

Streamlining patient records and clinical scheduling with RPA



To propel patient services across this variety of environments, Nottinghamshire Healthcare NHS Foundation Trust introduced several automated processes to uplift its long-standing electronic patient record system (EPR), RiO.

The Challenge

Like many Trusts across the NHS, Nottinghamshire Healthcare utilises the RiO EPR system to create, manage and share essential service-related patient care notes. As both an inpatient and community healthcare provider, it's essential the Trust's staff can utilise this system effectively from any service or healthcare base – from viewing and creating data directly in patient files, to securely sharing information with third-party healthcare organisations for comprehensive care.

The Solution

Following previous successful RPA projects within another EPR system, SystemOne, the Trust identified several RiO-related processes that could also be significantly improved with the use of [NDL Automate](#). Uplifting the system and its capabilities ensured minimal disruption to care, while allowing the legacy processes staff are familiar with to remain unchanged.

Verifying NHS numbers

Nottinghamshire Healthcare's RiO EPR isn't connected to the central NHS Spine system, making it difficult to match or trace NHS numbers for new patient registrations. Originally, the Trust's Applied Information Team would complete this process manually – extracting weekly registration reports from RiO and sending them away for verification, before reimporting confirmed matches and investigating anomalies. However, Nottinghamshire Healthcare was able to completely streamline this with an automated process:

Key Benefits

Efficient services for patients and staff

Improved data security and sharing

Uplifted existing processes without service impact

Increased patient data accuracy

Reduced administrative burden for healthcare staff

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The RPA process was able to pick up many of the repetitive changes in complex connections, particularly around sharing diary and caseload information. Post-pandemic, this function supports the large Junior Doctor Rotations and releases time to focus on other important tasks.
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 Richard Detheridge
Clinical Applications Manager





1. Each morning, an RPA bot logs into RiO and retrieves the registration report before sending it out for verification
2. Once received, verified information is then imported back into RiO
3. Discrepancies are highlighted for investigation by the Appropriate Team.

Improving its ability to verify NHS numbers, the project provides faster access to data for internal and third-party community care providers, such as NHS Digital's recently introduced [National Record Locator \(NRL\)](#).

Diary and Case Load Allocation

Another integral feature of RiO is its diary and caseload function – allowing users to access patient data, record outcomes and book new appointments. Though mostly used by clinical staff, a wide range of medical secretary teams also require access to support in numerous administrative tasks.

To ensure data confidentiality and security, access to these diary and caseload functions require specific permissions within the RiO system. Particularly during junior doctor rotations, amending these permissions manually was an incredibly time-consuming task. A full cohort can require up to 4,000 account changes on average, with each new doctor account also



Using the various services provided by NDL alongside our own technical and admin team resources has allowed projects from design through to implementation to be introduced with minimal disruption.



Phil Chesterman
Systems Development Manager



requiring support from 2 to 12 administrative secretaries.

Automating the monitoring and updating process for permissions in RiO has provided faster access to the tools needed for clinicians and medical secretaries to provide consistent and effective care, especially when onboarding a new wave of staff. Since the project's launch, a total of **2490 case-loads** have been updated to reflect team structure and personnel changes. This has resulted in **63,690 individual changes** within the system by [Automate Bots](#) - which equates to around **141 working days**,

The Benefits

Both of the Trust's recent RiO automation projects have yielded many advantageous benefits. In addition to the obvious time and resources savings, uplifting its EPR has allowed the Trust to make impactful changes for both patients and staff – allowing clinicians to use their digital tools more effectively, and providing more efficient and consistent care through the enabled sharing of information.

What's Next?

Following its success with RiO automation, Nottinghamshire Healthcare currently aspires to progress its RPA capabilities. The Trust plans to increase its NHS verification automation from five to seven days per week, while also creating a brand-new RPA process – allowing the Trust to automate RiO account creation for a range of its clinical staff.

To learn how RPA could benefit your public sector organisation, don't hesitate to [get in touch](#) with a member of our team – or join the NDL Community first-hand at one of our many industry-leading [events](#). Find more real-life use cases over in our [Success Story library](#).

