The Netherlands

Sharing best practice on the implementation and use of GS1 standards in hospitals

Challenge

GS1 standards are increasingly being implemented in hospitals across the globe. By scanning barcodes assigned to products, places and people, it becomes possible to precisely track healthcare processes. However, hospitals – and even different departments within those hospitals – often approach the implementation of standards in different ways. What this can mean is that those involved in these projects inadvertently 'reinvent the wheel'; failing to take lessons from previous implementations. This then reduces the efficiency with which standards are implemented and the speed at which benefits are realised.

Approach

GS1, in partnership with IT services and consulting firm PinkRoccade, has developed the Hospital Implementation Dashboard (HID). The dashboard brings together information on how hospitals have implemented and are using GS1 standards. It is being used to support knowledge sharing between hospitals, meaning teams can learn from one another on how to reap the benefits of such standards.

Introduction

In recent years, global healthcare regulations on pharmaceuticals and medical devices – which includes implants – have become increasingly aligned to global standards for product identification. Regulatory agencies and jurisdictions in countries including Australia, Canada, the United States, the United Arab Emirates and in nations across Europe acknowledge the necessity of global barcoding standards in healthcare for procurement and traceability reasons. In addition, there is growing evidence for the efficacy of barcode solutions in improving overall patient safety.
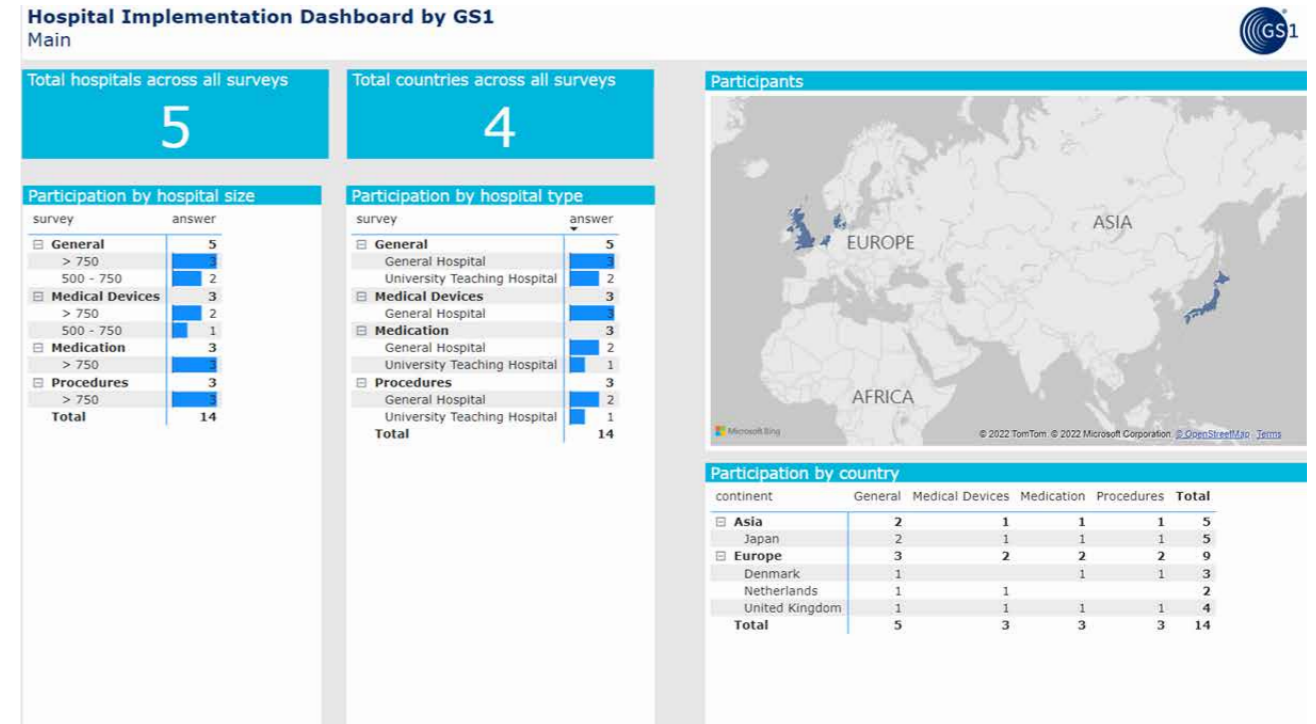
Teams at hospitals often work in isolation in implementing these standards, even though other organisations may have already successfully carried out a similar project and have lessons to share.

