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1. Introduction

Scan4Safety is a pioneering initiative, led by the Department of Health and developed by NHS trusts, that is improving patient safety, increasing clinical productivity and enabling supply chain efficiency across the NHS. Scan4Safety achieves these aims by driving standardisation across healthcare. Adoption of the initial scope of Scan4Safety by all acute trusts in England will, in itself, generate net efficiency benefits of over £1 billion in seven years.

Scan4Safety is about the adoption of common ways of working across healthcare, supported through two international standards, GS1 and PEPPOL. These enable all organisations involved in healthcare to use standard and proven nomenclature systems for the vital clinical and operational processes that support the delivery of care.

“Scan4Safety is a world first in healthcare – and a vital part of this government’s drive to make the NHS the safest and most transparent healthcare system in the world.”

Jeremy Hunt
Secretary of State for Health and Social Care

The opportunities for Scan4Safety are broad and varied, ultimately covering all areas of healthcare. To make adoption manageable an initial scope was agreed that limited activity to just acute trusts, to the three core enablers (Place, Product and Patient) and to three primary use cases (Inventory Management, Purchase to Pay and Product Recall). In future it is expected that the scope will be expanded to cover all healthcare organisations, other enablers and a far broader set of use cases.

To define the ways of working, validate the benefit to the NHS of adopting initial scope, and to learn the lessons once on behalf of NHS, the Department of Health provided funding and support to six acute NHS ‘Scan4Safety Demonstrator sites’.

- Derby Teaching Hospital NHS Foundation Trust;
- The Leeds Teaching Hospital NHS Trust;
- North Tees and Hartlepool NHS Foundation Trust;
- Plymouth Hospitals NHS Trust;
- Royal Cornwall NHS Trust; and,
- Salisbury NHS Foundation Trust.

The Department of Health and the Demonstrator sites have worked closely with both medical suppliers and technology service providers to drive the adoption of GS1 and PEPPOL standards upstream within the healthcare supply chain.

Further information on Scan4Safety and its benefits can be found at: www.Scan4Safety.nhs.uk.
2. Background

The six acute NHS Scan4Safety Demonstrator sites worked through adoption of the three primary use cases (Inventory Management, Purchase to Pay and Product Recall) and supporting three core enablers (Place, Product and Patient). In doing so, the sites defined a highly structured approach of phases, milestones and achievements as outlined in the published “Guidance Scan4Safety implementation requirements”.

The Demonstrator sites have worked together to capture and document their experiences and learnings in a set of ‘How To’ guides. These guides provide any NHS trust looking to follow the Scan4Safety approach robust, step-by-step manuals for each area of activity, ensuring a consistent approach is taken and maximum benefit is realised for the NHS.

The suite of Scan4Safety ‘How To’ guides will continue to grow and initially includes:

- Place;
- Product;
- Patient;
- Inventory Management;
- Point of Care (Surgical);
- Purchase-to-pay (NHS trusts);
- Purchase-to-pay (suppliers);
- Product Recall;
- Pharmacy;
- Supplier Adoption;
- Resource and Cost Planning;
- Benefits Planning and Reporting.
### 3. Acronym Decoder

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AP</strong></td>
<td><strong>Access Point (PEPPOL):</strong>&lt;br&gt;The technical connector of a software solution that is capable of sending and/or receiving PEPPOL business documents. Sometimes referred to as a DAP (Data Access Point)</td>
</tr>
<tr>
<td><strong>BIS</strong></td>
<td><strong>Business Interoperability Specification:</strong>&lt;br&gt;A PEPPOL created specification that defines how a business document exchange should take place and how the UBL elements are bound to semantical elements.</td>
</tr>
<tr>
<td><strong>BLR</strong></td>
<td><strong>Business Level Response:</strong>&lt;br&gt;Business document to be exchanged stating business level validation results (see also MLR). PEPPOL does not contain a single BLR - it contains an Order Response and an Invoice Response</td>
</tr>
<tr>
<td><strong>Business Card</strong></td>
<td><strong>Business Card:</strong>&lt;br&gt;The document type for describing the non-functional aspects of a PEPPOL participant for listing in the PD.</td>
</tr>
<tr>
<td><strong>CMS</strong></td>
<td><strong>Catalogue Management System:</strong>&lt;br&gt;A system for the exchange and storage of product and pricing data.</td>
</tr>
<tr>
<td><strong>EDI</strong></td>
<td><strong>Electronic Data Interchange:</strong>&lt;br&gt;The electronic exchange of business documents that removes the necessity to manually re-enter data.</td>
</tr>
<tr>
<td><strong>GLN</strong></td>
<td><strong>Global Location Number:</strong>&lt;br&gt;A globally unique code for the identification of a physical or functional location.</td>
</tr>
<tr>
<td><strong>GTIN</strong></td>
<td><strong>Global Trade Item Number:</strong>&lt;br&gt;A globally unique code for the identification of a product or service.</td>
</tr>
<tr>
<td><strong>GSRN</strong></td>
<td><strong>Global Service Relationship Number:</strong>&lt;br&gt;A globally unique code for the identification of a care giver or care receiver.</td>
</tr>
<tr>
<td><strong>GDSN</strong></td>
<td><strong>Global Data Synchronisation Network:</strong>&lt;br&gt;A network of standardised and interconnected data pools for the exchange of product catalogue data.</td>
</tr>
<tr>
<td><strong>M2M</strong></td>
<td><strong>Machine-to-Machine:</strong>&lt;br&gt;A principle supported by EDI (see entry) wherein systems communicate with one another</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MLR</td>
<td>Message Level Response: Business document to be exchanged stating technical validation results.</td>
</tr>
<tr>
<td>OpenPEPPOL AISBL</td>
<td>The organisation responsible for maintaining PEPPOL standards and running the transport infrastructure.</td>
</tr>
<tr>
<td>P2P</td>
<td>Purchase-to-Pay: The full cycle of capturing a customer’s requirements, transmitting this to the appropriate supplier, delivering the order and then paying for it.</td>
</tr>
<tr>
<td>PD</td>
<td>PEPPOL Directory: A central PEPPOL service that should help in mapping PEPPOL participant IDs to the participant names and countries.</td>
</tr>
<tr>
<td>PEPPOL</td>
<td>Pan-European Public Procurement On-Line: This is the European project that initiated all this. Started as a European large-scale pilot and is now maintained by OpenPEPPOL AISBL.</td>
</tr>
<tr>
<td>SML</td>
<td>Service Metadata Locator: A registry of SMPs (see entry) detailing the location of metadata relating to the sender/recipient of electronic business documents</td>
</tr>
<tr>
<td>SMP</td>
<td>Service Metadata Publisher: A registry of senders/receivers of electronic business documents detailing their readiness and AP</td>
</tr>
</tbody>
</table>
4. **Product (catalogue management)?**

Catalogue Management, also referred to as ‘Product’, is a core enabler of Scan4Safety. The primary purpose of deploying a catalogue management strategy is to realise an improvement in product data accuracy and consistency across multiple IT systems, essential for the successful implementation of GS1 Standards.

