Trust Policy

University Hospitals Plymouth NHS Trust

Asset Numbering and Labelling Policy

Issue Date	Review Date	Version
December 2019	December 2024	1

Purpose

To implement a Trust-wide asset management numbering policy that ensures GS1 compliant asset management within the hospital can be managed in the most efficient way to support the best patient care and improve operational productivity.

Who should read this document?

All staff, especially those with a responsibility to purchase, register, maintain or use assets.

Key Messages

Reason for the accurate identification of assets:

Reduction in costs:
- Reduction in hoarding leading to less requirement for new equipment
- Faster location and repair of damaged equipment
- Reduction in unexplained equipment losses
- Accurate information on utilisation of existing equipment
- Reduction in staff time spent searching for equipment

Improved safety:
- Equipment has been serviced and calibrated according to manufacturer's instructions
- Improved control ensuring equipment is configured correctly
- Recording equipment used on a patient

Releasing time to care:
- Nurses and other staff spend less time searching for equipment

Other:
- Reduction in staff time spent maintaining and updating asset databases
- Find and return rental or leased equipment coming to end of contract thus avoiding penalties
- Ensure contract compliance of service providers

Ultimately adoption of GS1 standards will minimise data entry costs while providing more accurate and comprehensive information leading to improved patient safety and cost efficiencies; mitigating instances of double entry of data, releasing time to care through reducing wasted effort searching for items and allowing rapid response to product recall through track and trace. It will provide a foundation for system interoperability, allowing departments to have bespoke systems, but also access and input to Trust wide information that is patient and procedure focussed and collected as part of the treatment process.

Core accountabilities	
Owner	Scan4Safety Programme Manager
Review	Medical Devices Strategy Group
Ratification	Executive Medical Director / Director of Healthcare Science and Technology
Dissemination (Raising Awareness)	All Staff
Compliance	Medical Devices Strategy Group

Links to other policies and procedures

Asset Management Policy
Policy for the Management of Safety Alerts and Product Recall
The Management and Use of Medical Devices Policy
Clinical Risk Classification Scheme for Medical Devices
Estates Services Provision Policy
E&FM Asset Management Policy
Medical Equipment Users Guide
SDU – for SOPs relevant to SDU, see SDU QMS system

Version History		
1	December 2019	Signed off

The Trust is committed to creating a fully inclusive and accessible service. Making equality and diversity an integral part of the business will enable us to enhance the services we deliver and better meet the needs of patients and staff. We will treat people with dignity and respect, promote equality and diversity and eliminate all forms of discrimination, regardless of (but not limited to) age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage/civil partnership and pregnancy/maternity.

An electronic version of this document is available on Trust Documents on StaffNET. Larger text, Braille and Audio versions can be made available upon request.

Contents

1 Introduction

Every day patient care relies on the use of critical lifesaving medical and other operational equipment. To be able to quickly identify a piece of equipment (Trust Asset) accurately is vital to patient care and operational productivity. Assets are items that have value either in financial terms or in terms of their use and can be categorised in a number of ways: capital/fixed, information, etc. For details on the classification of a financial (capital/fixed) asset and the management of, refer to the Trust's Asset Management Policy.

To enable the tracking of an asset, it needs to be identified as such. This is done by allocating a unique asset number, along with information about individual attributes (such as name, type, value, etc) which are recorded within an electronic registry/system. The Trust currently has several systems which record assets in this way:

- Clinical Engineering Department (CE) – F2, soon to be replaced by eQuip
- Sterilisation and Disinfection Unit (SDU) – Nexus
- IM&T – ITBM
- Estates & Facilities – Planet FM
- Finance – Real Asset Management

The above list of asset management systems is not exhaustive, but these are the main ones within the hospital associated with asset identification.

Having a standardised approach to asset management will facilitate the introduction of tracking solutions, such as RFID, and also allow assets to be identified against their location (Global Location Number - GLN) or associated with a specific patient (Global Service Relation Number - GSRN).

