Who are we?

York & Scarborough Teaching Hospitals

1. Scarborough Hospital

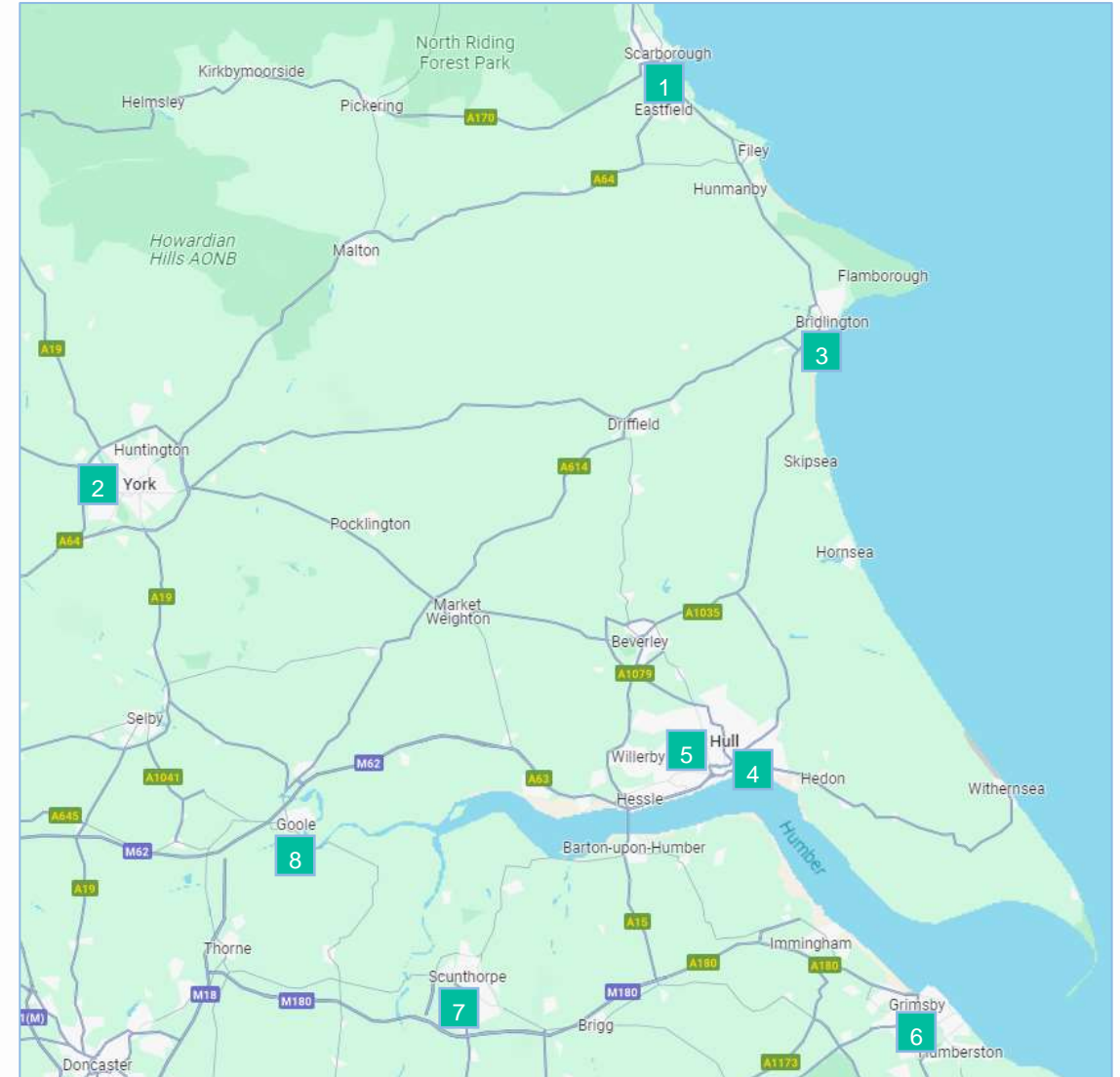2. York Hospital

3. Bridlington Hospital

Hull University Teaching Hospitals

4. Hull Royal Infirmary

5. Castle Hill Hospital

Northern Lincolnshire & Goole

6. Diana Princess of Wales Hospital

7. Scunthorpe General Hospital

8. Goole & District Hospital

Scarborough to Grimsby 72.5 miles – 2 hours

Benefits of using GLN in Healthcare Management

- Facilitates the unique identification of any location, asset and departments.
  - Error reductions – standardised methodology using global consistency (best practice).
  - Precision – avoid confusion over similar names of departments or vague descriptions.

- Improved supply chain and inventory management.
  - Streamlined operations – precise tracking of stored stock to ensure supplies are directed to the correct location.
  - Scan delivery to a location where people may not be present.
  - Efficient logistics – reduce queries as to where and when deliveries were made.