Catalogue Management is a process of suppliers making available product content to purchasing organisations, to allow procurement of goods electronically, where product content is held by either the supplier or the buyer.

‘Product’ information is required by many separate functions within a Trust. Historically, product information within a Trust is difficult to manage for a number of reasons:

- Descriptions are Trust designed and not recognised by suppliers
- Pricing is out of date
- Incorrect data in many instances including product codes, minimum order quantities etc
- Relies heavily on manual intervention, re-keying, data capture at Trust level
- Within any given Trust, Product data is held in various systems and there are many versions of the truth.

By having multiple mechanisms operating across a single Trust for identifying and managing products and associated data, errors and queries within the processes that rely on product data are inevitable, diverting resources away from value add activities.

4.1 **The need for ‘Product’ identification**

Currently, the typical master data management process for Trusts is similar to that shown below:
This process creates a number of key challenges including:

- the sheer volume of supplier requests detracts from a focus on consistency and automation
- the effort to maintain data is duplicated within a Trust
- it is not possible to compare information extracted from the different computer systems because the data is not consistent
- the quality control and update frequency is function specific and sometimes limited to a commercial interest
4.2 Catalogue Management

Within the Scan4Safety core enabler of ‘Product’ (Catalogue Management), the overall solution represents a combination of the use of GS1 standard Global Trade Item Numbers GTINs as the primary product identifier where possible, together with systems and common processes deployed that offer governance, consistency and control.

The basis of Catalogue Management is the unique identification of the product using the GTIN; where possible this needs to be the primary product identification key used by Trust systems that host product information. The GTIN is a common identifier used to describe a product and allows a logical way of integrating existing computer systems within an organisation.

The Department of Health and Social Care’s (DHSC) requirement of NHS Acute Trusts in England, and their associated business partners is to adopt these standards for suppliers to provide information about their individual products (using a GTIN) to other organisations. All Acute Trust systems that hold product information should be able to integrate with the national Master Data Exchange (MDE) (a pilot is currently underway at the DHSC). Using the MDE, NHS Acute Trusts will receive automated product updates to the catalogues that reside in their local systems. It is recognised that there is likely to be a period of time between the national MDE and GDSN being fully established and adopted by the full supplier base, as well as the Trust being able to receive electronic product data. In the short term the Trust needs to review its local processes and practices in order to identify how they can be improved before the full national infrastructure is deployed.

Adoption and implementation of the product identifier (GTIN), along with similar approaches for “Place” and “Patient”, are enablers to numerous use cases and opportunities including Inventory Management, Purchase to Pay (P2P) and Product Recall.

4.3 Benefits

Below are examples of why unambiguous identification of products within an organisation is needed:

- Support patient safety through enabling accurate identification of products used on individual patients, to give a single version of the truth for products across all systems that hold product data in the Trust.
- Ensure accuracy of communication between the Trust and its trading partners regarding product identification during the purchase to pay process.
- By enabling increased automation in the flow of product data from trading partners, manual intervention will be reduced, increasing product data accuracy and operational efficiency.
- Accurate product data will reduce queries within the purchase to pay process e.g. price mismatch; enabling resources to be focused on value add activities.
- Design-out process inefficiencies both within the hospital and its wider supply base and to deliver a radical step-change in system interoperability.
- To enable procurement teams to manage “procurement and pricing” and not catalogues or supplier data.
The benefits of the future state can be summarised below:

- The NHS request for and validation of master data is made using standardisation and acts as a single voice
- The maintenance of master data is automated
- The information extracted from the different systems used within a trust is consistent and can be compared
- The improved accuracy and quality of the information can be leveraged to improve patient safety.
5. Implementation Steps

5.1 Phase 0

**Complete an "As is - To be" review of policies, processes and relevant systems**

“This is a gap analysis activity to assess the current status of policies, processes and relevant systems to meet the requirements for catalogue management in phases 1-4.

**Need to evidence that a Trust-wide review of policies, processes and relevant systems, related to catalogue management, has been undertaken and completed.**

Following the review, consideration has been given to the policy, process and/or relevant system changes needed to meet phase 1-4 requirements and an investment case developed for the necessary new and/or upgrading of relevant system(s) for catalogue management.

The review also needs to assess and report the current level of master data provision and utilisation (the “As is”) and plans to increase master data provision and utilisation (the “To be”).”

**Step 1 Understand where you are starting from**

In order to move forward it is essential to know where you are starting from. The diagram in Appendix A - Catalogue maturity matrix is designed to help you understand your current level of maturity in using catalogues within the Trust. The diagram will also enable you to understand some of the areas you will need to consider as part of the deployment of catalogue management within the Trust.

This is meant as an overview for anyone picking up the document so they can understand the full scale of how catalogue management will be delivered going forward, use the maturity matrix as a high level summary.

- At a summary level map your organisation against the maturity matrix to understand at a high level where you currently sit. This will help to focus the further steps referenced in this document and highlight areas that need early consideration

Time required – Max 1hr of FTE

**Step 2 Assign Project Lead and form cross functional team to review**

Following the review of the maturity matrix a stakeholder group needs to be formed to review. This could take a number of forms dependent on what is already in place within an organisation but this must include the elements listed below:
A. The organisation needs to assign a project manager to oversee the introduction and adoption of GTINs and common catalogue management processes, and to co-ordinate between departments including Finance, Procurement and Pharmacy. The role will include:
  - Lead on as is to be gap analysis – Working closely with Clinical representation
  - Map which Trust systems require product information
  - Link with the Product recall lead to ensure data on “relevant products” is collected in line with the Trust Policy and wider initiatives
  - Ensure clear lines responsibilities with other use cases – How will each section flow in to each other

B. An initial review group needs to be formed. As a minimum the initial review group must contain the following. This should link in to a Trust wide governance structure that must review and approve the output of the report, this must be an area that has responsibility for Non Pay spend.

