solutions:** We provided Royal Devon with insights into how they could use Epic more effectively. This included optimising dashboards, enhancing user access and security settings, and using Epic's built-in Cogito reporting tools to generate data models that could be integrated back into Epic workflows.
- **4. Long-term strategy:** In addition to building a foundation for predictive analytics, we supported the Trust's long-term goal of moving to the cloud. Our work helped align their predictive model development with future cloud capabilities within Epic, offering a scalable solution as the Trust's data and technology needs evolve.

"Having moved to using Epic as our EPR a few years ago, we now have access to an immensely rich source of data to better understand our patients' needs. We're now looking to move to the next stage of our data journey and use this data to proactively provide insights, improve efficiencies, and enhance patient care. CereCore International have provided our Transformation Team with the support and knowledge to embark on our journey into predictive analytics – their expertise has demystified the process of developing predictive models and implementing interventions, giving us a solid foundation to build upon."

Alex Kerans | Senior Project Manager, Royal Devon University Healthcare NHS Foundation Trust

The results

⊘ Kick-started predictive analytics:

Our roadmap helped Royal Devon begin their predictive analytics journey, outlining the steps required to implement these tools effectively.

Long-term strategy alignment:

Our roadmap provided alignment with Epic's cloud-based predictive analytics, which will be pivotal in the Trust's long-term data strategy.



CereCore® International provides IT services that make it easier for you to focus on supporting hospital operations and transforming healthcare through technology. With a heritage rooted in top-performing hospitals, we serve as leaders and experts in technology, operations, data security, and clinical applications. We partner with clients to become an extension of the team through comprehensive IT and application support, technical professional and managed services, IT advisory services, and EPR consulting, because we know first-hand the power that integrated technology has on patient care and communities.