



University Hospitals
Plymouth
NHS Trust

GS1 UK Healthcare Conference

Nick Thomas

Deputy Chief Executive

Plymouth Hospitals NHS trust

Achieved S4S Accreditation 2018



SCAN+ SAFETY
Certified 2018



What's been achieved?

The 1st two years ...



- **£1m+ savings**
- **Potential for further £1m**

The 1st two years

7,286 procedures captured



6,215 patients



13,971 products (implants) assigned to a unique patient



25,932 products tracked by lot & expiry date



193 discarded products

£4.5m cost of items used



2,324 orders raised from electronic consumption.

77 work days saved (15min average manual order)



Product recall before **19 days 10 hrs.**

Now **1hr 45mins**, less than **1 min** to search and identify patients

The New Ambitions

- Avoid Never Events
- End-to-end traceability of medical devices and care events
- Using GS1 standards and RFID to track and trace assets / staff

"Every single BEEP tells us a little, millions of BEEPS tells us a lot!" Nick Thomas, Plymouth Hospitals [#scan4safety](#) [#GS1HCconf](#)



Avoid Never Events

NHSI April – December 2018

- 391 never events
- 54 (14%) implants/wrong prosthesis
- 21 (39%) related to hip surgery

Avoid Never Events

A new national system of scanning prosthetic implants before they are put into patients should be created by the government, the Healthcare Safety Investigation Branch has said.

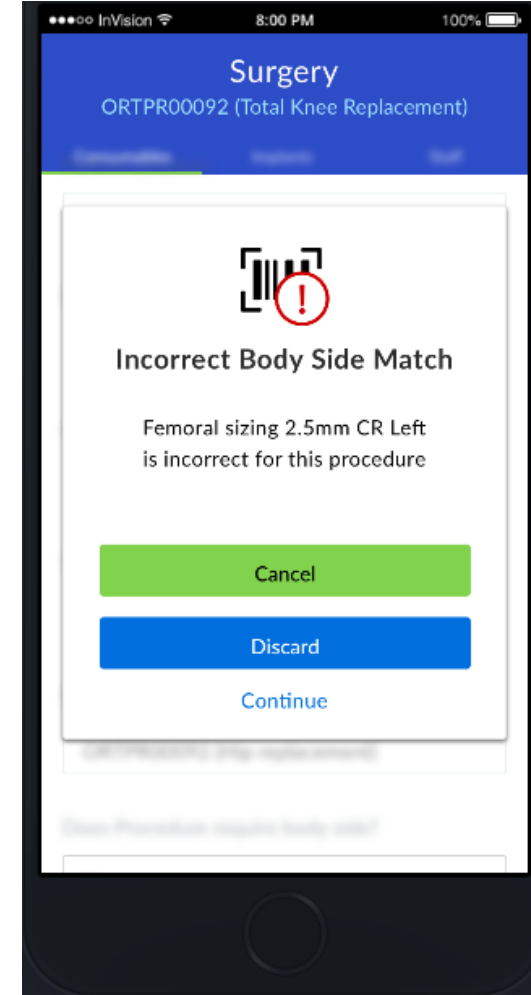
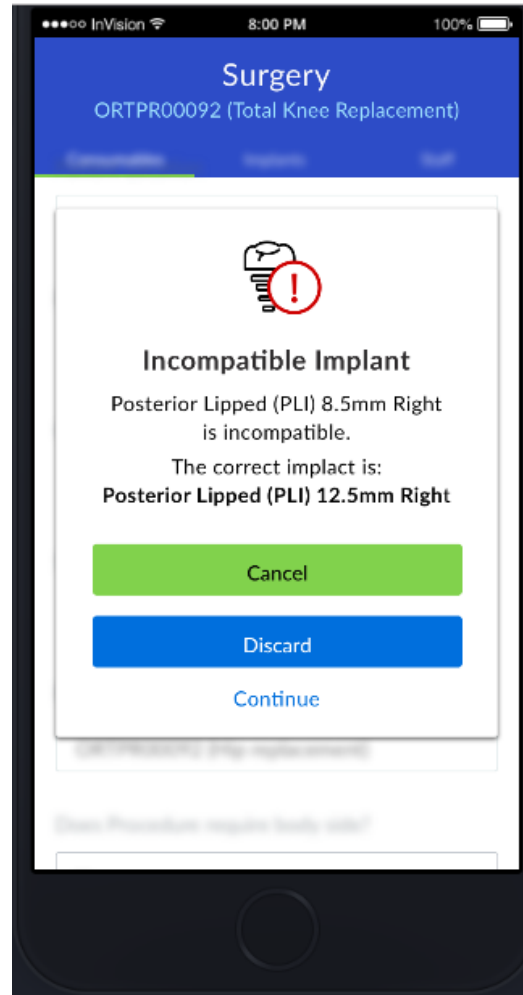
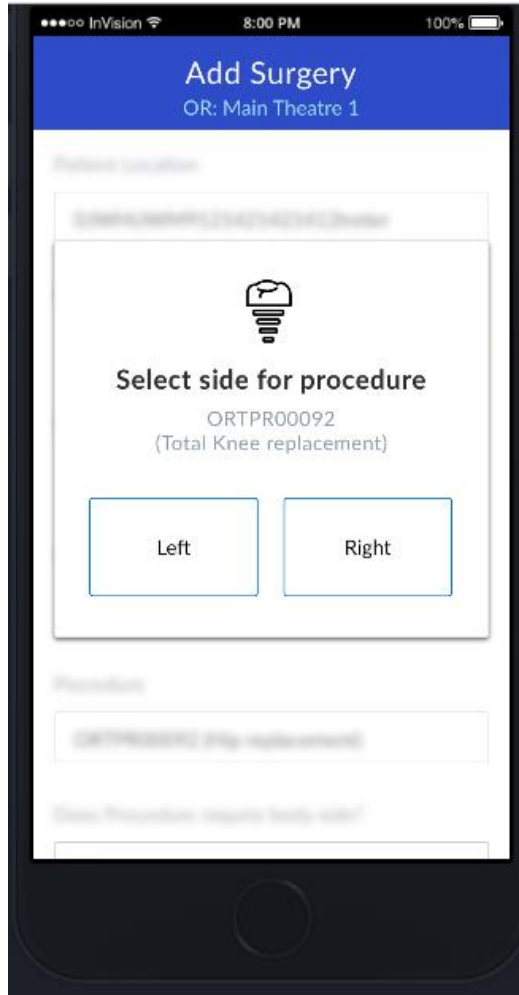
In its first national investigation report since being set up in April last year, HSIB said such a system if used in operating theatres could prevent wrong prostheses being used.