<table>
<thead>
<tr>
<th>Procurement</th>
<th>Understanding of current processes of control on catalogue products and links to contracted information and attributes required.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>Knowledge of catalogue management process in Pharmacy and implications of other requirements such as EU Falsified Medicines Directive</td>
</tr>
<tr>
<td>Clinical Representatives</td>
<td>who have knowledge of – Cardiology/Theatres/Radiology (Multiple people potentially)</td>
</tr>
<tr>
<td>Nursing Lead</td>
<td>Senior Nurse from ward areas ensure ward requirements for visibility and control are included</td>
</tr>
<tr>
<td>Estates/Facilities/IT</td>
<td>Covering areas Non Clinical spend (Estates, Catering, Cleaning,)</td>
</tr>
<tr>
<td>Finance</td>
<td>Understanding of issues and challenges caused by lack of catalogue spend and areas that fall outside current catalogue process</td>
</tr>
<tr>
<td>Product Recall Responsible representative</td>
<td>Linking to the Product recall document a single responsible organisation must be selected (Most likely Medical Devices) a representative from this group must be included.</td>
</tr>
</tbody>
</table>

Time required: 3 Days of FTE

**Step 3  Undertake an As-Is Vs To-Be assessment**

Following the formation of the project team and appointment of the lead a full review needs to be carried out. This must include the following and needs to link with the P2P and Product recall requirements.

A. At initial review meeting agree the timeline for the as is to be gap analysis
   i. This should be able to be completed within 1 month provided all stakeholders can input fully
ii. Initial review meetings should be scheduled on a minimum of monthly to ensure the review is carried out in a timely manner

B. The as is to be gap analysis should be led by the project manager. Appendix H - shows the structure that must be completed as a minimum. Following this structure will allow for all elements to be considered.

C. The final report needs to make clear the recommendations and changes required within the organisation this will be used to drive the delivery of many streams and must be defined in terms of the following:
   i. People
      • Must state the people involved in the process
      • Create a stakeholder grouping map as per Appendix G -
      • Must state governance structure (see Appendix E - Propose a recommended / straw-man organisation structure to include content review, governance and processing
   ii. Process
      • Must state the future process
      • Must produce terms of reference or review current group terms of reference
      • Must state the KPIs to be produced (As per minimum requirements in Appendix C -)
      • Must state the required attributes to be captured and managed in the catalogue system
      • Must state service items/suppliers which are the priority
   iii. Technology
      • Must state what system will be used to drive
      • Must state the investment which will be needed
      • Must state systems to be updated
      • Must state an estimated implementation time line – Including Procurement of and Interface requirements

D. Following completion of the assessment this is submitted to the governance board. The templated pro-forma in Appendix J - must be completed and submitted for approval

   Time required: 25 Days of FTE

   *This is very much dependant on the current state and formalisation of groups within Trusts. Once a project manager is assigned the review should take approx. 1 Month based on access to the stakeholder list provided.*

**Step 4 Approval of gap analysis and formalise next steps**

Following the production of the gap analysis and recommendations the organisation needs to ensure that the report is approved and recommendations followed through:

A. Following submission of the recommendation pro-forma (Appendix J -) the Trust must approve the recommendations and confirm and sign off this includes:
• Who will have overall responsibility and management (This must be Procurement department for Non Pharma and Pharmacy for medicines)
• The system to be taken forward confirmed. If a new system is required a clear planned should be laid out around Procurement and selection of Provider.
• Recommendations regarding governance agreed and signed off
• Other in Trust systems outlined and signed off as needing to be changed
• Agree the timeline and frequency of ongoing review.

Time required – 1 Day FTE – Preparation and presentation of the report to the governance group
5.2 Phase 1

*Design the sustainable organisation to manage catalogue master data.*

“Need to demonstrate that a sustainable (as opposed to project) organisation has been designed and approved for the ongoing management of catalogue master data across all relevant areas of the trust.

*Need to show that clear controls and monitors are included with corresponding escalation paths.*”

**Step 5  Sustainable organisation**

Following approval of the as is to be gap analysis the recommendations must be implemented as per the assessment. Governance must be established before any process changes are implemented it is essential they are planned and communicated end users.

- Establish appropriate governance arrangements –
  - Arrange the initial meeting of the group and schedule for ongoing meetings agreed
  - Sign off agreed terms of reference
- Review plans for system updates and or Procurement for new Systems
  - Systems requiring updating must be outlined at the initial group to show the likely timeline for updates. Approval given to proceed and update additional internal governance formed or linked to other use cases (likely to be Purchase to Pay and Inventory Management)
  - New system – Will review timeline/structure/budget for the Procurement Exercise approving the specification and timeline. The evaluation panel for the system should be made up of the same structure as the governance board.

Time required – 2 Days FTE arrange an produce documentation

**Publish approved Trust policy(ies) for Product (catalogue) management.**

“Need to demonstrate that a Trust policy has been produced and approved covering the management of product data and catalogue information using GTINs. The policy should:

- cover all functional areas of the Trust;
- include all commodity areas; and
- confirm roles and responsibilities.”

**Step 6  Update policy**

Following the establishment of the governance structure this must include detailed requirements for polices and processes. If none exist they must be created.
The project manager should produce the updated Strategy/Policy based on the outline structure provided in Appendix D -

The first meeting of the governance group should review and sign off the new or updated Trust wide Policy and Process

- See example Trust Policy (Appendix D) and make reference to a draft policy/consolidated version of Demonstrator Site policies.
- This includes specific requirements of Pharmacy in relation to catalogue management and refer to Appendix F - Specific requirements for Pharmacy
- Purchasing Policies updated to include requirement for product information to be provided as part of the catalogue process

Elements of the Policy and processes may need to be updated as the Trust proceeds and implements changes to the processes and systems as part of this process. This is included as a step within the report produced at the end of Phase 2, 3 and 4.

Time required – 5 Days FTE to produce policy and submit to the group

Step 7  Communicate & Educate

One of the most critical elements to ensure a sustainable organisation is ensuring that stakeholders are informed and trained as appropriate.

The as is to be analysis (Step 3) includes an outline approach and includes a communications plan which should be followed after the new/updated policy and processes have been published.

This is a critical step to make sure stakeholders are clear on the process and where the governance sits. If the process is circumvented in any way the data quality and purpose of the catalogue system will be diluted and this will erode the value.

Therefore understanding the value of each step in the process and the role of each participant is essential. Historically this has not been seen as an important part of the process; this mind set needs to change. The assessment matrix gives a guide of the messages for different stakeholder groups.

The following streams need to be engaged and messages and information shared an ongoing structure set up this must identify

- Stakeholders to keep informed
- Stakeholder to be trained/updated
- Suppliers to be engaged; review the supplier engagement guide for detailed guidance on engagement
- How will stakeholders be kept informed
  - Publication of review steps/Invites to key stakeholders
  - Highlight changes that will be made and when they will be implemented
- Manage expectations across your organisation
- Communicated and establishing why catalogue management processes are required and how GTINs benefit the organisation
- Communicate the timelines to implement the changes

Time required – 15 Days FTE for the initial planning and development. Time to complete will be dependent on the size of the organisation and the stakeholders identified and which streams require face to face training.

