

# Maximising The Value of PRO Data with a Single Scalable Solution

*IQVIA Connection transforms data collection for a leading NHS centre, enabling fast, accurate real-time analysis of patient-reported outcome measures (PROMs)*

The Royal National Hospital for Rheumatic Diseases (RNHRD, part of the Royal United Hospitals Bath NHS Foundation Trust) is an NHS centre of excellence with an international reputation in rheumatology, chronic fatigue and pain management. The hospital offers general local services but also specialist programmes, attracting referrals from across the UK.

## Challenge

Having long relied on the manual collection of patient-reported outcomes information, RNHRD sought a more efficient approach to fully utilise the data. Typically, patients attending a clinic were asked to complete a paper-based assessment to discuss during their appointment. A key disadvantage for clinicians was lack of ready access to the scores or ability to reliably compare them with previous findings. All the collected data required entry into an Access database before reports could be generated.

Keen to eliminate paper, accelerate data capture and gain real-time access and insights, RNHRD approached IQVIA. With no single system ideal, the need was for a tailored, flexible solution that could not only enable better use of Patient Reported Outcome Measures (PROMs), but also allow historic importing and feeds from existing NHS databases.

## Solution

IQVIA experts addressed RNHRD's data capture and reporting challenges using IQVIA Connection, a market-leading online platform enabling fast collection and automated real-time analysis of non-identified and identified Patient-Reported Outcome Measures (PROMs) and Patient-Reported Experience Measures (PREMs).



***"This system has enabled me, as a clinician, to have the PROMs at my finger tips, which has led to improved informed decisions about patient care. The versatility of being able to add patient-related data improves accuracy and is invaluable for both clinical care and research."***

— Raj Sengupta, Consultant Rheumatologist, RNHRD

They began by importing an initial list of patients and their contact/demographic information from the NHS Millennium database into Connection. This was achieved via secure FTP and IQVIA's Data Import Wizard. The Wizard enables columns to be mapped from an import file into data fields within IQVIA Connection. Over 40,000 RNHRD patients have since been imported. Any changes in Millennium are synchronised with Connection daily, amounting to ~1,500 updates every day.

### CONVENIENT ELECTRONIC DATA CAPTURE

Using IQVIA Connection's Patient Management tool, patients can now complete assessments via a link in a pre-configured iPad in the clinic, or at home on any internet-enabled device. The questionnaires are menu-driven, user-friendly, intuitive and fulfill all the format requirements of different PRO measures. For example, patients filling out a Margolis Pain Diagram indicate areas of pain simply by touching a diagram of the body on the iPad.

**Figure 1: RNHRD stores a range of data sources on IQVIA Connection**

<b>PATIENT INFORMATION</b>	<ul style="list-style-type: none"> <li>• Contact details</li> <li>• Demographics</li> </ul>
<b>SUPPORTING PATIENT DATA</b>	<ul style="list-style-type: none"> <li>• Diagnosis</li> <li>• BMI with calculator</li> <li>• DMARDs and NSAIDs</li> <li>• High-cost drugs/biologics</li> <li>• Blood test results</li> <li>• Life events</li> <li>• Consent and research</li> </ul>
<b>PATIENT REPORTED (PRO) AND CLINICIAN REPORTED (CLINRO) OUTCOMES ASSESSMENTS</b>	<ul style="list-style-type: none"> <li>• EQ5D-5L: EuroQol 5-level Quality of Life</li> <li>• PASI: Psoriasis Area Severity Index</li> <li>• DLQI: Dermatology Life Quality Index</li> <li>• BASMI: Bath Ankylosing Spondylitis Metrology Index</li> </ul>
<b>COMPOSITE MEASURES</b>	<ul style="list-style-type: none"> <li>• ASDAS: Ankylosing Spondylitis Disease Activity Score (+ calculator)</li> <li>• PASDAS: Psoriatic Arthritis Disease Activity Score (+ calculator)</li> </ul>

***“The system is intuitive and user friendly. It is easy to train, add and remove users, input data and read the information that has been entered. And with the data pull-through, the patient demographics are already generated and updated.”***

— Debra Weeks, Biologics Administrator, RNHRD

Responses are saved to the platform, enabling real-time access to all assessments for a particular patient. Clinicians can also complete clinical questionnaires online during examination and share the results immediately with the patient.

### CUSTOMISED FUNCTIONALITY

The structure for capturing, feeding and storing data through IQVIA Connection is simple and fully tailored to RNHRD's requirements. The hospital has imported over 180,000 completed PROMs assessments, along with a wide range of supporting information (Figure 1).

### WEALTH OF REPORTING OPTIONS

Supported by charts, graphs and heat maps, the data can be viewed and analysed in various reporting formats, including

1. **Aggregated summary**, enabling analysis across a cohort, e.g. assessing health gains after a course of treatment
2. **Full patient record** in a series of panels, as supporting information
3. **Health trend chart** drawn from multiple PROMs over time, with optional markers for key events (e.g., medication switch, blood results) to understand changes and contributing factors

The data can also be exported to analyse patient results based on a complex set of requirements.

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***“Introducing electronic capture of patient outcomes has enabled multiple benefits, improving accuracy, reducing staff resources, affording real-time access by clinicians to patient data for treatment, and as a research resource bringing us into the digital age with its associated efficiencies.”***

— Jane Carter, Research Manager Development, RNHRD

## Results

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With the fast, accurate, real-time data enabled by IQVIA Connection, RNHRD staff are making broader, more effective use of PROMs, resulting in:



**Improved clinical care** with the ability to

- Capture patient information quickly, both on and off site
- Calculate results immediately and reliably
- Visualise, contextualise and discuss patient progress during consultation



**Enhanced patient engagement** with feedback demonstrating

- Strong buy-in to online questionnaires and score charts
- Deeper understanding of their condition
- Associated willingness to change treatments or therapies



**Optimised research activities** through

- Improved patient screening for clinical trials
- Analysis of readily available de-identified data
- Potential to support long-term observational studies

### **GROWING APPLICATIONS**

At a time of increasing emphasis on patient-reported outcomes, RNHRD is well positioned to maximise the value of this data with a single, scalable solution. One that enables timely insights into PROMs but also affords a broader perspective for a complete patient picture. With the system allowing for growth, there is excitement for further applications at RNHRD, including its wider use in research and to help reduce waiting lists, allowing for even greater efficiencies.

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***“There seems room for expansion with this system. I can see it having a bright future and being used in other departments.”***

— Debra Weeks, Biologics Administrator, RNHRD



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**CONTACT US**

If you want to learn more about how our solutions can specifically help your Trust to improve value and patient outcomes, please contact +44 (0) 1785 238 009 or [nhssolutions@iqvia.com](mailto:nhssolutions@iqvia.com) [www.iqvia.com/uk-nhs-solutions](http://www.iqvia.com/uk-nhs-solutions)