It made the recommendation after an incident where a 62-year-old man had two incompatible prostheses implanted during a total hip replacement. The mistake was only picked up days after the surgery, when information was entered into the National Joint Registry database.

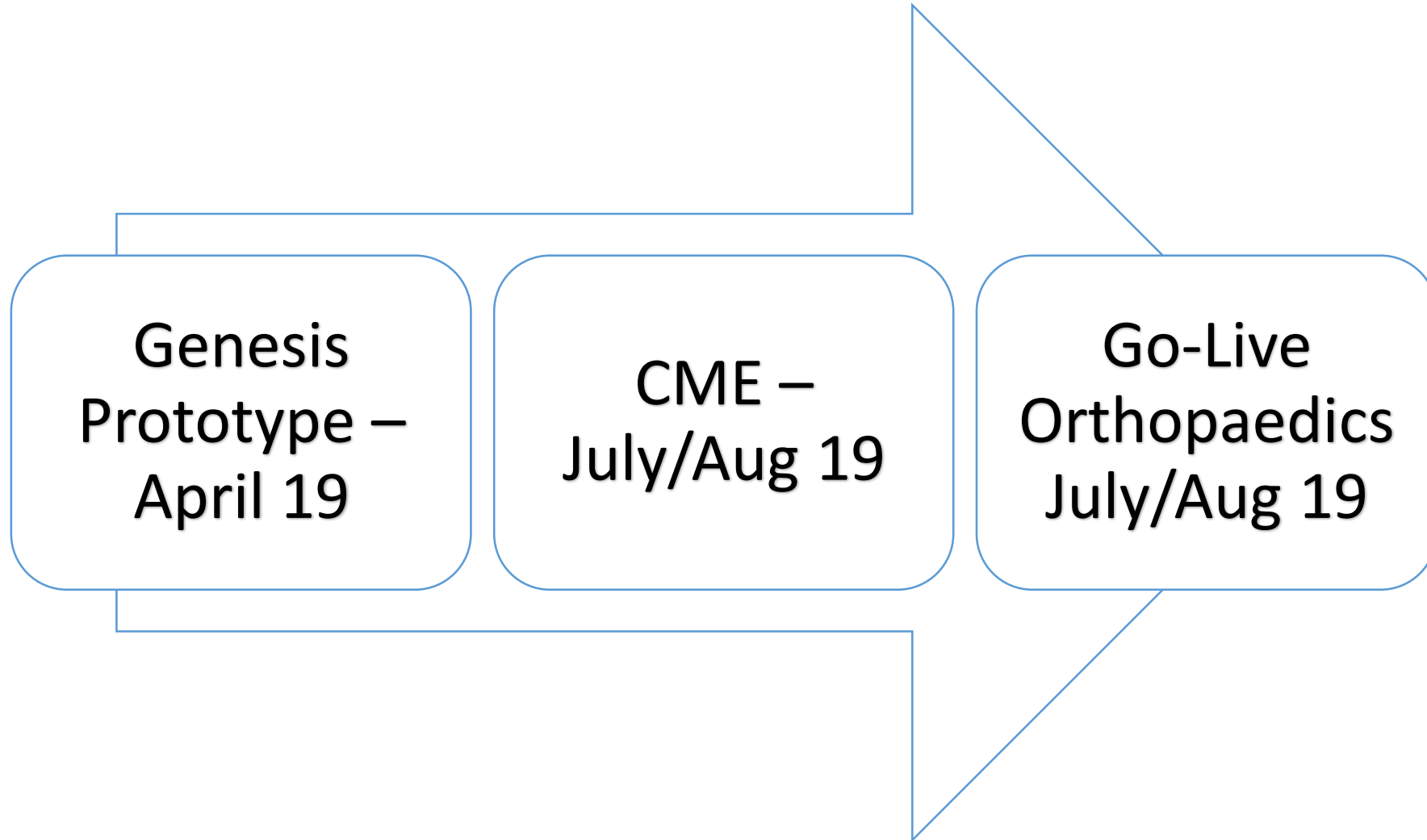
HSIB said there were on average 52 wrong implant or prosthesis never events a year with the latest data showing 65 in the year to March 2018, which it said suggested “a national, systemic issue”.