### 5.3 Phase 2

**A sustainable organisation is in place to manage catalogue master data.**

"Need to evidence a sustainable (as opposed to project) organisation is in place to manage catalogue master data across all relevant areas of the trust and that it is working to appropriate policy(ies) and process(es).

Need to show that clear controls and monitors are in place with corresponding escalation paths."

**Trust catalogue management system(s) can hold and use GTINs.**

"Need to confirm that a review has been undertaken and that appropriate catalogue management solution(s) has been selected and implemented covering Medical, Surgical, General and Pharmacy areas. The implemented catalogue management systems can hold and make use of GTINs for product identification."

### Step 8 Data Quality & Data Attributes

Product data and the management of the process is a key element which must be carried out by all organisations.

This step should be split in to two sections depending on where the organisation sits within the process.

#### A. For Trusts Implementing a new catalogue management system

It is an essential part of the implementation process that data standards are agreed and implemented with a large focus on quality and consistency. It may be tempting to export and load current product data; this must not be done without a full cleanse and review of quality.

The as is to be gap analysis carried out in step 3 must be used as the basis for the data cleanse.

All data to be populated must be reviewed in a priority order based on:

- Volume – Transaction volume
- Value – High value products
• Traceability – The attributes required will have been defined in the gap analysis, they will need to be checked to ensure they are correct.

In Appendix I - there are 2 data models: a summary and a supplier model. These should be used to assess each area as part of the review.

An organisation should look to follow a staged implementation as outlined below:

• Link with roll out plan for inventory: the catalogue data will need to be in place before any implementation. The likely split will be by distinct categories, however, there may be some suppliers and products which cross between different categories. The key categories to look at initially are:
  o Orthopedics
  o Cardiology
  o Endoscopy

Time required – 25 Days FTE per area – This is very much dependent on previous level of data quality. Linking with Demonstrator sites to look at data available is critical.

B. For Trusts reviewing and updating a process already in place

For trusts with a catalogue management system already in place the following should be carried out

• All of the steps listed in section A
  o Assessments must be made about the current data quality
  o Changes should then be applied to the data already in place and data should be cleansed and implemented based on category.

Time required – 15 Days FTE per area – This is very much dependent on previous level of data quality. Linking with Demonstrator sites to look at data available is critical.

Step 9 Implementation/Updated Processes

Once step 8 has been completed and clean data is available the Trust can proceed to implement and utilise the catalogue management data.

The communication and training programme formulated as part of the gap analysis must be followed during the implementation and go live of the catalogue solution.

The implementation should be linked to the implementation of inventory management and point of care scanning with areas implemented once clean and accurate data has been implemented.

The exact steps for the implementation elements of the system will be dependent on the system selected. However there are some core areas that will need to be considered, these are listed below:

• Interface requirements – What are the requirements for the interface? Which systems will need to link to the data (defined in the gap analysis)
• Commissioning updates to other systems to use GTINs – For example P2P/Inventory/PEPPOL Access point
• Testing and Commissioning of updated data to selected Trust systems completed. Create test items to ensure flow as expected
• Process documents created
  o Inventory – Non Pharma/Pharma
  o Purchase to Pay – Non Pharma/Pharma

Time required – 40 Days FTE (For new implementation including integration to Inventory Management or P2P) 25 Days of FTE to review processes and retrain in current implementation.

(At least) 50% of purchasing transaction lines are using product data from the catalogue system(s).

“Need to evidence that more than 50% of the total purchasing transaction lines generated by the Trust during a given period are based on catalogued product data sourced from the Trust’s catalogue system(s).

Step 10 Monitoring and measurement

As part of the initial as is to be gap analysis the Trust will have identified the priority areas. Following implementation the usage and coverage of this needs to be validated using the KPI’s, this will ensure that the organisation is progressing as expected.

KPI’s must be produced on a monthly basis and reported via the governance group. These are also used to complete stage reports and will ensure that progress is tracked.

The KPI’s will also help to show clear change within the organisation and help to motivate the programme team and other stakeholders by showing the organisation that the process is increasing visibility and offering the benefits identified as part of the Trust original business case.

Completion of the KPI’s will give an ongoing position with regards to purchasing transitions lines on catalogue. As above, this needs to be at 50% before step 4 above is completed.

This will likely be completed in advance of Phase 2 completion. The process of adding and monitoring should not cease and efforts should be made to increase % on catalogue whilst ensuring data quality is maintained.

Time required – 2 Days FTE per month
**Catalogue management system(s) linked to Master Data Exchange service.**

*Need to evidence that appropriate system interoperability has been established between the Master Data Exchange and the Trust’s catalogue management systems. This interoperability needs to enable the automated flow of product data, relating to new and updated products, between GS1 certified data pools and the Trust’s catalogue management system(s).”*

**Step 11 Establish Master data linkages**

As part of the as is to be gap analysis and step 3 data quality, the Trust will have reviewed the areas where data quality needs to be improved and also identified the most consistent source of data.

The aim of this step is to ensure that the organisation has the most reliable and accurate source of data. This will need to be assessed by the organisation at the time when this step is carried out.

The following areas must be reviewed for market development

- Data available via the GDSN
- Data repository from catalogue management tool (This should be supplier loaded data and not that uploaded by the Trust)
- NHS Supply Chain
- Direct from Suppliers

The assessment detail and outline of any improvements made must be included within the Phase completion report, example showing in Appendix J.

Time required –2 Days FTE bi-monthly to review current status – Updates dependent on results of review.

**Other relevant systems modified to hold and use GTINs and attributes.**

*“Need to evidence that the relevant systems for the holding and using product data have now been updated to use GTINs and related data attributes in product records.”*

**Step 12 Relevant systems updated**

As part of step 3, as is to be gap analysis, the organisation identified systems to be updated to utilise product data. These were approved as part of step 4. At this point within the programme the systems must be updated and integrated within the systems infrastructure.

It is essential that data flows between systems with no manual intervention and that changes made to the source data in the catalogue management tool are handed down to other systems, for example product data to an inventory system or ordering data flowing through catalogues and through the purchase to pay process.

This is essential to ensure electronic trading is efficient and effective via PEPPOL, for more information see the Purchase to Pay how to guide.
Time required – Step 9 includes commissioning of Interphase requirements where systems are updated to include GTIN. 2 days FTE to sign off that this has occurred.

**Step 13 Review and report creation completion - Phase 2**

Building on the as is to be gap analysis a progress update report must be produced and submitted to the governance group; an outline of the structure can be seen in Appendix K -

This format is designed to flow from the as is to be gap analysis through all monthly governance meetings and in to the update report. The production and review of monthly KPI’s will ensure that ongoing monitoring is given to the process. This will ensure that the expected target is set on a monthly basis and tracked.