Once fully implemented GIAIs will enable the Trust to introduce the following use cases:

- Medical equipment management - track expensive/critical medical equipment throughout the Trust to improve equipment management and reduce associated costs.

- Surgical equipment management – track surgical trays/instruments/endoscopies and loan surgical instruments throughout the Trust to improve surgical instrument management and reduce associated costs

- IT asset management - track IT equipment throughout the Trust to ensure high value and portable assets are secure from theft and loss. The IM&T Department deploys hundreds of PCs, Laptops, Ipads and mobile devices which can easily be lost and sometimes forgotten. The Asset database is only as good as the date of deployment. RFID will ensure that these assets can be tracked, located and redeployed when required. Real-time tracking of IT equipment will assist in the accuracy of location of equipment, and as the trust moves towards initiatives such as a device as a service, it is critical to be able to pinpoint the equipment when its renewal date is due. Scanning of barcodes is already a function embedded into the deployment process and so use of GS1 codes and RFID will be an enhancement.

- Estates and Facilities equipment management - track Estates/Facilities equipment throughout the Trust to improve asset management and reduce associated costs.

This document sets out the Trust's policy for allocating a unique asset number, which meets GS1 standards, ensuring that all assets can be uniquely identified and tracked throughout the Trust.

2 Purpose

All assets within the Trust of value or importance to patient care, require a unique way of identification to allow traceability throughout the Trust. UHPT has a duty to ensure it complies with all requirements for CQC registration, and particularly Outcome 11 Safety, availability and suitability of equipment. Asset tracking will support clinical staff to provide high standards of care with the confidence of having the right equipment in the right place at the right time.

The Trust has adopted GS1 standards for a Patient, Place & Product as this is a mandatory requirement as stated in the Department of Health's eProcurement Strategy There are two GS1 standard identifiers for assets: the Global Individual Asset Identifier (GIAI) and the Global Returnable Asset Identifier (GRAI). It is GS1 UK's advice to standardise asset management identifiers and to predominantly use the GIAI for individual asset marking GRAIs may be used on assets that can be reused as logistics carriers, eg. blue boxes, transportation trolleys, etc.

Each of the above mentioned systems have inbuilt specialised functionality related to the type of asset concerned. There is no intention at this time to implement a single Trust-wide asset management system. Rather, the implementation of a standardised asset numbering system (GIAI) would allow the Trust to retain specialised individual departmental asset management systems whilst providing a mechanism to uniquely identify all assets.

A unique number shall be assigned to each asset within the Trust, enabling assets to be linked to events (eg. interactions with patients) and locations, with certainty. Adoption of GS1 standards in the above systems will be governed by the Scan4Safety Programme.

3 Definitions

Asset – a useful or valuable thing

Capital/fixed asset - Item meeting NHS capital criteria that is held on Capital Asset Register.

Global Standards 1 (GS1) – GS1 is a not-for-profit, international organization that develops and maintains standards for supply and demand chains across multiple sectors.

Global Location Number (GLN) – A Global Location Number (GLN) is a unique number that is assigned to locations to enable them to be identified uniquely worldwide. These can be physical, functional, digital or legal.

Global Individual Asset identifier (GIAI) – GS1 asset identifier can be used to identify any individual fixed assets of a company.

Global Returnable Asset Identifier (GRAI) – GS1 asset identifier can be used to identify an asset type along with a serial component.

Global Service Relation Number (GSRN) – The GSRN is used to identify either the recipient (patient/member of staff) or individual provider of services in the context of a service relationship.

Information asset – An information asset is a body of information, defined and managed as a single unit so it can be understood, shared, protected and used effectively.

Medical Devices –Medical equipment is used for the specific purposes of diagnosis and treatment of disease or rehabilitation following disease or injury; it can be used alone or in combination with any accessory, consumable or other piece of medical equipment. This is normally equipment requiring calibration, maintenance, repair, user training and decommissioning: activities usually managed by clinical engineers. Medical equipment excludes implantable, disposable or single-use medical devices.