It has made a number of safety recommendations aimed at NHS Improvement, the Department of Health and Social Care and other national bodies.

Avoid Never Events



Avoid Never Events



EPCIS (Electronic Product Code Information Services)

GS1 and the barcode – a brief history

Today, GS1 barcodes are scanned more often than searches are performed on Google

5 billion + per day



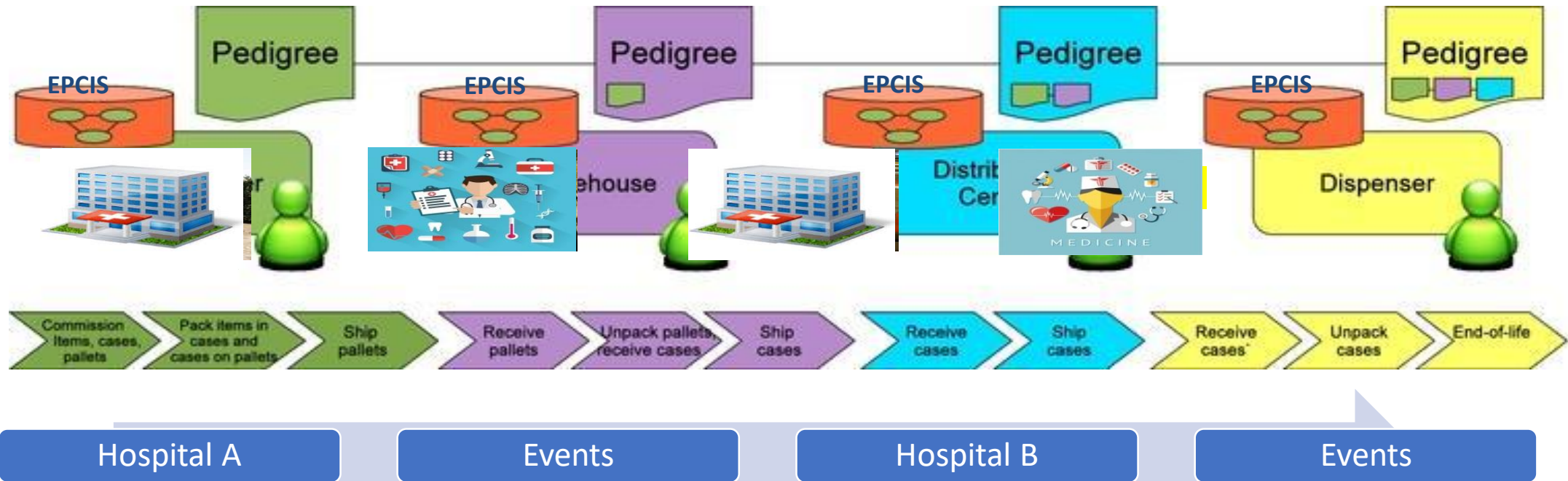
Why EPCIS

- Tracking and sharing events
- Industry and Application agnostic
- Supplement to **NOT** a replacement for existing systems.

Today EPCIS used by companies across the world to track everything from the origin and freshness of food to the safety of pharmaceuticals

EPCIS (Electronic Product Code Information Services)

The NHS – Scan 4 Safety



“The NHS’s top priority is Patient Safety”.