This final report will be submitted as part of the evidence to show Phase 2 completion (Based on meeting the required metrics are this stage).

Time required – 10 Days of FTE to source information and produce report

**5.4 Phase 3**

**At least 80% of purchasing transaction lines are using product data from the catalogue management system(s).**

“Need to evidence that more than 80% of the total purchasing transaction lines generated by the Trust during a given period are using catalogued product data.”

**At least 50% of (required and available) product records are being provided through the Master Data Exchange.**

“Need to evidence that a review has been undertaken to compare all product records required by the Trust are currently available for use within the Master Data Exchange.

Based on the output of the review the Trust needs to demonstrate that at least 50% of the product records that they require AND are currently available, are being downloaded from the Master Data Exchange through established links.”

**Step 14 Ongoing review of transactions and master data**

Further to the reviews carried out in step 11 and 12 the organisation must continue to review the utilisation and coverage of the catalogue and also assess the best source of data available.

The ongoing production of the monthly KPI’s must be presented at the governance group, along with continued assessments of the availability and quality of data, the review must include

- Monitoring of key supplier list and current status
• Catalogue utilisation % - Non utilised items
• Attributes review – Ensuring these continue to be captured and utilised

**Step 15 Review and report creation – Phase 3**

Building on the as is to be gap analysis a progress update report must be produced and submitted to the governance group; an outline of the structure can be seen in Appendix K -

This format is designed to flow from the as is to be gap analysis through all monthly governance meetings and in to the update report. The production of monthly KPI’s and review will ensure that ongoing monitoring is given to the process. This will ensure that the expected target is set on a monthly basis and tracked.

This final report will be submitted as part of the evidence to show Phase 3 completion (Based on meeting the required metrics are this stage).

Time required – 10 Days of FTE to source information and produce report

**5.5 Phase 4**

**30% of services purchased are listed in the catalogue system.**

“Need to evidence that the use of the catalogue management system(s) has been extended to include services and that at least 30% of repeat purchased services are captured.”

**Step 16 Review of catalogue for services**

As part of step 3 services to be catalogued were identified, as part of the end of phase report the status of service data has been included. Therefore this step is a review to ensure the following

• Areas identified as being service suppliers in step 3, monitor to ensure that these lines are now being placed through a catalogue and the 30% target has been reached
• Additional areas/services that have been identified and how these are be progressed

Time required – 2 Days FTE review and submit to governance forum

**100% of (required and available) product records are sourced from the Master Data Exchange.**

“Based on phase 3, need to demonstrate that 100% of the product records, which are required by the Trust AND are currently available in the Master Data Exchange, are being provided through the established linkages.”

**Step 17 Ongoing review of transactions and master data**

Further to the reviews carried out in step 11 and 12 the organisation must continue to review the utilisation and coverage of the catalogue and also assess the best source of data available.
The ongoing production of the monthly KPI’s must be presented at the governance group along with continued assessments of the availability and quality of data. The review must consider:

- Monitoring of supplier list and current status
- Catalogue utilisation % - Non utilised items
- Attributes review – Ensuring these continue to be captured and utilized

Time required – 2 Days FTE bi-monthly to review current status – Updates dependent on results of review.

**Produce a project review report.**

“Need to evidence that a full review has been undertaken following adoption of catalogue management system(s), the introduction of GTINs and the sourcing of catalogue data from publicly available sources.”

**Step 18 Project review and future planning**

All along your journey there will be incremental developments that move you towards your final position at the end of the programme. As you complete each of these steps record your successes and the lessons learnt along the way.

Your final project review should gather this information together along with:

a) Costs

- The cost of any new systems (installation, support and license costs)
- The cost of any system upgrades
- The cost of any new system interfaces
- Any hardware costs that may have been incurred
- The costs of any posts created for the implementation of the Product Recall workstream
- The time and banding of any non-Scan4Safety funded bodies contributing
- The numbers and bandings of any new positions generated to carry on the work as BAU

b) Benefits

Together all of this information should represent the summary of your level of change as a result of your work in Scan4Safety. It can then be shared with other organisations to allow them to avoid pitfalls you may have fallen into and adopt practices you have discovered as beneficial.

Time required – 15 Days FTE overall review including workshop review
# Questions and Answers

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
7. Data dictionary

As part of the as is to be gap analysis and part of step 3, the organisation will need to ensure that the required attributes can be captured and utilised within the catalogue management process.

Data dictionaries are being produced across key sub categories (see compliance timelines below for examples) these outline the information suppliers will be mandated to provide and maintain both for Trust and for regulatory requirements.

The detailed requirements can be found on the Department of Health and Social Care workspace.

Whilst not all attributes will be available initially their availability will increase over time and the Trusts needs to ensure that processes and systems are future proof and ensure data available is utilised to add value, for example size and weight information could potentially be used to inform inventory storage requirements when a new contract is on boarded.
8. Compliance timelines

For each of the various categories compliance timelines are being published. The sectors to which these relate are shown below. For more details and exact dates please see Department of Health and Social Care workspace. Those that have been published to date have been noted below. As part of the as is to be gap analysis the Trust needs to be cognisant of these timelines in relation to suppliers that are likely to be within these categories and their readiness to provide the data.

- Medical Devices and IVD – Published
- Medicines - Published
- Office & IT
- Estates & Facilities
- Services


9. References

- For latest information from the demonstrator sites, go to www.scan4safety.nhs.uk
- For latest information regarding data dictionaries and compliance timelines by market sector go to Scan4Safety Supplier Workspace
- For further details on the use of GS1 standards required by the DH, please go to the Scan4Safety Trust Workspace
- For further details on PEPPOL and the work of OpenPEPPOL please go to the PEPPOL website

Contact us:

To speak directly to a demonstrator site, email scan4safety@nhs.net
## Appendix A - Catalogue Management Maturity Matrix

<table>
<thead>
<tr>
<th>Catalogue Management Maturity Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 0</strong></td>
</tr>
<tr>
<td>Unaware</td>
</tr>
</tbody>
</table>

### Unaware
- Unaware of GDS, Department of Health, Demonstration Site
- No understanding of supplier requirements

### Opportunistic
- Some awareness of GDS, Demonstration Site Initiative
- Initial understanding of supplier needs

### Enabling
- Attending demonstrator sites and exchange knowledge
- Identifying gaps for analysis
- Supplier engagement

### Deploying
- People have been designated KPIs
- Training and education delivered
- Seek certification or required
- Supplier awareness engagement

### Transforming
- Use of GSL standards, transparent and business as usual
- Learning and best practice adopted between departments and Trusts
- Understanding of importance and implications of catalogue management to the Trust

