

Transfusion 2024 A five-year strategy for clinical and laboratory transfusion in England Checklist for hospitals

Introduction

The Transfusion 2024 plan (*Transfusion Medicine*. 2021; 31(6): 400 – 408) outlines key priorities for clinical and laboratory transfusion practice for safe patient care across the NHS. This is based on the outcomes of a multi-professional symposium held in March 2019 organised by the National Blood Transfusion Committee (NBTC) and NHS Blood and Transplant (NHSBT). The plan builds on recommendations of previous Better Blood Transfusion Health Service Circulars with many of the actions outlined being implemented within the regulatory, training, and operational infrastructure and framework already developed within hospitals supported by the NBTC and Regional Transfusion Committees (RTCs).

Around 2 million units of blood and components are used across hospitals in England to support patients across a wide spectrum of acute clinical disciplines for adult and paediatric patients such as trauma, surgery, cancer, renal, intensive care etc. It is essential to define a clear policy for the many healthcare teams involved to support safe and appropriate use of blood for effective patient care.

There are over 200 hospital transfusion laboratories within trusts across England with major challenges and concerns around the current delivery of service to support safe patient care. It is essential to define key actions with emphasis on an educated and trained workforce, with appropriate IT support working in integrated partnerships with specialist NHSBT laboratories, and across pathology networks within the principles of current NHS strategy.

The following checklist has been developed by representatives from the NBTC and its allied groups (including National Lab Managers Group, National Transfusion Practitioners Network and Education working group), NHSBT Patient Blood Management (PBM) team, UK Transfusion Laboratory Collaborative, and the UK Serious Hazards of Transfusion (SHOT) Haemovigilance Scheme.

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Patient Blood Management				
	Outcomes	Tools & Resources	Actions for hospitals	Compliance
Self - assessment Develop a transfusion practice self-assessment tool to allow benchmarking.	Develop a tool for self-assessment by hospitals/trusts with plan for pilot and rollout.	PBM Toolkit Pre-op anaemia toolkit Vein to Vein Blood Transfusion Processes Guidance Vein to Vein Data Collection Tools 2021 Survey of Patient Blood Management	Review results and act on recommendations of 2021 National Comparative Audit PBM national survey National Comparative Audit reports	
	To include compliance with NICE Quality Standards for Transfusion. *Pilot work with Model Hospital in progress	QS138 Quality Insights Audit Tool - Hospitals and Science - NHSBT (blood.co.uk)	Recommend QS138 Insights Audit Tool as a hospital/trust CI initiative	
			Active participation in the Blood Stocks Management Scheme (BSMS) https://www.bloodstocks.co.uk/	
Resources to support clinical transfusion practice.	Define minimum recommended levels of transfusion practitioner staffing and other resources for Hospital Transfusion Teams.	2021 Survey of Patient Blood Management 2018 Survey of Patient Blood Management 2015 Survey of Patient Blood Management 2013 Survey of Patient Blood Management	Review results and act on recommendations of 2021 National Comparative Audit Patient Blood Management survey National Comparative Audit reports	
	NHSBT to review and strengthen support for clinical transfusion practice (including PBM teams, the National	NHSBT/NBTC education and transfusion resources PBM website JPAC website	Include PBM as standard agenda item at Hospital Transfusion Team/Hospital Transfusion Committee meetings Contact local PBM/HCS/BSMS representatives.	

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Comparative Audit programme, and Blood Stocks Management Scheme).	NBTC website	Contact nhsbtcustomerservice@nhsbt.nhs.uk	
	National Comparative Audit website	Signpost and promote clinical courses to appropriate staff groups.	
	Blood Stocks Management Scheme website	Promote and support attendance at education events and share learning with clinical teams through an agreed format.	
	RTC /NBTC education programme	Ensure Trust representation at Regional Transfusion Committee meetings.	
	NHSBT clinical courses/eLearning	Multidisciplinary attendance at Hospital Transfusion Team meetings – as per HTC Chairs toolkit	
	NHSBT non-medical authorisation of blood components course		
Develop a documented competency framework for transfusion practitioners (TP) with plan for pilot and implementation.	HTC Chairs toolkit		
	ISBT Transfusion Practitioners Tools	Review current local TP competencies.	
	National Transfusion Practitioners Network	Implement national competency framework when published.	
	2021 Survey of Patient Blood Management	Incorporate framework into appraisal and career development process.	
	2018 Survey of Patient Blood Management	Ensure regional TP representation at National TP group	
	2015 Survey of Patient Blood Management		
	2013 Survey of Patient Blood Management		