Surgical instruments – A specially designed tool or device for performing specific actions or carrying out desired effects during surgery or an operation, such as modifying biological tissue, or to provide access for viewing it.

Radio-Frequency Identification (RFID) - Radio-frequency identification (RFID) uses electromagnetic fields to automatically identify and track tags attached to objects. The tags contain

electronically-stored information. Passive tags collect energy from nearby RFID readers interrogating radio waves.

Clinical Engineering Dept – responsible for registering and maintaining all medical devices.

Surgical Disinfection Unit – responsible for registering and maintaining all surgical instruments.

IM&T – responsible for registering and maintaining all computing devices such as computers, mobile devices, servers, etc.

Estates & Facilities – responsible for registering and maintaining all equipment (assets) associated with the provision, distribution or maintenance of heating, ventilation, lighting, power, gas, medical gases, water services, drainage, building equipment or fabric throughout the estate, including the grounds.

Trade items – products or services that are priced, ordered or invoiced at any point in the supply chain.

4 Duties

Role of the Scan4Safety Programme (Board/Representatives)
The Scan4Safety Programme will ensure that Trust-wide GIAI adoption and management is robust and in line with this policy and any specific GS1 requirements.

Role of Specialist staff (Clinical Engineering, Surgical Disinfection Unit, IM&T and Estates & Facilities
Managers who control/oversee individual assets are responsible for the creation and maintenance of a Departmental Standard Operating Procedure in line with Trust protocols for allocating and maintaining asset numbers in alignment with this policy.
Ensure that this policy is followed when applying an asset number to any new or existing asset.
Follow the Departmental Standard Operating Procedure for applying labels to equipment.
Follow the Departmental Standard Operating Procedure for records management regarding assets, ie. updating asset management system

Role of the Managers
Line managers are responsible for ensuring that:
All staff are aware of the above policy and relevant Standard Operating Procedure for numbering and labelling assets.

Role of Individual Staff
All staff members within the Trust are responsible for:
Being aware of this policy and understanding the reasons for identifying and labelling assets.
Ensuring that asset labels are not removed or repositioning on any asset – if the label is causing a concern the Department responsible for management of that asset should be contacted.
Should follow the Trust's Capital Asset Management Policy when disposing of capital assets.

5 Main Body

5.1 GIAI rules and structure

Use of asset identifiers – GS1 asset identifiers will be used to identify any assets of the Trust.

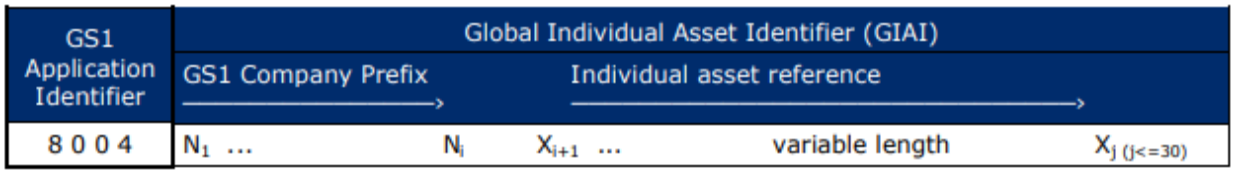
Asset identifiers must not be used for any other purpose and must remain unique for a period well beyond the lifetime of the actual asset itself and any relevant records pertaining to the asset. If the Trust assigns asset identifiers to trade items supplied to its customers, the Trust must ensure that the asset identifiers are never reused.

Reuse of asset identifiers – All issuers of asset identifiers must ensure that asset identifiers (GIAIs, GRAIs) allocated for medical devices/equipment used for treatment of a patient SHALL never be reused.

Also GIAIs that are marked directly on safety critical components and parts, SHALL never be reused.

The manager/s who are responsible for the overall management & control of a specific asset type (eg. CE, SDU, IM&T, etc) will ensure that the correct asset identifier is used for each individual asset used within the Trust.