EPCIS (Electronic Product Code Information Services)

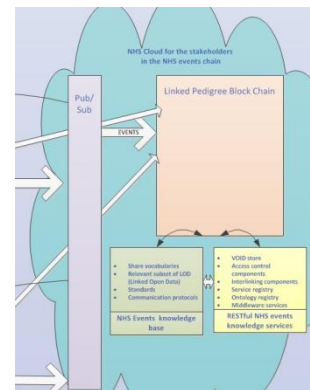
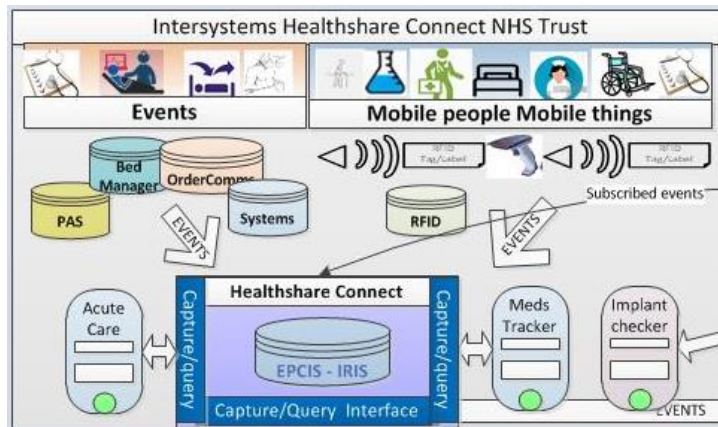
- Supports food safety, drug safety, environmental safety, patient safety
- Efficiency, easy to track where products are or within whom – product recall
- Use case – MRI, 2 working days per week



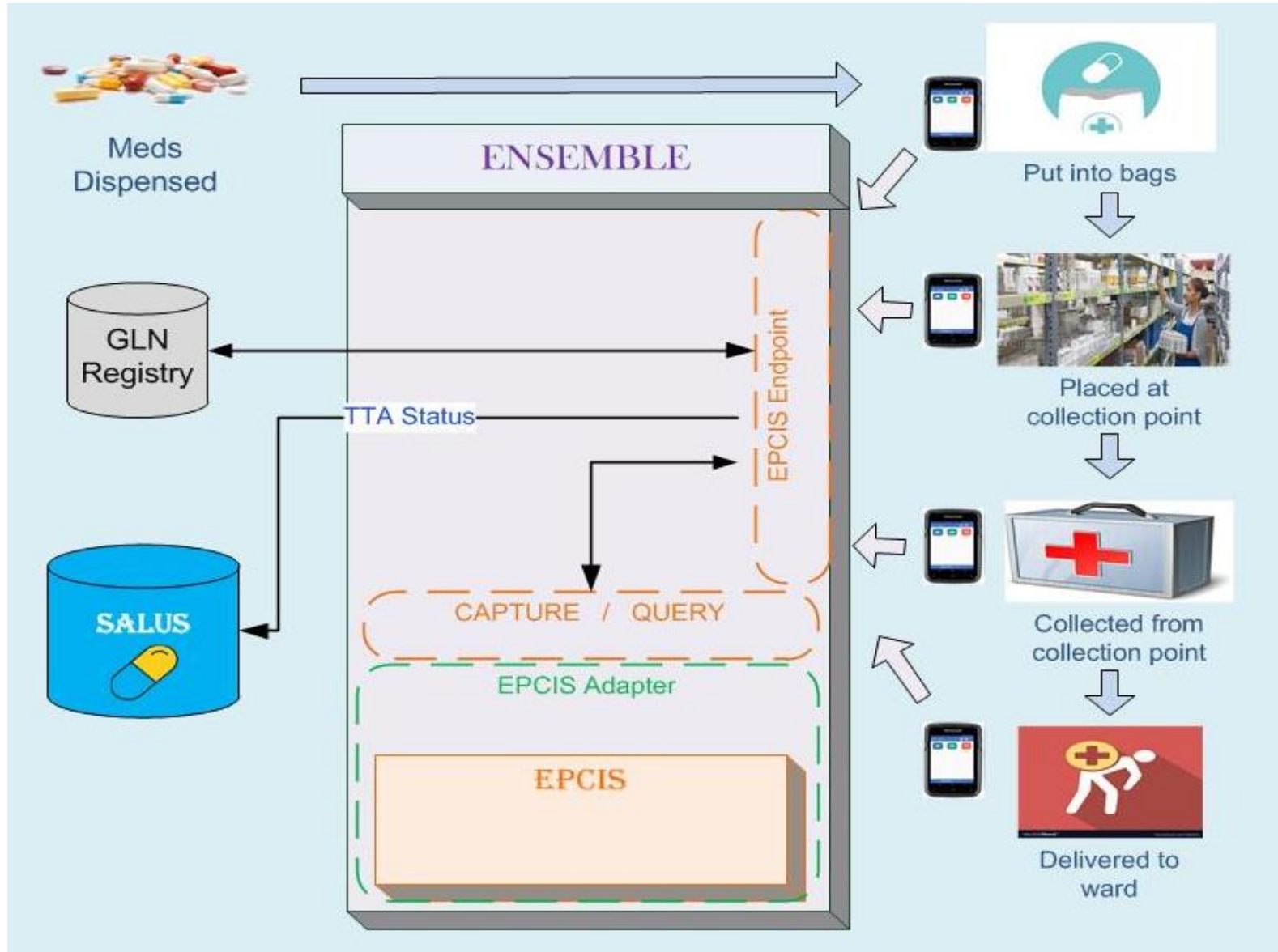
But there's more.....