- Enhanced patient safety and quality of care.
  - Rapid response using exact locations.
  - Data integration – database key that links departmental functions e.g. estate changes.
  - Rapid recall and traceability – accurate pinpoint identification of where recalled products are located for prompt removal.

- Enabling system interoperability - administrative, clinical, information and external supply chain.

Benefits of using GLN in Healthcare Management

- Facilitates regulatory compliance and interoperability.
    - Global best practice.
    - Scalability – hierarchical organisation.

- Operational efficiencies and cost reduction.
    - Asset management.
    - Resource allocation.

In summary the GLN plays a key role in modernising hospital Estates and Facilities management. They serve as the backbone of accurate location identification, reducing administrative overhead, minimising supply chain errors and contribute to better patient outcomes by ensuring that every product, service and asset can be managed with accuracy.

Our Journey

The delivery of Scan 4 Safety is planned to deliver across all trusts within the HNYPC. Our deployment scope and plan includes the delivery of the following GS1 identifiers:

- Patients (wristbands) (GSRN)

- Product (GTIN)

- Locations (GLN)

By utilising these identifiers and scanning barcodes we know that we will improve our inventory management deployment, reduce stock management administration and advance the standardisation of all Trust locations in our existing Estates and Facilities systems.

All of our Estates and Facilities teams currently use the same system to manage locations, departments and services – MICAD.

Our Approach

- Onboard MICAD and GS1.

- Determine scope with all Estates & Facilities teams to ensure standardised approach for delivery.
  - What are the Scan4Safety allocation requirements (in the first instance)?
  - How do we utilise GLN's for other services – future proof?
  - Do we use GLN's currently – what is their function and use?
  - What are our physical locations, legal entities, functional entities and hierarchical structures?

- Validation of existing Computer Aided Design (CAD) drawings within the MICAD solution.
  - Enables mapping of GS1 allocated GLN's to physical locations.
  - Identification of gaps – these may exist due to facility ownership.

- Design of physical label with input from Infection Control.

- Agreed procedure for initial upload and allocation of GLN's across the estate.
  - This was carried out by MICAD – the addition of GLN space database in the MICAD IPR.
  - Assign mapped GLN's.

Key Considerations

- Incomplete CAD drawings.
  - We had gaps in the completeness of CAD drawings, so our decision was to keep initial deployment of GLN's to delivery point locations in the IPR at ward and department level in the existing "all room" work around hierarchy.
  - When new drawings are uploaded and correct room hierarchy is loaded, then these will be migrated to the new structure and all room level GLN's will be populated by script.

- Utilisation of existing GLN's.
  - Our existing procure to pay (P2P) solution was already using GLN's for Accounts Payable, we had to ensure these were "recycled" to ensure there was no impact to current function.

- Resource and cost
  - Who will complete the mapping? Note that the Scan4Safety team provided the requirement, Estates validated the need and MICAD completed the task.
  - Who will print and allocate the labels? This is part of next steps but will be a combined effort between the Scan4Safety team and Estates.
  - Who will fund the activity – hardware and configuration.

Next Steps

- Allocation of physical GLN's across York & Scarborough Teaching Hospitals.

- Repeat the process for our other sites ensuring that all GLN's have been allocated to the GS1 registry and are mapped correctly in the Estates and Facilities IPR.

- Development of Standard Operating Procedures to ensure that GLN's are centrally managed moving forward with new and/or changing requirements.
  - Maintaining uniqueness.
  - Embedding persistence.
  - Reallocation policy.
  - Audit and traceability.
  - National regulations.

Enabling GLN Potential – The Future

- Growth Planning.
    - Hospital expansion and/or repurposing.
    - Tracking activities across sites – a number of services are run in other Trust premises.

- Technology Evolution.
    - RFID tracking.
    - AI driven inventory management linked to GLN.
    - Automated logistics in supply chain.

- Accurate identification for works allocation and billing.
    - Works calls raised against the GLN (accuracy of location).
    - Unique identification ensures that the correct service/ department is invoiced.

- Reduction in Billing errors.
    - Using GLN's instead of manually entered locations will reduce errors caused by misspellings, duplicate records or outdated information.

- Streamlined Electronic Data interchange (EDI).
    - Improved support of electronic invoicing.

Wider Lessons Learned

- Historically the focus on barcodes has been GTIN and not all barcodes. All barcodes need to be linked to enable the full benefits to be delivered.

- Despite GTINs being the focus we still have a lot of products which don't have any barcode. This undermines the instruction around the importance of scanning.

- Quality of data is key. We have spent a lot of time tidying product information, but we are doing this locally rather than nationally meaning a lot of duplication. A truly national programme is what is needed so we join all elements of our supply chain together and correct data once.

- A national programme would allow for lessons learned to be shared so we don't all make the same mistakes. How do we make better use of the knowledge and experience GS1 colleagues have – can we establish communities of practice?

- The NHS is complex as we have the same stock coming from multiple routes which can also be owned, consigned and loaned. A single stock management process will help with understanding how we manage this – getting the basics right.