Title: Introduction or Upgrade of Information Systems Procedure

Ref: IT-0032-001-v2.3

Status: Approved
Document type: Procedure
Overarching Policy: Maintenance of IT Systems

Contents

1   Introduction

This procedure describes the process for introducing or upgrading Trust information systems.

It is imperative to consider the potential implications of introducing new information systems to the Trust to ensure that the correct solution is procured, in line with ensuring that cost aligns with benefit for end users. In addition, the ability to be able to provide the level of support required for any new systems needs to be reviewed as part of this process.

Enhancements to functionality or upgrades to existing systems should also be assessed from a cost/benefit perspective prior to planning implementation.

This procedure links to Our Journey To Change (OJTC) and has been developed with OJTC in mind and helps us deliver our three strategic goals as follows:

- This procedure supports the Trust to co-create a great experience for all patients, carers and families from its diverse population by ensuring that systems introduced provide the functionality required by Trust staff to support the provision of outstanding and compassionate care all the time.
- This procedure supports the Trust to co-create a great experience for our colleagues by introducing systems that provide the functionality required to support Trust staff in undertaking their roles ensuring that the workplace is fit for purpose.
- This procedure supports the Trust to be a great partner by encouraging the sharing of system functionality, skill, and knowledge working innovatively across organisational boundaries to improve services.

2   Purpose

Following this procedure will assist the Trust in: -
- Introducing new information systems that are fit for purpose and aligned with achieving the Trusts' strategic goals.
- Ensuring that current system functionality already available within the Trust is reviewed as an option.
- Ensuring that cost, benefit, and any potential resource requirements (to support and maintain) are considered when planning any procurement and implementation of new systems.
- Ensuring that lived experience co-creation is included when considering the functionality and implementation.
- Upgrading existing information systems

3   Who this procedure applies to

This procedure applies to any member of staff involved in the procurement or upgrade of a Trust system.

4   Related documents

This procedure describes what you need to do to implement the Introduction or Upgrade of information Systems procedures section of the Maintenance of IT Systems Policy [ref IT-0032].

> The Maintenance of IT Systems Policy defines the principles which you must read, understand and be trained in before carrying out the procedures described in this document.

This procedure also refers to:

- Information Security and Risk Policy [IT-0010]
- Digital Technology Assessment Criteria (DTAC) Procedure [IT-0037]
- Data Protection Impact Assessment (DPIA) Procedure [IT-0030-001]
- Clinical Risk Management Procedure [CORP-0071]

5   Procedure

New system enhancements/developments must adhere to the following stages from concept to implementation:

> ⚠ The Digital & Data Department will not support any system enhancements pursued outside of the process described in this document

5.1 Develop the concept: Consider the need

When considering new ideas, consult with all key stakeholders. In the case of information systems, you must include the Digital and Data Services department as part of this stakeholder engagement group. The 'I have an idea' form accessible via the Self-Service Portal should be completed to request support for ideas or proposals at this stage of development.

Focus on:

- What are the requirements, what is the current gap in functionality?
- What would be the business benefits of implementing a new system?
- Can current practice be improved, or the requirement be met without implementing a new system?
- Can the requirements be provided by utilising an existing system within the Trust?
- How will any new system be introduced, supported and maintained, is additional resource required? Has a funding stream been identified?
- Equality Impact Assessment - ensure that the needs of people with disabilities and other protected groups are considered

Once the 'I have an idea', form is submitted it will be logged in a queue for action and, a representative from Digital and Data Services will contact you to discuss your requirements.