- An EPCIS app is usable against any EPCIS compliant system.



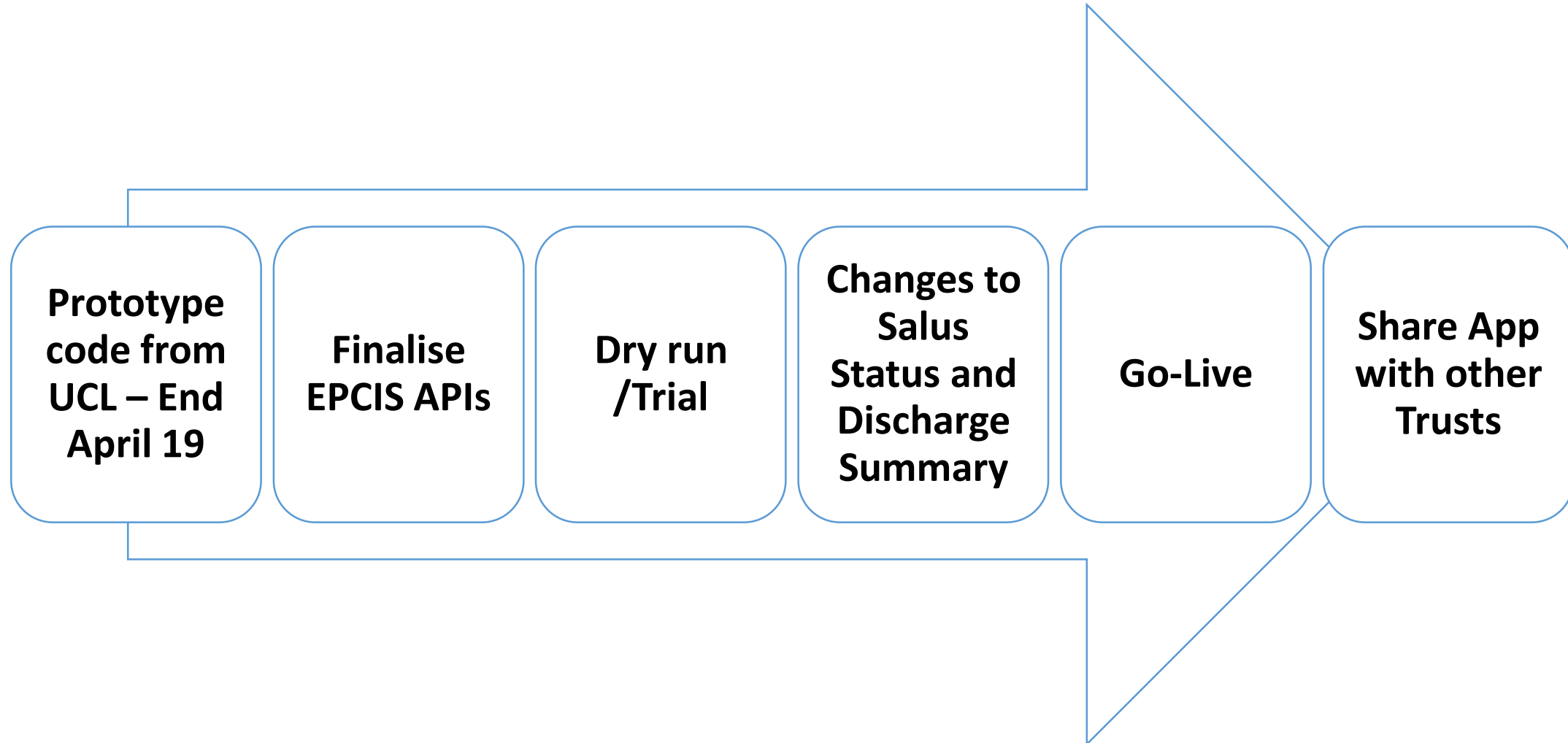
EPCIS TTA Tracker



A vertical stack of logos for the following organizations:

- NHS University Hospitals Plymouth NHS Trust
- UCL
- GS1 UK
- NHS Digital
- InterSystems

End-to-end traceability of medical devices and care events

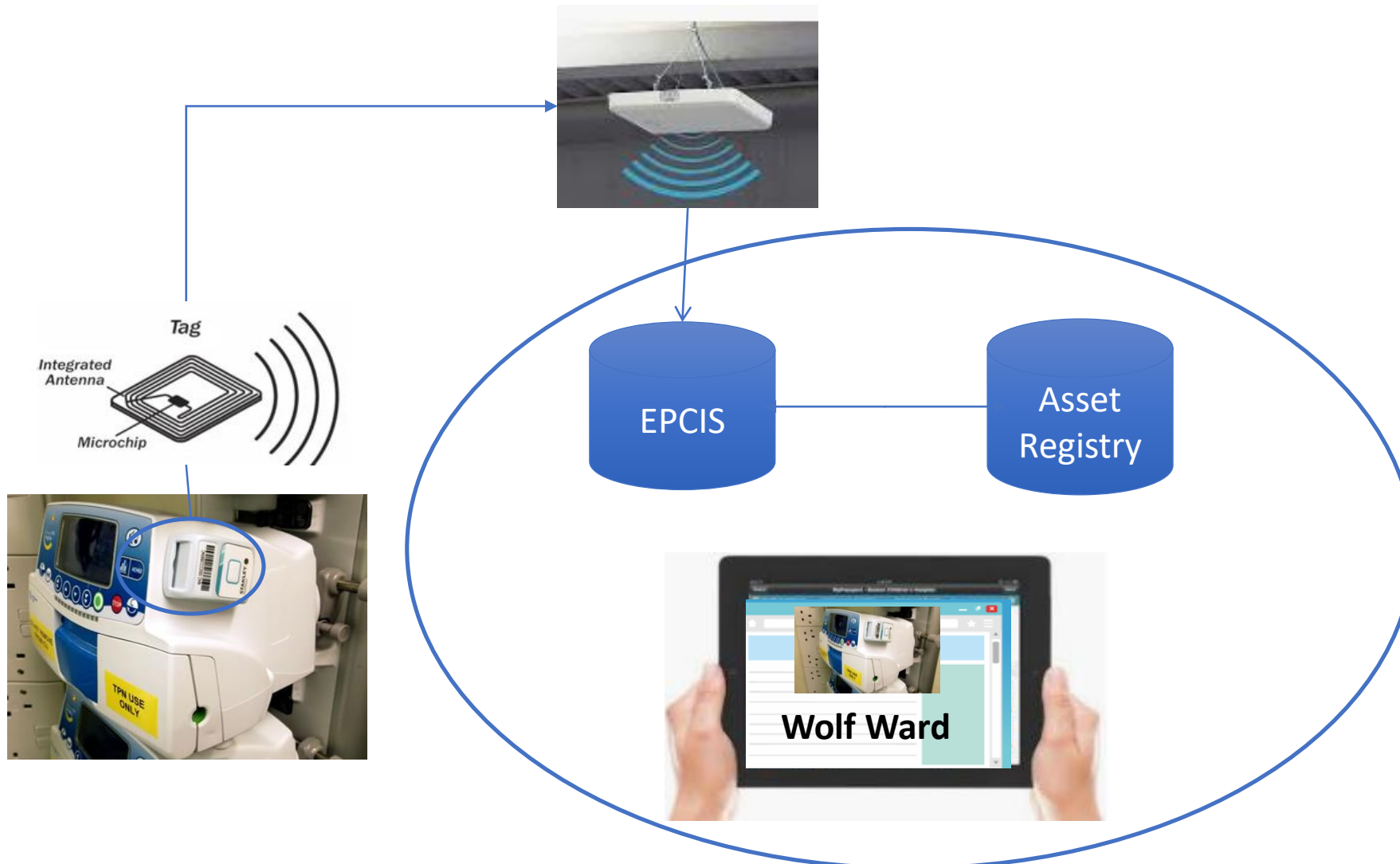