The Global Individual Asset Identifier (GIAI) is structured according to the figure below.



GS1-128, GS1 DataMatrix

AI (8004) GIAI

EPC: urn:epc:id:giai:CompanyPrefix.IndividualAssetReference
GS1 XML: string [-!»%&'()*+,./0-9:;<=>?A-Z_a-z]{4,30}
EANCOM: an..35; DE7402(DE7405=CU)

5.2 Allocating GIAIs

Allocation rules – The GS1 Allocation rules state that "the exact method used to allocate the GIAI is left to the discretion of the issuing organisation. However, each GIAI must be unique for each individual asset being identified and, for ease of administration, the GS1 system recommends that GIAIs be allocated sequentially and not contain classifying elements."

However, as it is recognised that the Trust has a number of independent asset management systems, it has been agreed to introduce the following high level classification system in order to avoid duplication of numbers within these systems:

1	GIAI Asset Identifier	**(8004)**
2	Organisation	**(8004) 50552084**
3	Asset type*	**(8004)50552084 xx**
4	Asset Number**	**(8004)50552084 xx nnnnnnn**

**See table below for asset type identifiers*

*** Range 0000001 – 9999999 (zero filled)*

The above structure has been agreed with RFID in mind; the numeric only structure reduces the tag size required. An alternative numbering structure may be agreed in exceptional circumstances and only by agreement of the Scan4Safety Programme.

The following asset type identifier will be issued by the Scan4Safety team:

Asset Type	System	Identifier
Medical devices	eQuip	12
Estates/Facilities	Planet FM	13
Surgical instruments	Nexus	14
IT and associate infrastructure	ITBM – PHT	15
IT and associate infrastructure	ITBM – Livewell	16

Each Asset Management System shall have a supporting Standard Operating Procedure to determine the assets being managed and how they will be tracked eg. by a barcode/RFID tag.

5.3 Labelling

What assets will be labelled

The appropriate level of asset management and tracking will vary with the type of asset. The following table outlines a possible classification of assets based on the following characteristics. It will be useful to classify assets as follows:

- Mobility - Fixed, Static, Mobile and Portable
- Cost - <£100, £101 - £600, £601 – £2000, £2001 - £15000, >£15000
- Urgency - Low, Medium, Urgent and Critical
- Demand - High, Medium or Low – *This may change by season or conditions presented*

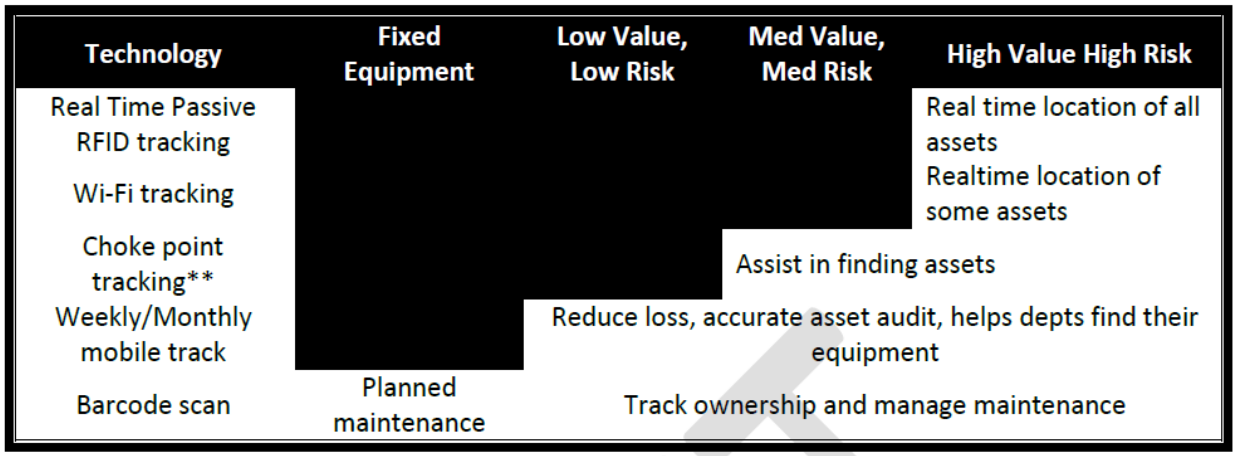
Definitions of Mobility Classifications:

- Fixed - Unable to be moved without engineering work (e.g. MRI Scanner)
- Static - In fixed Location e.g. Large machinery requiring multiple resources to move, for example a Bone Density Scanner Truck
- Mobile - moved on wheels (e.g. Large Ultrasound scanner)
- Portable - moved by hand (e.g. Volumetric Pump)

Definitions of Urgency:

- Critical – Needed immediately
- Urgent – short term alternatives available
- Medium – time available to source
- Low - other methods available

Based on the above categories the following table summarises the options:



Technology	Fixed Equipment	Low Value, Low Risk	Med Value, Med Risk	High Value High Risk
Real Time Passive RFID tracking				Real time location of all assets
Wi-Fi tracking				Realtime location of some assets
Choke point tracking**			Assist in finding assets	
Weekly/Monthly mobile track		Reduce loss, accurate asset audit, helps depts find their equipment		
Barcode scan	Planned maintenance	Track ownership and manage maintenance		

** *Choke point defined as the place an asset was last seen.*

Every asset should be labelled with the unique GS1 asset number encoded in a barcode and, at least for mobile assets, an RFID tag.

How will assets be labelled - The label can also include human readable printed information which could be a trust specific identifier and asset description. Each asset will be labelled with an asset number following the above structure and according to the above rules.

Consideration should be given to the type of label to be used in accordance with the environment and asset type. Departmental Standard Operating Procedures for affixing labels should take into account the following:

Location of label – can it be seen, is it accessible?
Number of labels – does it require more than one label?
Size – is the size appropriate?
Type – what material is the label made of? Does it meet infection control standards?
Content – what needs to be on the label? Contact information, human readable number, etc
Barcode size – does the barcode size meet GS1 standards?
Barcode type – does the barcode type meet GS1 standards? 2D vs 1D
RFID requirement – does the asset need to be tracked?
Infection control - impact of cleaning, decontamination.

5.4 GIAI registry

Whilst governance has been put in place to ensure that all asset numbers will be unique (see section 5.2), it is the intention of the Trust to eventually have an overarching asset registry, pulling information from each of the asset management systems.

5.5 Decommissioning/disposal of assets

At end of useful life, all assets should be disposed of in accordance with relevant Trust policies and asset management systems updated accordingly.

6 Overall Responsibility for the Document

The implementation of this policy will be the responsibility of the Scan4Safety Programme.

The design and process of review and revision of this policy will comply with The Development and Management of Formal Documents.

The review period for this document is set as default of five years from the date it was last ratified, or earlier if developments within or external to the Trust indicate the need for a significant revision to the procedures described.

This document will be reviewed by the RFID Project Board/Medical Devices Strategy Group and ratified by the Executive Medical Director and Director of Healthcare Science and Technology.

Non-significant amendments to this document may be made, under delegated authority from the Executive Medical Director, by the nominated owner. These must be ratified by the Executive Medical Director / Director of Healthcare Science and Technology.

Significant reviews and revisions to this document will include a consultation with named groups, or grades across the Trust. For non-significant amendments, informal consultation will be restricted to named groups, or grades who are directly affected by the proposed changes.

8 Dissemination and Implementation

Following approval and ratification, this policy will be published in the Trust's formal documents library and all staff will be notified through the Trust's normal notification process, currently the 'Vital Signs' electronic newsletter.

Document control arrangements will be in accordance with The Development and Management of Formal Documents.

The document owner will be responsible for agreeing the training requirements associated with the newly ratified document with the named Deputy Chief Executive and for working with the Trust's training function, if required, to arrange for the required training to be delivered.

