Here to RCI Assist you!

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NHS Blood and Transplant

Introduction

Transfusion 2024[1] outlined key priorities for clinical and laboratory transfusion practice across the NHS

This initiative aligns with findings from the United Kingdom Transfusion Laboratory Collaborative (UKTLC) survey, which highlighted capacity and resource challenges within HTLs[2]

A defined pathway between Hospital Transfusion Laboratories (HTLs) and Red Cell Immunohaematology (RCI) was identified as a priority, specifying decision points for further serological investigation

NHSBT workload audits demonstrate that RCI activity has increased by approximately 40% over the past decade, largely driven by pressures on HTL capacity and resources

This was to address the urgent need to strengthen support for HTL to ensure safe provision of care for patients in need of transfusion

In response, a referral support tool—**RCI Assist**—has been developed to facilitate decision-making and streamline referrals

Developing RCI Assist

The referral support tool was initially developed as a paper-based flow chart and validated though pilots between Newcastle Upon Tyne NHS Foundation Trust supported by RCI Newcastle, Path Links Pathology Network, supported by RCI Barnsley, and East and Southeast London Pathology Partnership, supported by RCI Tooting. The tool contains decision points alongside supporting information and can act as a guide for less experienced staff, be used for training and provide reassurance about serological cases to all staff, aiming to standardise the referral process and improve staff confidence. To make the tool more user friendly, a digital version was developed and made available for HTL staff to access via links in Sp-ICE and OBOS.

Pathways include:

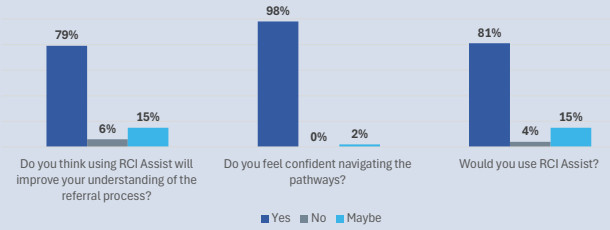
- Grouping
- Antibody Identification
- Antenatal
- Panreactives
- Elution
- Transfusion

How it works:

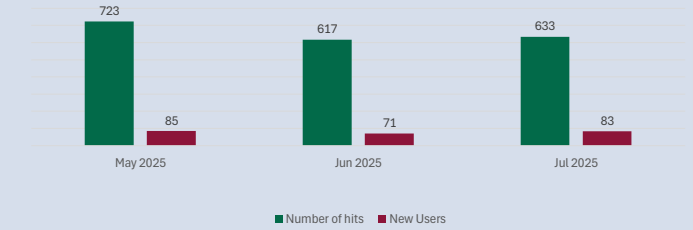
- To move through the pathways, select the yes or no options next to the question boxes
- To jump straight to a section, select the required tab
- To get supporting information about a topic, click the information icon
- Reach a decision point and either refer to RCI or result in-house

Measure of success?

A series of online training sessions were held throughout January, February and March 2025 and feedback was collected from almost 500 attendees:



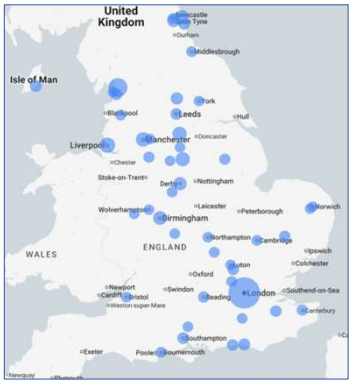
Google Analytics is utilised to collect usage on RCI Assist. In the first three months from go live in May 2025, RCI Assist was accessed almost 2000 times by over 200 new users:



Project analytics and next steps

Going forward:

- Usage will continue to be monitored via Google Analytics
- Training sessions will be offered to HTL across England
- User feedback will be collected to see if HTL staff confidence has improved
- User feedback will inform future developments to RCI Assist
- Publications and award submissions will be considered
- Further workload audits of RCI will be carried out to assess the impact of RCI Assist roll out



Acknowledgements

Special thanks to all HTL staff in Path Links Pathology Network, East and Southeast London Pathology Partnership, Newcastle upon Tyne Hospitals NHS Foundation Trust, all NHSBT staff in RCI, Digital Learning, Hospital Customer Services, Clinical Services Product Centre and Transfusion 2024.

Additional thanks goes to everyone who took the time to provide invaluable feedback on RCI Assist during its development.

References

1. National Blood Transfusion Committee and NHS Blood and Transplant (no date) *A five-year plan for clinical and laboratory transfusion, Nationalbloodtransfusion.co.uk*. Available at: https://nationalbloodtransfusion.co.uk/sites/default/files/documents/2023-03/Transfusion%202024%20Brochure%20FINAL%20%2811.12.2020%29.pdf

2. Bolton-Maggs, P., Mistry, H., Rook, R., 2019) "Staffing in hospital transfusion laboratories: UKTLC surveys show cause for concern," *Transfusion Medicine (Oxford, England)*, 29(2), pp. 95–102. doi: 10.1111/tme.12593.

For further information on RCI Assist, please visit the NBTC website