To avoid this, GS1 member organisations in a number of countries are advancing the Hospital Implementation Dashboard (HID). The dashboard was initially developed last year, in association with IT services and consulting firm PinkRoccade. Teams at GS1 Denmark, GS1 UK, GS1 Japan, GS1 Netherlands have already started to populate the dashboard with data from a variety of hospitals.

Sharing knowledge

"What we're trying to show is what use cases there are for scanning, whether patient scanning, medical device scanning, pharmaceutical scanning, asset scanning, you name it," explains Hans Lunenborg, sector manager healthcare at GS1 Netherlands. "My main aim is to show how other hospitals can help you in implementing; to learn from each other, network."

Teams at the GS1 member organisations help hospital staff to complete the relevant data, to help reduce administration burden. This means the data on the dashboard is comparable between organisations. It also provides an opportunity for GS1 to forge closer connections with hospital staff, and to lend assistance and advice on implementation generally.

With the insights the tool provides, hospitals should be able to deploy standards more broadly and more efficiently, thus enabling improvements in patient safety and increasing operational efficiency. The dashboard helps give a sense of the variety of settings in which hospitals can valuably roll out the use of GS1 standards.

Protecting the data

For now, the data on HID is only visible to staff within GS1 member organisations. This is in large part due to data protection and privacy requirements. In the Netherlands, for instance, those at one hospital would not be allowed to view data from another.
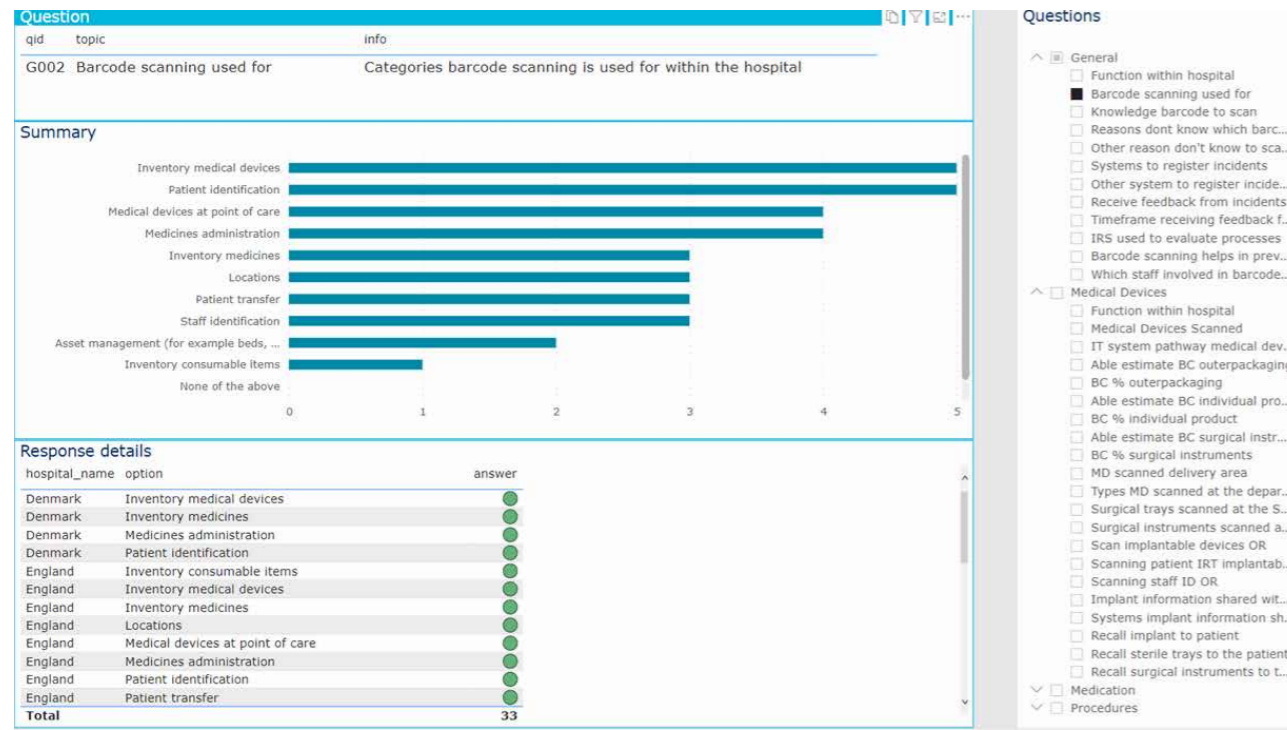
Over the longer term, the plan is to explore how to share data more widely while maintaining appropriate privacy. At present, GS1 staff use the dashboard to build their knowledge of how standards are being used and share this general information with hospitals as appropriate.