9 Monitoring Compliance and Effectiveness

Element to be monitored	Ensure that assets numbers match departmental asset register and conform to GS1 policy document.
Lead	Dependant on asset type:

	Medical equipment – Head of Clinical Engineering Surgical instruments – SDU Manager Estates/Facilities - Associate Director of Planning Facilities and Estates IT and associated Infrastructure – Director of IM&T.
Tool	Physical inspections with reference to the departmental asset register and GS1 policy document.
Frequency	Auditing will be undertaken as part of daily business and any discrepancies will be reported to the relevant lead for investigation.
Reporting arrangements	Any discrepancies found on audit will be reported to the Scan4Safety Programme on a monthly basis.
Acting on recommendations and Lead(s)	Scan4Safety Programme team will act on recommendations with individual leads leading any subsequent actions.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within 4 weeks. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders as well as the Scan4Safety Demonstrator Sites.

10 References and Associated Documentation

CQC Outcomes	https://www.cqc.org.uk/sites/default/files/documents/guidance_about_compliance_summary.pdf
Health and Social Care Act 2008 (Regulated Activities) Regulations 2010: Regulation 15	https://www.legislation.gov.uk/ukdsi/2014/9780111117613/regulation/15
The Medical Devices Regulations 2002	http://www.legislation.gov.uk/uksi/2002/618/contents/made

GS1 Standards are a requirement in the following frameworks/strategies:

Department of Health's eProcurement strategy 2014	mandates the use of GS1 standards in every NHS Acute Trust – to increase efficiencies and significantly improve the quality and safety of care. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/a

	ttachment_data/file/344574/NHS_eProcurement_Strategy.pdf
Personalised Health and Care 2020 Framework	enable England to become a global leader in the provision of digital health and care services that improve patient safety and transparency. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/384650/NIB_Report.pdf
Carter Report	reinforces this and calls for the NHS to undergo a cultural change in order to bring about major efficiencies, or risk further losses. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/499229/Operational_productivity_A.pdf

Dissemination Plan and Review Checklist | Appendix 1

Dissemination Plan	
Document Title	Asset numbering and labelling policy
Date Finalised	23/04/2019
Previous Documents	
Action to retrieve old copies	

Dissemination Plan

Recipient(s)	When	How	Responsibility
All Trust staff		Vital Signs	Information Governance Team

Review Checklist		
Title	Is the title clear and unambiguous?	Y
	Is it clear whether the document is a policy, procedure, protocol, framework, APN or SOP?	Y
	Does the style & format comply?	Y
Rationale	Are reasons for development of the document stated?	Y
Development Process	Is the method described in brief?	Y
	Are people involved in the development identified?	Y
	Has a reasonable attempt has been made to ensure relevant expertise has been used?	Y
	Is there evidence of consultation with stakeholders and users?	Y
Content	Is the objective of the document clear?	Y
	Is the target population clear and unambiguous?	Y
	Are the intended outcomes described?	Y
	Are the statements clear and unambiguous?	Y
Evidence Base	Is the type of evidence to support the document identified explicitly?	Y
	Are key references cited and in full?	Y
	Are supporting documents referenced?	Y
Approval	Does the document identify which committee/group will review it?	Y
	If appropriate have the joint Human Resources/staff side committee (or equivalent) approved the document?	N/A
	Does the document identify which Executive Director will ratify it?	Y
Dissemination & Implementation	Is there an outline/plan to identify how this will be done?	Y
	Does the plan include the necessary training/support to ensure compliance?	Y
Document Control	Does the document identify where it will be held?	Y
	Have archiving arrangements for superseded documents been addressed?	Y
Monitoring Compliance & Effectiveness	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Y
	Is there a plan to review or audit compliance with the document?	Y
Review Date	Is the review date identified?	Y
	Is the frequency of review identified? If so is it acceptable?	Y
Overall Responsibility	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Y