5.2 Governance Groups: Strategic Alignment

The following groups provide the governance for information system developments:

Group	Responsible for
Digital Programme Board	The programme board governing the delivery of the Digital and Data programme's projects and workstreams The aim of the board is to implement the Digital Transformation Strategy in the Trust to ensure that the Trust's digital transformation vision is achieved also considering equality impact and co-creation requirements.
Digital Performance and Assurance Group	Promoting and ensuring that an effective digital technology assessment is carried out prior to deploying, developing, and modifying health IT Systems. The Digital Technology Assessment Criteria (DTAC) ensures that each proposed implementation has in place: • Procurement assurances and supplier due diligence • Technical assessment • Data Protection Impact Assessment • Clinical Safety Case (where required)

Cyber Security Group	• To receive updates from key functional areas within Digital & Data Services Department in relation to the Cyber Security activities. This would include:
	    o Information incidents
	    o Third party audits
	    o DTAC assessments

	○ Identification and review of critical systems to include Business Continuity Plans (BCP) and Disaster Recovery (DR) ○ Software Vulnerabilities ○ Review & prioritisation of Cyber alerts ○ Regional/national briefing - To ensure an impact assessment are undertaken for all security alerts. - To establish and monitor the standard systems and processes in place to ensure the security and integrity of the Trusts Digital & Data Systems are maintained. - To monitor the progress, compliance and delivery of key actions that underpin the Trust Cyber Security approach. - To be accountable for the assessment and mitigation of issues and risks raised to the group – issues and risks that are identified will be managed by the group and escalated as appropriate. - To ensure effective communication and engagement approaches are in place with Trust stakeholders and Trust staff on cyber security – within and external to the Information department. - To provide assurance that the Trust has no unsupported or isolated systems that requires additional measures. - To produce a quarterly report to the digital safety board providing assurance on cyber security.
Change Advisory Board (CAB)	- To act as the change board for all changes to the Trust's IT Infrastructure and Information Systems, ensuring all changes are documented, impact assessed managed, and tested in accordance with best practice prior to deployment to the live environment. - To provide technical assurance that all changes and developments, that fall within its remit, are impact assessed to ensure that the requirements are met, and do not compromise current infrastructure and systems once deployed.
Information Governance Group (IGG)	To provide assurance of the quality, confidentiality, integrity and availability of the proposed use of information.

The process for scoping new developments is outlined in Appendix 1. Proposals must include:

- Strategic alignment
- Business benefits
- Risks
- Dependencies

- Technical evaluation and assurance – this is evaluated by the Digital and Data Services department with reporting and sign-off sought from Digital Programme Board
- Patient/Clinical Trust systems need to be assessed by a Trust Clinical Safety Officer.
- Clinical Safety Cases are completed if the system relates to Patient information/data
- Equality Impact Assessment to ensure that the proposal is fair and will not unfairly advantage or disadvantage protected groups e.g. staff with disabilities
- A Data Protection Impact Assessment (DPIA) to support 'privacy by design' by identifying and minimising the data protection risks of a project.
- A Digital Technology Assessment Criteria (DTAC) document should also be completed to ensure that standards around clinical safety, data protection, technical security, interoperability, usability, and accessibility, are met.

5.3 From Concept to Approved Business Case

Annually, the Digital Programme Board (DPB) agrees schemes in relation to Trust priorities for the coming year.

Business-critical proposals may be considered in-year by either DPB or the Trust's Transformation and Strategy Board.

All approved proposals will need a detailed business case using the Trust's project management framework.

Document	Contents
Project Brief	Scope of the development Request resources for requirements gathering Market review Stakeholder consultation including equality impact and co-creation requirements. Next Steps including development of business case timeline
Outline Business Case (OBC)	Outline scope Identify detailed benefits Implementation timescales Implementation plan Project Initiation Document (PID) Plans for procurement Quality Impact Assessment Data Protection Impact Assessment (DPIA)

		Equality Impact Assessment – this must be considered from requirements gathering onwards i.e. it should not be done at the end
Full Business Case		As for OBC, but post-procurement
		How the development supports the Trust's strategic vision
		Which of the Trust's objectives the development will address
		Expected outcomes and benefits of implementation
		Identify all costs including capital and recurring expenditure

These forms must be presented to and considered by relevant governance group for approval which will be facilitated by the team managing within Digital and Data Services.

5.4 Implementation

Approved projects are monitored by the relevant governance group and reported each month as part of the Trust's project management framework to Digital Programme Board (DPB).

Introduction of new information systems or upgrades to existing systems should be delivered using project management methodologies and principles.