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Transfusion Laboratory Safety				
	Outcomes	Tools & resources	Actions	Compliance
Laboratory staffing	Laboratories to have robust capacity planning to ensure adequate staffing, skill mix and resources for safe and effective delivery of services.	Capacity Planning Guidance and Methodology for Transfusion Laboratories (SHOT) Link to the UKTLC standards and tools (UKTLC - Serious Hazards of Transfusion (shotuk.org))	Each hospital transfusion laboratory has an approved capacity plan in place fully supported by trust senior management.	
	Ensure the safe use of non-haematology staff especially in essential laboratory services (ESLs) out of hours, supported by guidance on education requirements for multi-disciplinary staff.	https://www.shotuk.org/resources/current-resources/uktlc/	Each hospital to have a plan in place to ensure non-haematology staff are provided education and training to meet the current UKTLC standards (updated in 2023)	
Scientific and technical education and training	Review and strengthen transfusion scientific training. Develop and implement a strategy for Consultant Clinical Scientists to take a leadership role in transfusion.	https://hospital.blood.co.uk/training/scientific-courses/ https://nshcs.hee.nhs.uk/programmes/ <i>*The National School for Healthcare Science (NSHCS) in conjunction with the Royal College of Pathologists (RCPATH has updated the Scientist Training Program (STP)</i>	Support training and continuing professional development for all transfusion laboratory staff within hospitals. Explore further development of Consultant Clinical Scientists posts within Trusts and Pathology networks and in partnership with NHSBT	

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		<i>curriculum and widened biomedical scientist (BMS) entry criteria for the Higher Specialist Scientist Training (HSST) training program for Haematology and Transfusion Science</i>		
Pathology networks	Development of defined standards for laboratory transfusion practice. Inclusion and review of blood usage/wastage data across networks	UKTLC standards have been updated. https://www.shotuk.org/UK-TLC-Standards-2023	Review provision of transfusion services aligned to Pathology Networks	
		https://www.shotuk.org/wp-content/uploads/myimages/LIMS-Suppliers-Survey-2021-Summary-Report.pdf	Review lab IT systems and explore NHSE funding opportunities for upgrade.	
		RCPATH, NBTC and SHOT to incorporate principles in developing transfusion standards for Pathology networks in collaboration with NHSE	Active participation in the Blood Stocks Management Scheme (BSMS) and regular input of use and wastage data https://www.bloodstocks.co.uk/	
Adverse event reporting	Promote a culture where all staff involved with transfusion are supported in highlighting and reporting adverse events.	UK Transfusion laboratories culture survey report 2019 SHOT laboratory reporting guide SHOT Human factors tuition package SHOT Benchmarking NHS Patient Safety Incident Response Framework PSIRF and impact on haemovigilance in England	Incorporate Human factors in incident investigations and training.	

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Information Technology				
	Outcomes	Tools & resources	Actions	Compliance
Transfusion IT	Inclusion of defined standards for hospital transfusion IT within pathology networks. Design a blueprint for managing inventory and define an approach for roll out to hospitals.	https://www.shotuk.org/resources/current-resources/script/	Review results of SHOT SCRIPT survey and recommendations Active participation in the Blood Stocks Management Scheme (BSMS) and regular input of use and wastage data https://www.bloodstocks.co.uk/	
Vein to vein electronic tracking.	Develop a plan to drive the implementation of vein-to-vein electronic systems from donation, recipient group and screen sample, blood collection, administration of blood and monitoring of transfused patients.	Vein to Vein Blood Transfusion Processes Guidance Vein to Vein Data Collection Tools 2021 Survey of Patient Blood Management	Review internal systems to maximise vein-to-vein tracking and report to HTC	
			Utilisation of NCA quick audits	
			Active participation in the Blood Stocks Management Scheme (BSMS) and regular input of use and wastage data https://www.bloodstocks.co.uk/	
			Review results and act on recommendations of 2021 National Comparative Audit PBM national survey National Comparative Audit reports	

Some other key areas of progress include the following:

- NHSBT in partnership with the National Institute of Health Research (NIHR) has funded further new NIHR Blood and Transplant Research Units (BTRUs) launched in 2022 as centres of multidisciplinary research excellence including data driven transfusion practice.
<https://www.nhsbt.nhs.uk/research-and-development/current-research/btrus/data-driven-transfusion-practice/>

NHSBT has established the HAEM-MATCH consortium that aims to develop algorithms to optimise the allocation of genotyped blood to patients and to optimise the collection of blood from the donor pool by type.