

Influencing Change in Transfusion Information Technology Systems in the UK- the SCRIPT Survey and Collaborative Working Project

Jennifer Davies^{1,2}, Nicola Swarbrick¹, Victoria Tuckley¹ and Shruthi Narayan¹

¹Serious Hazards of Transfusion, NHS Blood and Transplant, Manchester ²Royal Devon University Healthcare NHS Foundation Trust

1. Introduction

Serious Hazards of Transfusion (SHOT) is the UK independent haemovigilance scheme, which accepts reports on transfusion serious adverse events (SAE) and reactions (SAR)

SCRIPT is the SHOT Collaborative Reviewing and reforming IT Processes in Transfusion working group. In the past 10 years SHOT has seen an 82% rise in errors related to IT. The Annual SHOT Report 2022 included 430 cases containing errors relating to IT

Errors are seen across a range of reporting categories including failure to meet transfusion specific requirements (118/430, 27.4%), Incorrect component transfused (32/430, 7.4%) and handling/storage errors (101/430, 23.5%).

SCRIPT aimed to enhance transfusion safety by identifying areas for improvement and provide resources to bridge gaps identified in IT processes

An initial survey of all registered SHOT reporters in late 2020 helped understand the current status of IT implementation across the NHS, and identify gaps and challenges faced by teams across the UK

2. Survey findings

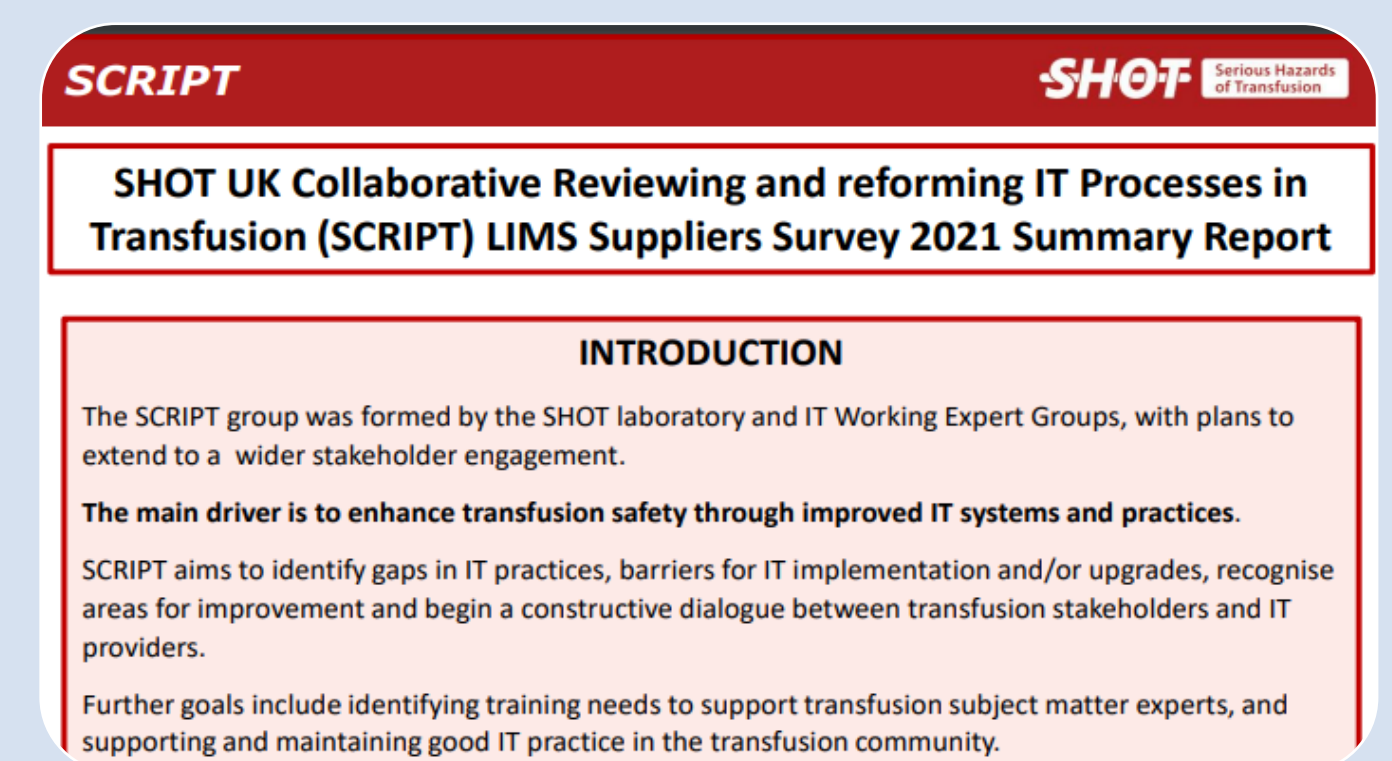
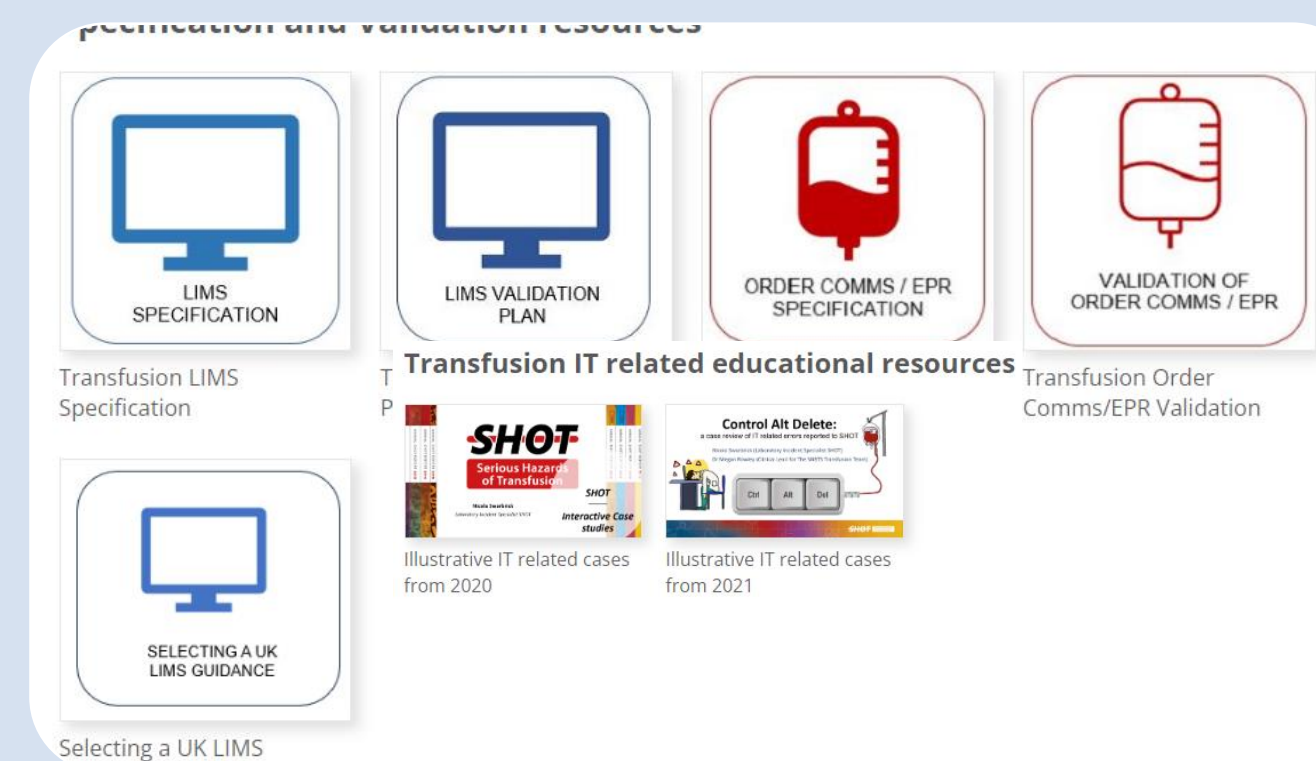
The user survey identified key challenges with IT:

1. Barriers to implementing IT systems, including lack of funding, resources, and engagement from Trust/Health Board, particularly relating to electronic blood management systems (EBMS)
2. Lack of IT expertise, training, and allocated time for implementation, development, and maintenance of systems
3. A need for national guidelines and templates for procurement, validation, and implementation
4. Deficiencies in laboratory information management systems (LIMS), particularly relating to algorithms for appropriate selection of blood components where patients have specific requirements

3. Method

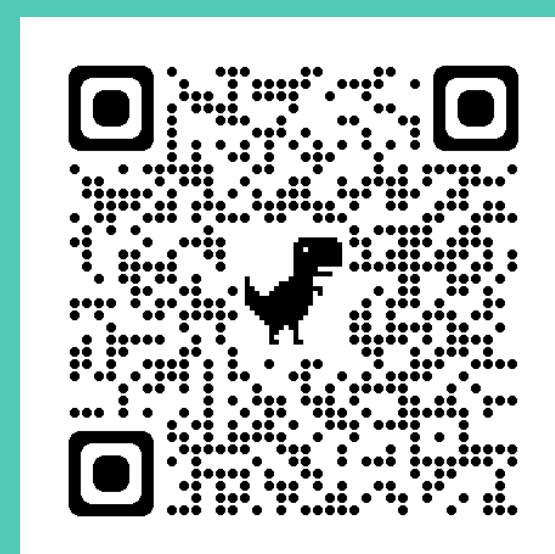
The key challenges identified were reviewed by a collaborative group including representatives from key transfusion stakeholders. Processes for addressing each of the key challenges were agreed and taken forward by the group

4. Outcomes



To address gaps in funding, the survey results were presented to NHS England. This enabled provision of a funding stream for hospitals in England to implement IT systems for transfusion

Lack of IT expertise and training was addressed by the provision of IT related educational resources on the SCRIPT page of the SHOT website



The need for national guidelines and templates was addressed by provision of resources on the SCRIPT page of the SHOT website, including support for business cases for procurement

A LIMS supplier survey was performed in late 2021 to address specific issues identified in the initial user survey. Survey results are available on the SCRIPT page of the SHOT website and an article relating to LIMS has been published ([doi:10.1111/tme.13010](https://doi.org/10.1111/tme.13010))

5. Discussion

The SCRIPT user survey has effected tangible changes in supporting transfusion IT systems, including release of funding and provision of many useful resources freely accessible to all organisations. SCRIPT continue to build on this work, including plans for further discussions with LIMS providers, an e-learning module to support training for IT experts in transfusion and more useful resources. The SCRIPT project highlights the power of surveys and collaborative working to influence positive change

INFORMATION TECHNOLOGY MUST BE SET UP AND USED CORRECTLY TO BE SAFE

IT SUPPORTS SAFE TRANSFUSION - USE IT



For more information on the SHOT SCRIPT work visit our website at: <https://www.shotuk.org/resources/current-resources/script/>

SCRIPT

54 Shares [Tweet](#) [Email](#) [in Share](#) [Print](#) [Share](#) [Share](#)

The SHOT UK Collaborative Reviewing and reforming IT Processes in Transfusion (SCRIPT) group aims to improve transfusion safety through improved IT systems and practices



Download the SHOT App now to keep up to date with SHOT resources wherever you are