Project implementation plans must establish and monitor:

- That the scope and requirements are fully documented, and met
- Agreed timescales (also considering potential procurement timeframes)
- Appropriate resources (including any additional resources required)
- Impacts on other systems
- Impacts on stakeholders
- Involvement from the Digital and Data Services Contracts team (where required)

For the introduction or upgrade of clinical systems, assurance is required that the skills, competence, capacity, and confidence to take on the system are present. Clinical teams should be resourced onto the project, along with a Clinical Safety Officer (CSO). In addition, the Digital and Data Business Analysis team should be fully engaged to ensure that the scope and requirements are fully documented, understood, and signed off.

In the absence of this, clinical safety may be compromised and/or benefits might not be realised. To ensure that clinical safety is not compromised, a Pilot site approach should be considered to evaluate any risk to patient safety before any large-scale implementation is undertaken.

3rd party audits will be undertaken as required by the Digital and Data Services Information Governance team. Transition of the new or upgraded system to the

Services utilising it as opposed to transition to IT Operations (covered in section 3.5) is an important aspect of the project implementation phase. Staff who will be using the system should be engaged in the process at the earliest possible stage. This will enable staff to identify any changes or enhancements required prior to the system being rolled out Trust-wide.

Any new system or development must be fully tested (in a Test environment), by the development team, systems team, and end users from the Service, and signed off via the Trust CAB (Change Advisory Board), prior to being deployed into the live environment.

The training needs for users must also be carefully considered, considering how they can demonstrate practical competence in using the system. The Digital Learning team should be fully engaged in the process to develop a training needs analysis and digital learning offer that is inclusive of all learners needs. In addition, consideration should be given to involve / engage with the LTHC (Long Term Health Conditions) and Neurodiverse staff networks for staff who would like to be involved in the training needs of the system.

All developments of new web and browser systems should consider meeting the Worldwide Web Consortium (W3C) Web Content Accessibility Group (WCAG) 2.2 AA standard. There are three potential levels of WCAG compliance ranging from A-AAA, with A being the minimum required to ensure a website does not contravene the Disability Discrimination Act (2005) and AAA defining the requirements for a site specifically designed to support users with impaired motor, visual, or auditory capabilities.

Developments in non-Web technologies will consider Guidance on Applying WCAG 2. to Non-Web Information and Communications Technologies.

5.5 Transition to Operations in Digital & Data Services Department

5.5.1 Checklist

Task	Responsible	Done ✓
Project Documentation Business Requirements Documentation (including definition of scope including alignment with equality and co-creation requirements, and any change requests) Outline Business Case (if relevant) Final Business Case (if relevant)	Project Manager	

Project Initiation Document Contractual agreements Final copy of project AIR log Project Close Report including Benefits Data Protection Impact Assessment signed off by Data Protection Officer Lessons learned from previous similar projects, pilots, end user feedback		
Operational and Technical Documentation e.g. IP Address allocation PC Imaging Procedure Asset Register for items deployed as part of the project Server documentation Process for ordering new equipment, including costs Maintenance process	Project Manager	
Named Service Owner, System Owner and Technical Owner agreed	Project Manager	
Product Catalogue entry including how many items are purchased	Project Manager	
Service Desk script(s) written and signed off	Project Manager	
Training for Operational support staff	Project Manager	
Digital Learning Offer for system/product users (e.g. e-learning content)	Project Manager	
End user documentation e.g. How to User Guides	Project Manager	
System test plans (including full regression test scripts) and end of test reports from the project phase.	Project Manager	
Full system release notes from the supplier for the version of the system handed over to operations.	Project Manager	
Documented descriptions of DR plans and security patching schedules are agreed and in place.	Project Manager	
System Specific Policy approved and in place to include agreed processes for the safe and legal governance, support, backup plans and maintenance arrangements for the system	Project Manager	

DPIA – Data Protection Impact Assessment approved and in place to identify risks out of the processing of personal data. DPIA's should be implemented and approved at IGG prior to the processing of any data, and should be refreshed to reflect any system changes to ensure that the solution being deployed into the live environment is reflected.	Project Manager	
DTAC – Digital Technology Assessment Criteria approved and in place to ensure clinical safety, data protection, technical security, interoperability, and usability and accessibility standards are met.	Project Manager	
System Contract and associated documentation to be handed over.	Project Manager	

5.5.2 Assurance

> ⚠️ Systems must not transfer to live operation until the required documentation has been handed over, the System Specific Policy is approved, a DPIA is in place (prior to any data being processed), and a DTAC assessment has been undertaken.