### Manual, Resource Intensive
- No uniform process across all Trusts, departments and suppliers

### Automated
- Design automated process
- Create an execution plan
- Develop a uniform process
- Create an execution plan

### Collaborative
- Collaborate working between Trusts and suppliers
- Uniform process across all departments, Trusts and suppliers
- Full automation of Product Data across all stakeholders

### No Catalogue Management Solution
- Understand the requirements for catalogue management solution
- Review existing catalogue management solutions to see if meets requirement

### Implement Governance Policy
- Robust governance in place
- All product changes are managed by the supplier
- A single Master Record acting as the true source of product information is held in the catalogue management solution

### No Strategy for Product/Catalogue Management
- No multidisciplinary team to develop strategy
- Create Business Case

### Customer Engagement Strategy
- Conducted review to ensure the solution aligns with the purpose

### Implementation Status

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3 and 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalogue Management System in place</td>
<td>90% of purchased products listed in catalogue system</td>
<td>90% of purchased products listed in catalogue system</td>
</tr>
<tr>
<td>Conducted a detailed “as is to be” gap analysis</td>
<td>50% of purchased products listed in catalogue system modified in Trust systems to hold STGAs, GULs and associated attributes</td>
<td>50% of available master data pulled from approved PM provider</td>
</tr>
<tr>
<td>100% of available master data from approved PM provider</td>
<td>30% of purchased services listed in catalogue system</td>
<td>Sustainable organisational structure in place no administrative master data</td>
</tr>
</tbody>
</table>
### Appendix B - Implementation requirements

<table>
<thead>
<tr>
<th>Phase 0</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete “As-Is - To-Be” review of policies, processes and relevant systems.</td>
<td>Design the sustainable organisation to manage catalogue master data.</td>
<td>A sustainable organisation is in place to manage catalogue master data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publish approved Trust policy(ies) for Product (catalogue) management.</td>
<td>Trust catalogue management system(s) can hold and use GTINs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(At least) 50% of purchasing transaction lines are using product data from the catalogue system(s).</td>
<td>(At least) 80% of purchasing transaction lines are using product data from the catalogue system(s).</td>
<td>30% of services purchased are listed in the catalogue system.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Catalogue management system(s) linked to Master Data Exchange service.</td>
<td>At least 50% of (required and available) product records are being provided through the Master Data Exchange.</td>
<td>100% of (required and available) product records are sourced from the Master Data Exchange.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other relevant systems modified to hold and use GTINs and attributes.</td>
<td></td>
<td>Produce a project review report.</td>
</tr>
</tbody>
</table>

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Appendix C - Key Performance Indicators

All organisations are already producing a large volume of data to provide centrally for example

- Carter Metrics – This is used to assess trusts at a high level
- 3rd Spend Analytics tools such as Bravo and PPIB

From data extracts minimum of the following need to be produced on a monthly basis. Creation and ongoing review will form an essential part of the process of catalogue introduction.

Although some organisations may find it a challenge to produce this sort of information this must be produced on a monthly basis – If these cannot be produced easily this suggests a lack of control as the organisation lacks the ability to assess the current status.

Those listed below are the minimum that must be produced and reported on a monthly basis, there may be additional

- KPI 1 - Number of PO lines On Catalogue/Off Catalogue by Area/Directorate – See example report below

![PO's on/off Catalogue by Directorate Apr-Jul 17](image)
• KPI 2 - Value of PO lines On/Off Catalogue by Area/Directorate – See example report below

![Value of PO lines on/off Catalogue by Area/Directorate Jun/Jul 17](image)

• KPI 3 - Volume of lines Off PO by Area/Directorate – See example report below

![Volume of Invoice lines with/without PO created by Directorate - Sep 17](image)
• KPI 4 – Catalogue coverage by Suppliers – Break down by lines – See example report below

**PO's on/off Catalogue by Supplier Jul 17**

![Bar chart showing PO lines for different suppliers.]

• KPI 5 – % of service lines on catalogue – See Example report below

**PO Service lines on/off Catalogue**

![Pie chart showing percentage of service lines on and off catalogue.]

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• KPI 6 – On Catalogue PO Number lines with GTIN’s – See example report below

Catalogued PO lines created with associated GTIN’s - Apr 17-Oct 17

As part of any catalogue implementation catalogue/P2P providers should be asked how this data can easily be monitored. These measures should be built in to any future system improvements to ensure the ongoing need to manually produce is reviewed and these reports can continue to drive improvements and monitor compliance ongoing.
Appendix D - Strategy and Policy – Example Sections

1. Strategy
The Catalogue Management strategy must aim to ensure:
   • For each product there is only one master record
   • For instances with multiple catalogues: where there are duplicated products there is a master record entry in a designated catalogue, and all others feed from this record as the master information source.
   • All product data is held in a catalogue(s), in electronic format.
   • Access Control; only data/products pertinent to the needs of users of that catalogue to be made available – No need to replicate all attributes in all catalogues

2. Governance
   • The output of the as is to be gap analysis will confirm the governance structure and reporting lines this needs to be included

3. Data quality
   • How will data quality be measured and monitored on an ongoing basis

4. Communications
   • How will you communicate and with who? – Need to ensure critical stakeholders are identified and included to ensure value of product data continues to be maintained

5. Training
   • Process for training/system access
   • Outline of areas within the training
   • Who should be trained
   • Quick reference guides

6. Process
   a. Contract
   b. New/Change Product process
   c. Remove Product process
   d. Data cleansing

7. KPIs

8. Governance structure
See Appendix E - for governance structure
Appendix E - Sustainable organisation structure

Governance Structure

Product Review Group

- Decision Making group

Directorate Approval/Review

- Example - Clinical Support

Directorate Approval/Review

- Example - Surgery

Directorate Approval/Review

- Example - Medicine

New Product requests

- Made by end users

Product Review Group minimum

- Procurement/Supply Chain
- Clinical Lead
- Nursing Representative
- Medical Devices
- Pharmacy
- Finance

Outline of Structure and roles and Responsibility

1. New item requests - Made by end users
2. Directorate Approval/Review – This role should be completed by a Clinical Lead who will test the need for a new product. This needs to define the reasons behind the request if they are comfortable that this new requirement is acceptable they would approve and submit the product review group.
3. Product Review Group – This group meets a minimum of monthly and may also be virtual for urgent requests.
   a. The Group role is to
      i. Review New product request
      ii. Review catalogue coverage and utilisation – KPI report presented
      iii. Review usage of new item requests from previous months
4. Outcome - The group will review requests and will make a decision and advise on next steps this will vary based on the circumstances examples could be
   a. Approved as a requirement – To be competitively tendered
   b. Approved to add catalogue/Inventory – Covered by Contract already
   c. Rejected
   d. Approved – Added to the catalogue usage to be monitored
Appendix F - Specific requirements for Pharmacy

**Contract:**

The NHS Dictionary of Medicines and Devices (dm+d) is the national standard dictionary for licensed medicine within the UK. Hospital pharmacy systems must adhere to dm+d standards by utilising identifier and descriptions in order to have a common language for prescribing.