Next steps

The pilot of the dashboard in Denmark, the Netherlands, the United Kingdom and Japan has shown it can offer valuable insights into how to increase the use of barcodes in healthcare settings.

In the Netherlands specifically, there is a goal to ensure data from at least 10 hospitals has been collected and added to the dashboard by the end of 2022. Those from the team at GS1 Netherlands are going on a tour of hospitals to discuss the dashboard with healthcare workers involved in scanning processes.

In the longer term, it will also be possible to include data from other institutions on the HID – that might include, for example, laboratories and extramural institutions. Scanning barcodes is becoming increasingly important following the May 2022 passage of the European In Vitro Diagnostic Regulation (IVDR) legislation. By using the tool, it's possible to create a roadmap of

Hospital Implementation Dashboard by GS1
Main

Total hospitals across all surveys	Total countries across all surveys
5	4

Participation by hospital size

survey	answer
General	5
> 750	2
500 - 750	2
Medical Devices	3
> 750	2
500 - 750	1
Medication	3
> 750	3
Procedures	3
> 750	3
Total	14

Participation by hospital type

survey	answer
General	5
General Hospital	
University Teaching Hospital	2
Medical Devices	3
General Hospital	
Medication	3
General Hospital	2
University Teaching Hospital	1
Procedures	3
General Hospital	2
University Teaching Hospital	1
Total	14

Participation by country

continent	General	Medical Devices	Medication	Procedures	Total
Asia	2	1	1	1	5
Japan	2	1	1	1	5
Europe	3	2	2	2	9
Denmark	1		1	1	3
Netherlands	1	1			2
United Kingdom	1	1	1	1	4
Total	5	3	3	3	14

what still needs to be done in the field of, among other things, diagnostic material.

In the meantime, GS1 member organisations are keen to collect data from more and more hospitals. "I want to have this dashboard on a local level, the regional level and then on the global level," says Mr Lunenborg.

"Ultimately, we want to use the insights the HID tool provides to help hospitals, both nationally and internationally, to learn from each other's best practices."He encourages any hospital interested in sharing data to contact their local GS1 member organisation.

Conclusion

Understanding the current use of GS1 standards in healthcare – who is doing what, how, and where – should assist all those involved in the sector. It will mean lessons are shared, including on how to most effectively implement such standards.

The HID tool should help hospital teams learn from each other. In a world in which the amount of data is growing rapidly, GS1 standards can help by providing a common language to identify, record and share supply chain data. This way, important information is accessible, accurate and easy to understand. By helping hospital teams understand how best to implement standards, the HID supports the faster use of barcode scanning to improve efficiency and patient safety.

About the author

Remi Quak
Consultant, PinkRoccade Healthcare

Remi Quak works as an IT consultant in the field of quality registrations in healthcare. In this role he is responsible for the insight and management of various indicators. Within the Hospital Implementation Dashboard project, Remi is mainly involved as a link between the end users and the developers of the dashboard. His ambition is to support and improve healthcare by using the data that is already available.

Local coordination

Hans Lunenborg
Industry Manager Healthcare, GS1 Netherlands

Hans Lunenborg is industry manager healthcare at GS1 Netherlands. He and his team support providers in implementing GS1 standards in the operating room, pharmacy and other departments. They also help suppliers to comply with legislation and to exchange data easily. Hans operates in the GS1 Healthcare Leadership Team to spread his knowledge and take healthcare a step further.

About the organisation

PinkRoccade Healthcare is a provider of software solutions in the Netherlands. The business unit, Hospitals BI, ensures that hospitals have the necessary data management at their disposal. Hospitals BI has an extensive data warehouse as well as ample knowledge of quality and patient safety. Its solutions include:

• Performance monitor: Current total overview of the quality indicators in a hospital
• Datadash: Anonymise data to support the GDPR legislation
• Geniq: Complete data warehouse for the most critical flows in the hospital

www.pinkroccade-healthcare.nl