Using GS1 standards and RFID to track and trace assets / staff

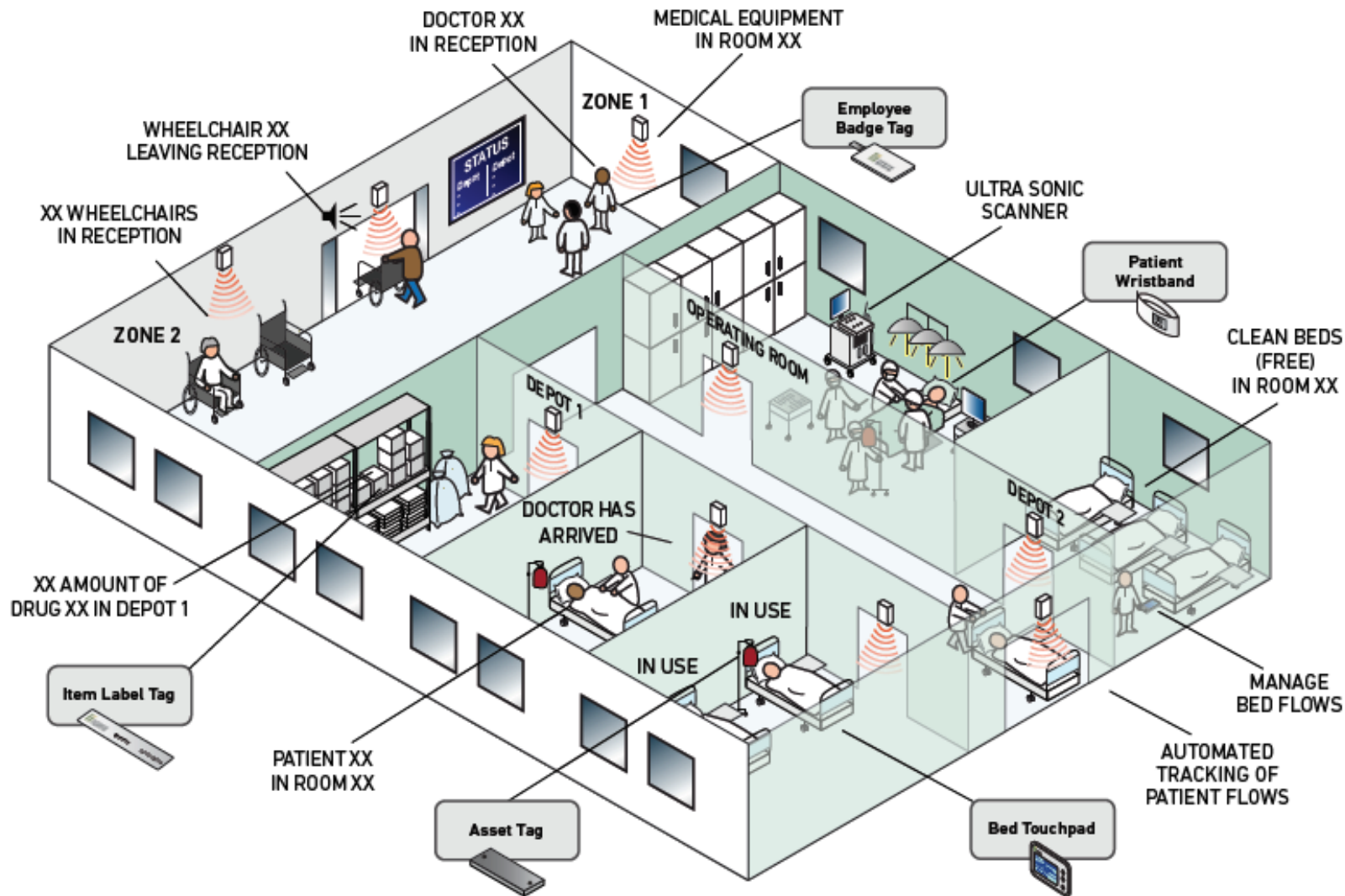
- 30,000 Portable/Mobile medical equipment
- 10,000 Static medical devices
- 15,000 Surgical Instrument Trays
- 7,000 Staff