There are four key components to dm+d identifiers:

- **Virtual Medicinal Product (VMP)** contains the generic title for a product including the form and strength, for example ‘Paracetamol 500 mg tablets’

- **The Virtual Medicinal Product Pack (VMPP)** contains the generic title for a product. The description includes the pack size, for example ‘Paracetamol 500 mg tablets 32 tablet’

- **The Actual Medicinal Product (AMP)** describes an actual product which is known to have been available linked to the name of a particular supplier, for example ‘Periactin 4mg tablets(Auden Mckenzie Ltd)’

- **The Actual Medicinal Product Pack (AMPP)** describes an actual product which is known to have been available linked to both the name of a particular supplier and information on the pack size of the product, for example ‘Periactin 4mg tablets(Auden Mckenzie Ltd) 30 tablet 3x10 tablets’

The Department of Health’s Commercial Medicines Unit (CMU) utilise the dm+d standards when updating their pharmacy catalogue. Since the CMU negotiates with pharmaceutical companies for the best pricing, updates contain information about high cost medicines and cost implications if hospitals do not revise their contract with the most recent pricing agreement. The updated contract is then changed in the hospital’s pharmacy system as well as uploaded into their catalogue management system.

If the catalogue management system does not already have the data mapping for the item, then it must be mapped in order to link the supplier code to the pharmacy system’s local code. The mapping goes through the hospital’s selected Pan European Public Procurement On-Line (PEPPOL) which allows for electronic invoicing and ordering.

Certain catalogue management systems, upon expiration of a contract, will automatically delete the mapping codes associated with the contract. This will require manual remapping of the codes to reorder products from the contract.

One of key things to consider regarding selecting a catalogue management system is the ability to enable electronic invoicing. As orders are sent through the pharmacy system, such as JAC, invoices are validated for pricing. If the price does not match, then the invoice is unprocessed and flagged to be investigated for the reason of the discrepancy.
New/Change Product Process:

The Drugs and Therapeutics Committee must approve all new product requests. Similar to the process as stated in the Scan4Safety Catalogue Management Strategy and Standard Operating Procedure (SOP), the pharmacy department must fill out a new item request form, which upon the approval of the Drugs and Therapeutics Committee, is then processed by the senior pharmacist. The new product is then added to the formulary list, along with the product details into the pharmacy system as well as the catalogue management system.

Non-Formulary items go through the same process in which approval is needed from the Drugs and Therapeutics Committee, however if the request is of an urgent nature, the request can be accelerated. The requesting consultant is required to complete a non-formulary item request stating the urgency and reasons for utilising a non-formulary item.

Special considerations are listed for new product to alert the finance department of reimbursement/national tariffs associated with the product. Special considerations are listed as the following, but not limited to:

- Payment by Results (PbR) – high cost are excluded from the list
- Cytotoxic
- Oral chemo
- CDF (Cancer Drug Funds)
- NICE (National Institute for Health and Care Excellence)
- Unlicensed

Although currently there is not an automatic feature within the catalogue management system or the pharmacy system to recognise these special consideration drugs in order not miss the reimbursement/national tariffs, it can be a future update for both systems.
Appendix G - Stakeholder map and key messages

Below is an extract from the communications tool kit this gives an example of the high level messages across each stakeholder group

<table>
<thead>
<tr>
<th>Stakeholder Map</th>
<th>Message</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement/Materials Management</td>
<td>Product data drives the whole Procurement Lifecycle – It is a critical asset that must be managed – One of the most important roles</td>
<td>Full training on process – Signed off</td>
</tr>
<tr>
<td>Key Clinical End users</td>
<td>Importance of product data to enable product recall and Point of Care Scanning – Examples of products not coming through clear routes</td>
<td>Communication session and education on process – Workshop on products</td>
</tr>
<tr>
<td>Directorate Managers/Budget Holder/Finance</td>
<td>Visibility of approval and items on catalogue to ensure clear control of spend</td>
<td>Training on approval process and communication</td>
</tr>
<tr>
<td>Medical Devices/EBME</td>
<td>Need to link to PAQ form and Product recall processes</td>
<td>Engaged as part of setting up policies and procedures</td>
</tr>
<tr>
<td>Suppliers</td>
<td>Importance of process and potential improvements changing requirements for them</td>
<td>Communication of requirements of Programme</td>
</tr>
</tbody>
</table>
Appendix H - As is to be document structure

The following outline shows the headings that must be included in the assessment. Brief summary notes have been added to give an outline of the content that should be included in each of the sections.

Executive Summary
Summarise overall findings including

- Governance structure
- Investment required
- Systems to be updated
- Process changes required
- Timescales
- Baseline KPI's
- Priority Areas & Implementation

A. Catalogue Process
   I. As is

Map existing processes – Working with the stakeholders in map the current process for catalogues and item requests for the following General Supplies, Pharmacy, Estates & Facilities, Office & IT these may be the same process map if your processes are already consolidated.

Departments will be unlikely to highlight bad and inconsistent practice. The process mapping and continued questioning of process is required to ensure that current state is mapped.

See Appendix L - for an example process map

II. To be
If changes will be required create an outline process map showing the changes highlighting which areas these will impact
B. **Data Quality Assessment**
   
   - **As is**
   
   - **To be**
     
     Include the steps to be taken to ensure that this improves

C. **Attributes**
   
   - **As is**
     
     Full mapping of current attributes captured and those that will be required, including which systems will require these. Consideration needs to be given to the data dictionary for each of the supplier categories more info can be seen in section 7 Data dictionary also the compliance timelines for this need to be considered more information can be seen in section 7.

   Also the source of the data needs to be included for example
   
   - Supplier
   - Trust
   
   - **To be**
     
     - *Must state the required attributes to be included in captured and managed in the catalogue system*

D. **System Map**
   
   - **As is**

   *System map for Trust – Following the mapping of processes in it should be clear which systems where product data is received, reviewed, held and utilised. From this create a as is systems map. See Appendix L - for an example systems map.*

   *This should show the current gaps*

   **Systems to be updated must be listed**

   *Link with other sites who use the same catalogue system if this includes the demonstrator sites understand what changes have been made and how this may impact the to be state.*
• **To be**

Further to the current systems map a future state systems map needs to be created if.