System recovery procedures are outlined in SSP (System Specific Policy) documents for each system. In addition, Services should also implement local BCP's (Business Continuity Plans, in line with the Trust Business Continuity Policy) in the event of system outage.

6 Definitions

Term	Definition
Stakeholder	Anyone who has an interest in the operation of the system, or the output from the system or from benefits derived from the system
Service Owner	Overall responsibility for the system from a Business/Service perspective.
System Owner	Responsible for providing operational systems management, administration, development/configuration, maintenance, and support.

Technical Owner	Responsible for the configuration, maintenance, and management of associated system architecture, including servers (if internally hosted), networks and desktop hardware provision.
Information System	An integrated set of components for collecting, processing, and storing data and for delivering information
Digital Programme Board	The programme board governing the delivery of the Digital and Data programme's projects and workstreams
Clinical Safety Officer	Individual responsible for assessing the clinical safety of Patient systems to ensure that clinical safety of patients is not put at risk
Project Manager	Individual responsible for the management and delivery of a project

7   How this procedure will be implemented

- This procedure will be published on the Trust Website and Trust Intranet.

7.1 Implementation action plan

N/A – process already in place.

7.2 Training needs analysis

Staff/Professional Group	Type of Training	Duration	Frequency of Training
Not applicable			

8 How the implementation of this procedure will be monitored

Number	Auditable Standard/Key Performance Indicators	Frequency/Method/Person Responsible	Where results and any Associate Action Plan will be reported to, implemented and monitored; (this will usually be via the relevant Governance Group).
1	100% of all new system or amendment requests have been approved by Digital Programme Board	Frequency = Monthly Method = Meeting (DPB) Responsible = Project Manager	
2	100% of all new system projects will have a Project Close report approved by Digital Programme Board	Frequency = Monthly Method = Meeting (DPB) Responsible = Project Manager	

9 References

- Consortium (W3C)
- Web Content Accessibility Group (WCAG) 2.1 AA standard.

10 Document control (external)

To be recorded on the policy register by Policy Coordinator

Required information type	Information
Date of approval	14 March 2025
Next review date	14 March 2028

This document replaces	IT-0032-001 version 2.2 – Introduction or upgrade of information systems procedure
This document was approved by	Digital Delivery Management Group (04 March 2025)
This document was approved	04 March 2025
This document was ratified by	Digital Performance and Assurance Group
This document was ratified	14 March 2025
An equality analysis was completed on this policy on	11 February 2025
Document type	Public
FOI Clause (Private documents only)	N/A

Change record

Version	Date	Amendment details	Status
V2.3	14 Mar 2025	3-year review of document with clarifications and amendments throughout to reflect current practice.	Approved

Appendix 1 - Equality Impact Assessment Screening Form

Please note: The [Equality Impact Assessment Policy](#) and [Equality Impact Assessment Guidance](#) can be found on the policy pages of the intranet

Section 1	Scope
Name of service area/directorate/department	Digital and Data Services
Title	Introduction or upgrade of information systems procedure
Type	Procedure
Geographical area covered	Trust-wide
Aims and objectives	In addition to the functionality required, it is essential that cost, benefit, and any potential resource requirements (to support and maintain) are considered during the business case phase when planning the potential procurement and implementation of new systems. In addition, current system functionality already available within the Trust should also be reviewed as an option. Following this procedure will assist the Trust in: - • Introducing new information systems that are fit for purpose • Upgrading existing information systems
Start date of Equality Analysis Screening	09/10/2024
End date of Equality Analysis Screening	11/02/2024