£100m est. value related to medical equipment

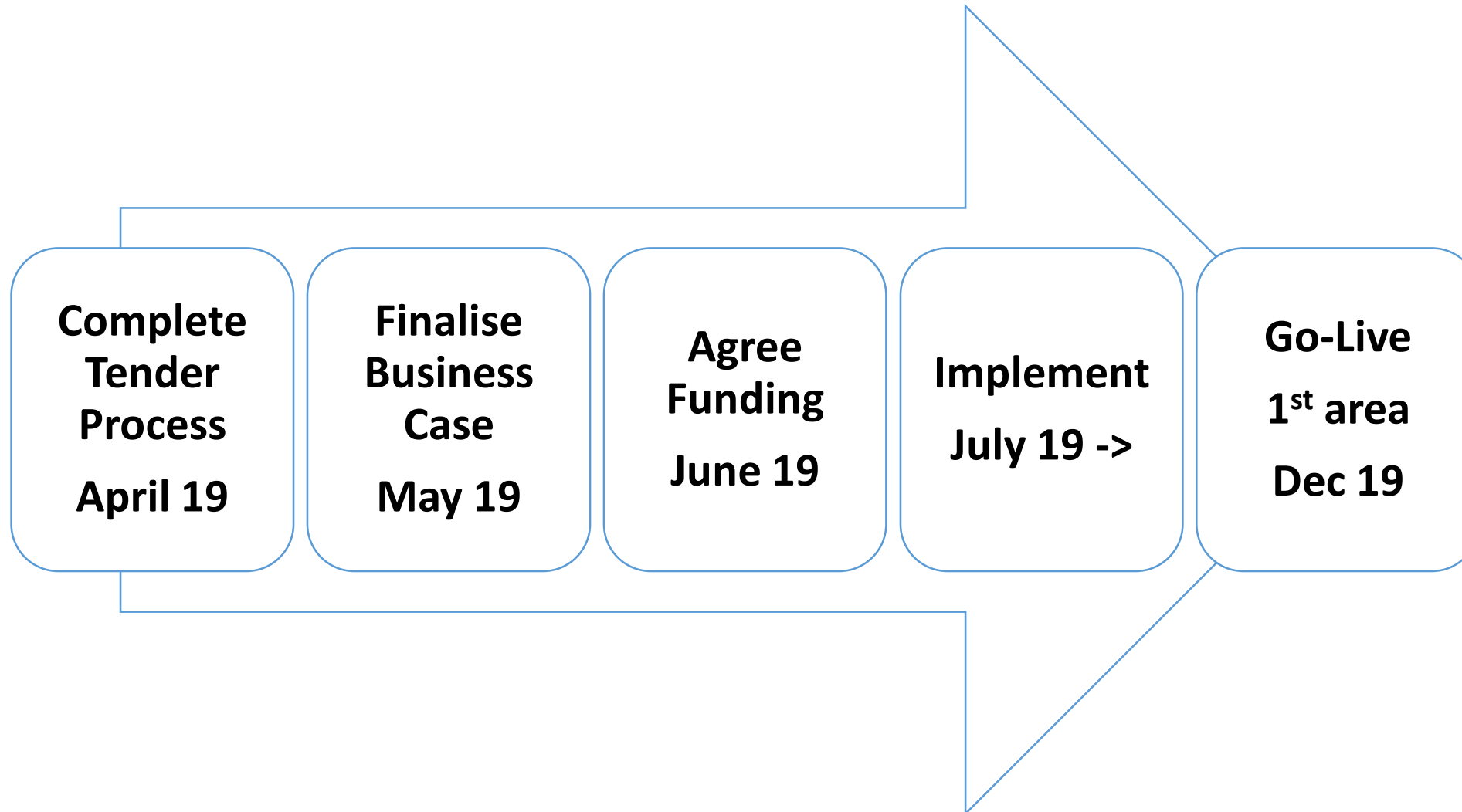
Using GS1 standards and RFID to track and trace assets / staff



Using GS1 standards and RFID to track and trace assets / staff



Using GS1 standards and RFID to track and trace assets / staff



We are seeing little if any progress in suppliers adopting GS1 standards for medical goods and services



PCB00 REF PCB0000225 **TECNIS**
1-Piece IOL

DIOPTER: +22.5 D

SUGGESTED "A" CONSTANT:

Optical Biometry..... 119.3

Ultrasound Biometry..... 118.8

OVERALL DIAMETER (\varnothing_T): 13 mm

OPTIC DIAMETER (\varnothing_B): 6 mm

USE BY (YYYY-MM-DD): 2021-12-02

SERIAL NUMBER (SN): 210047 1812

MANUFACTURED ON (YYYY-MM-DD): 2018-12-02

One-piece aspheric posterior chamber biconvex IOL, acrylic with UV absorber, in delivery system

Product of USA

Johnson & Johnson Surgical Vision, Inc.
1700 E. St. Andrew Place,
Santa Ana, CA 92705 USA

Production site:
AMO Puerto Rico Manufacturing Inc.,
Anasco, PR 00610

CE
0344

(01) 05050474558311(17) 211202(11) 181202(21) 2100471812 Z353143 Rev. 02 1018

How many suppliers have GTIN's 2018/19?

81,587 (81,575) items in Trust catalogue from 855 (811) suppliers.

23,841 (23,907) items have valid GTIN, 29.2 % (29.3) (From 71 suppliers, 8% of the suppliers have GTIN)

One supplier through the GDSN, Smith and Nephew

Stats in red are for same month 2017/18

Suppliers are not attributing barcodes to all units of measure, which means we cannot scan the product and link it to a patient.





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Questions?