- Must state what system will be used to drive
- Must state the investment will be needed
- Must state systems to be updated

**E. Governance**

• **As is**

Review of existing governance arrangements

- Linking to each of the process maps and system an outline of the governance structure must be produced highlighting what currently exists. It is likely that this is not controlled through one organisation

• **To be**

Must produce terms of reference/or review current group terms of reference

**F. Stakeholders and Communications**

To ensure that those who are required to be involved in the process a stakeholder map needs to be created an example of this can be seen in Appendix G - .

This sections needs to also include

- **Stakeholders to keep informed** - See potential
- **Stakeholder to be trained/updated**
- **Ongoing updates – How will stakeholders be kept informed**

- Refer to basic stakeholder map illustrating the key players and targeted messaging as illustrated in Appendix G - Stakeholder map and key messages
• Education sessions must be planned with key stakeholders. Training should be given and signed off to ensure understanding. – Including link from Catalogue Management to Invoice across all processes – Add appendix showing potential/MLE linked to all use cases

• Suppliers
  o The critical suppliers need to be defined
  o Suppliers to be engaged review the supplier engagement guide for detailed guidance for engagement

Any current messages should also be captured at this time

G. Key Performance Indicators

Initial Key Performance indicators created/Reviewed
These KPI’s need to be produced on a monthly basis and progress tracked it is essential that the data set that is used to produce this is consistent.

• As per Appendix C - Key performance Indicators need to collected and assessed and plan put in place to monitor on an ongoing basis

Top suppliers – by volume and value top list

• Must state service items/suppliers which are the priority

H. Priority Areas and Implementation

From the KPI data the priority areas for catalogue management need to be identified. The initial KPI’s must measure the current catalogue coverage in the Trust and identity suppliers to cover the following:

• 50% of Purchasing volume for Phase 2
• 80% of Purchasing volume for Phase 3

I. Timeline

Must state an estimated implementation time line – Including Procurement of and Interface requirements
Appendix I - Data Quality Model

Trust Data

a. Governance
   i. Little or no approval process for new products
   ii. Multiple users able to enter
   iii. No record of when and how products are added

b. Process
   i. Process to manage product changes unclear
   ii. Either no Inventory link or process to add

c. Quality Assessment
   1. Data entered manually by hand
   2. Local product codes and descriptions used
   3. Unit of measure not clear or inconsistent
   4. No standards of data quality or SOP such as guide to adding products
   5. No Clear process to cleanse data

d. Automation
   i. Fragmentation of entry points – For example Procurement enter on P2P system
      separate loading in to estates system without and automated link

e. Pricing
   i. No record of when pricing is valid until
   ii. Invoice holds frequent within the area
<table>
<thead>
<tr>
<th>Subject/Criteria</th>
<th>Nothing/Minimal</th>
<th>Developing</th>
<th>Established</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Data source</td>
<td>Manually entered/loaded by trust</td>
<td>Supplier loaded including via data repository such as GHX Nexus/Virtual stock</td>
<td>GDSN via subscription</td>
<td></td>
</tr>
<tr>
<td><strong>2</strong> Data standards</td>
<td>No agreed data standards trust specific UOM/Descriptions/Product codes used</td>
<td>Trust agreed data standards applied across key categories</td>
<td>Full data dictionary in place for each category collected and validated via GDSN</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Data Attributes</td>
<td>No ownership or clear list of data standards collected based on mandatory fields from P2P system. Local data added to by operational team</td>
<td>Mapping of required attributes based on set list of attributes that are collected and validated</td>
<td>Full set of required attributes mapped and included as part of ongoing maintenance and future use – i.e. MRI Safe for pacemaker</td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Pricing</td>
<td>No clear owner or end date not kept up to date. No link to contracted information and Inventory managed products. Multiple holds</td>
<td>Some ownership in key categories but no clear strategy and link to contract info</td>
<td>Clear strategy on management and loading of pricing data. Clear owners and link to contract and Inventory</td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Supplier % Coverage</td>
<td>Supplier items and spend not reviewed inconsistent and sporadic coverage</td>
<td>Full review carried out plan for supplier category and progress being made and tracked via KPI’s</td>
<td>Supplier coverage controlled and maximised</td>
<td></td>
</tr>
</tbody>
</table>
Appendix J -  As is to be Sign off Document

The Trust .......... Has reviewed and considered the output of the Catalogue management as is to be gap analysis and reviewed the recommendations at the ................. Steering group.

Further to the meeting the trust can confirm the following going forward for catalogue management

1. .......... Department will have overall responsibility and accountability for management of the process.
2. A product review group exists/has been set up to monitor and review the terms of reference can be seen in Appendix.........
3. .......... will provide the governance reporting line for this on an ongoing basis and will report on progress on a .......... basis
4. As per attached appendix xxxxxx KPI’s will be produced and submitted and reviewed on a basis
5. The governance structure can be seen in appendix ........
6. The catalogue systems approved for the management of catalogues are
   a. .......... For all non pharmacy products and services
   b. .......... For pharmacy products
   c. Approves the Procurement and implementation of a system as per the requirements defined in the as is to be gap analysis
7. Agrees and approves that changes are needed to the following systems
   a. .......... P2P system
   b. .......... Inventory system

Signed ............................................................................
Finance Director
Signed.............................................................................
Catalogue Management SRO
Appendix K - Review document (Completed for Step 11 & Step 13)

Review document structure

KPI’s – Stats
As per Appendix B these must be produced on a monthly basis. At end governance review the progress will be reviewed and action taken.

The end of phase report should summarise the current position analyzing any gaps and making clear recommendation based on areas to focus on for the each phase based on each of the main areas identified in Appendix B

- Trust specialties where there is low compliance to catalogue
- Services

System update
Update on progress to date based on systems where changes are required to pass GS1 keys. This will also include an update on progress to implement a new catalogue system where this is a requirement

Data Quality
Based on the original data quality assessment an update based on where and how data is being sourced and maintained.

Updated matrix as per Appendix H

Policy review
At each stage as changes or updates are required the Policy should be reviewed to ensure this is updated as required

Communications Review
Review of delivered communications and training and those planned for the next phase.
Appendix L - Example Process & System Maps

Process Map

(Double click on process map to enlarge image)
Systems Map

(Double click on process map to enlarge image)
## Appendix M - Product project stakeholders

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Responsibility within Product</th>
<th>Communications Required</th>
<th>Frequency / Method</th>
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## Appendix N - Example documents reviewed for Phase 1

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Purpose</th>
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## Appendix O - Example training register

<table>
<thead>
<tr>
<th>User</th>
<th>Job Role</th>
<th>Involvement in Catalogue Management Life cycle</th>
<th>Relevant SOPs</th>
<th>Method of Training</th>
<th>Trainer</th>
<th>Training Date</th>
<th>Signed</th>
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