Section 2	Impacts
Who does the Policy, Procedure, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan benefit?	Patients, Carers, Families, Staff, 3rd Party Stakeholders
Will the Policy, Procedure, Service, Function, Strategy, Code of practice, Guidance, Project or Business plan impact negatively on any of the protected characteristic groups? Are there any Human Rights implications?	**Race** (including Gypsy and Traveller) **NO** **Disability** (includes physical, learning, mental health, sensory and medical disabilities) **NO** **Sex** (Men and women) **NO** **Gender reassignment** (Transgender and gender identity) **NO** **Sexual Orientation** (Lesbian, Gay, Bisexual, Heterosexual, Pansexual and Asexual etc.) **NO** **Age** (includes, young people, older people – people of all ages) **NO** **Religion or Belief** (includes faith groups, atheism and philosophical beliefs) **NO** **Pregnancy and Maternity** (includes pregnancy, women / people who are breastfeeding, women / people accessing perinatal services, women / people on maternity leave) **NO** **Marriage and Civil Partnership** (includes opposite and same sex couples who are married or civil partners) **NO** **Armed Forces** (includes serving armed forces personnel, reservists, veterans, and their families) **NO** **Human Rights Implications NO** (Human Rights - easy read)
Describe any negative impacts / Human Rights Implications	No – Changes to systems can potentially have a negative impact on some staff. As a result, mitigating actions are recommended including i.e. Training needs analysis, staff consultation, equality impact assessment being part of the process from beginning to end etc.
Describe any positive impacts / Human Rights Implications	This procedure ensures systems are introduced into the Trust in a safe and effective manner regardless of the protected characteristics of our patients, carers, families and staff

Section 3	Research and involvement
What sources of information have you considered? (e.g. legislation, codes of practice, best practice, nice guidelines, CQC reports or feedback etc.)	See references
Have you engaged or consulted with service users, carers, staff and other stakeholders including people from the protected groups?	Yes
If you answered Yes above, describe the engagement and involvement that has taken place	This procedure is informed by the Digital Programme Board which includes representatives from Digital and Data Services and Clinical Services
If you answered No above, describe future plans that you may have to engage and involve people from different groups	N/A

Section 4	Training needs
As part of this equality impact assessment have any training needs/service needs been identified?	No
Describe any training needs for Trust staff	N/A
Describe any training needs for patients	N/A
Describe any training needs for contractors or other outside agencies	N/A

Check the information you have provided and ensure additional evidence can be provided if asked.
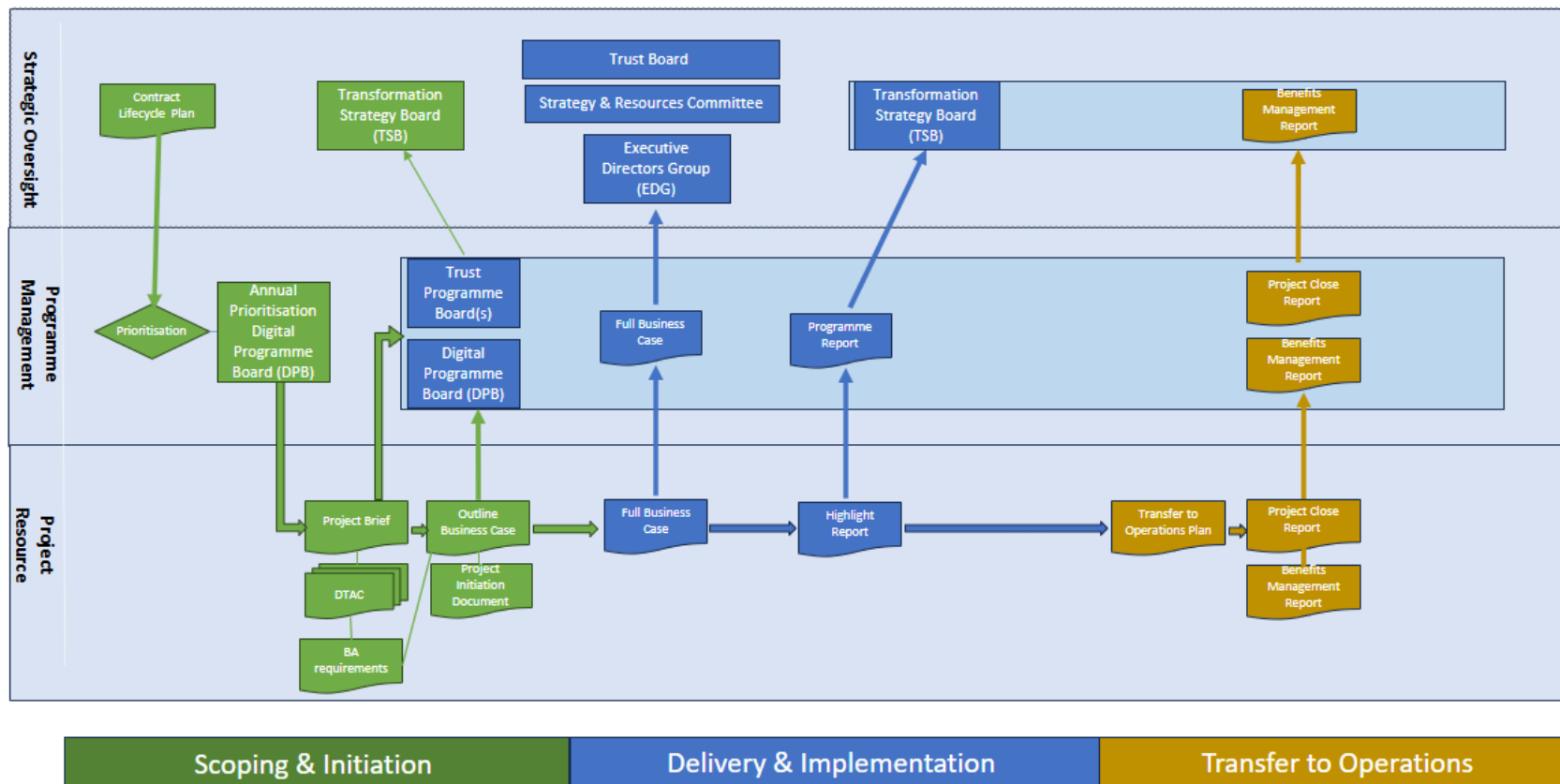
Appendix 2 – Approval checklist

To be completed by lead and attached to any document which guides practice when submitted to the appropriate committee/group for consideration and approval.

Title of document being reviewed:	Yes / No / Not applicable	Comments
1. Title		
Is the title clear and unambiguous?	Yes	
Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2. Rationale		
Are reasons for development of the document stated?	Yes	
3. Development Process		
Are people involved in the development identified?	Yes	
Has relevant expertise has been sought/used?	Yes	
Is there evidence of consultation with stakeholders and users?	Yes	
Have any related documents or documents that are impacted by this change been identified and updated?	Yes	
4. Content		
Is the objective of the document clear?	Yes	
Is the target population clear and unambiguous?	Yes	
Are the intended outcomes described?	Yes	
Are the statements clear and unambiguous?	Yes	
5. Evidence Base		
Is the type of evidence to support the document identified explicitly?	Yes	
Are key references cited?	Yes	

Are supporting documents referenced?	Yes	
6. Training		
Have training needs been considered?	Yes	
Are training needs included in the document?	N/A	
7. Implementation and monitoring		
Does the document identify how it will be implemented and monitored?	Yes	
8. Equality analysis		
Has an equality analysis been completed for the document?	Yes	
Have Equality and Diversity reviewed and approved the equality analysis?	Yes	11 Feb 2025 ah
9. Approval		
Does the document identify which committee/group will approve it?	Yes	
10. Publication		
Has the policy been reviewed for harm?	Yes	No harm
Does the document identify whether it is private or public?	Yes	Public
If private, does the document identify which clause of the Freedom of Information Act 2000 applies?	N/A	
11. Accessibility ([See intranet accessibility page for more information)](#)		
Have you run the Microsoft Word Accessibility Checker? (Under the review tab, 'check accessibility'. You must remove all errors)	Yes	
Do all pictures and tables have meaningful alternative text?	Pending	
Do all hyperlinks have a meaningful description? (do not use something generic like 'click here')	Yes	

Appendix 3 – Process model for Introducing a new system

Scoping & Initiation	Delivery & Implementation	Transfer to Operations

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