Hospital Implementation Session

Feargal Mc Groarty, chairperson

Berlin, April 2017

Agenda

- Introduction
- Two very different cases on GS1 implementation in hospitals

- Feargal Mc Groarty, chairperson
- Mr. Andrew Raynes: IM & T Director,
  Barking, Havering and Redbridge University Hospitals NHS Trust, UK
- Mr. Terry Hoy: Regional Supply Chain Manager,
  South West Supply & Logistics, South West Healthcare, Australia

- Discussion and Questions

Hospital Implementation Session

Feargal Mc Groarty, chairperson, National Haemophilia System Project Manager St. James's Hospital, Dublin, Ireland

Berlin, April 2017

My role….

- National Haemophilia System Project Manager St. James's Hospital (SJH), Dublin, Ireland

- GS1 Role
  - Member and now Tri Chair of the HC leadership Team
  - Tri Chair of Healthcare Provider Advisory Council (HPAC)
  - Member of a number of workgroups
- Successful GS1 implementations in SJH
  - Haemophilia
  - Surgical Instruments
  - eProcurement

WHY?

First Barcode scanned in Healthcare ….. 1991 … but

How standard are standards in healthcare?

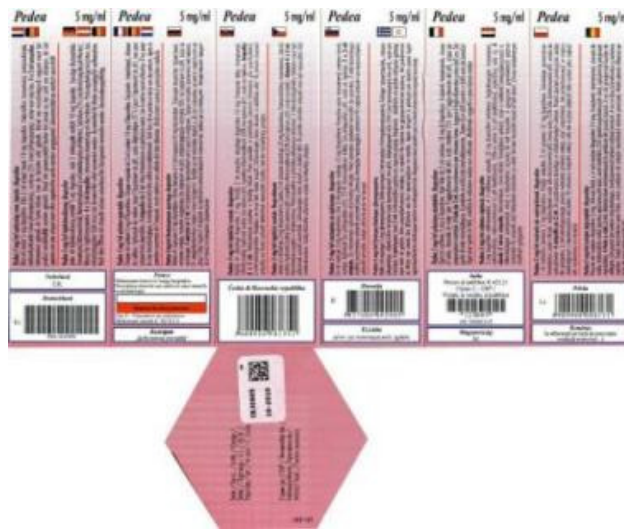'The nice thing about standards is that there are so many to choose from'

(Andrew Tannenbaum, the Vrije Universiteit, Amsterdam)

to which has been added …………

'and if I can't find one I like, I'll make up my own!'

(Paul Amos, Information Standards Board for Health and Social Care in England, UK).

..in Healthcare it is dangerous and inefficient!

- Multiple bar codes on one package – which one to scan?
- Different types of bar codes – inconsistency; incompatibility
- No bar code – need to bar code; re-package; re-label

Benefits for Patient Safety

- Reduction of **medical errors**
- Improved **recall** procedure and **adverse event reporting**
- **Documentation** of product/patient relationship – in **Electronic Health Records** (EHR) and registries
- **Visibility** of **inventory** – availability of devices
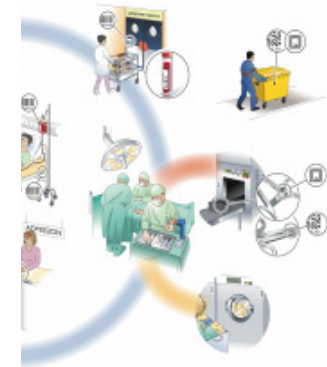- Supply chain **security/anti-counterfeiting**

WHO?

GS1 Healthcare – Voluntary, Global User Group

To lead the healthcare sector to the successful development and implementation of global standards by bringing together experts in healthcare to enhance **patient safety** and **supply chain efficiencies**.

WHY GS1?

McKinsey & Company report quantifies supply chain issues in Healthcare

Source: http://www.mckinsey.com

New McKinsey report "Strength in unity: The promise of global standards in healthcare*"*

Highlights the cost savings and patient safety benefits of adopting a single global supply chain standard in healthcare

Available at:

http://www.gs1.org/healthcare/mckinsey or

http://www.gs1.org/docs/healthcare/McKinsey_Healthcare_Report_Strength_in_Unity.pdf

Huge cost savings and patient safety benefits when adopting a single global standard in healthcare

- "Implementing **global standards** across the entire healthcare supply chain **could save 22,000-43,000 lives** and avert 0.7 million to 1.4 million patient disabilities"

- "Rolling out such standards-based systems globally **could prevent tens of billions of dollars' worth of counterfeit drugs** from entering the legitimate supply chain**"**

- [We] "estimate that **healthcare cost could be reduced by $40 billion-$100 billion globally**" from the implementation of global standards

- "Adopting **a single set of global standards** will cost significantly less than two" (between 10-25% less cost to stakeholders)

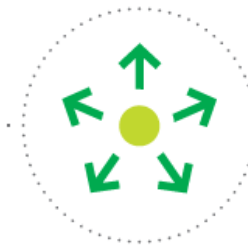SOURCE: McKinsey report, "Strength in unity: The promise of global standards in healthcare", October 2012
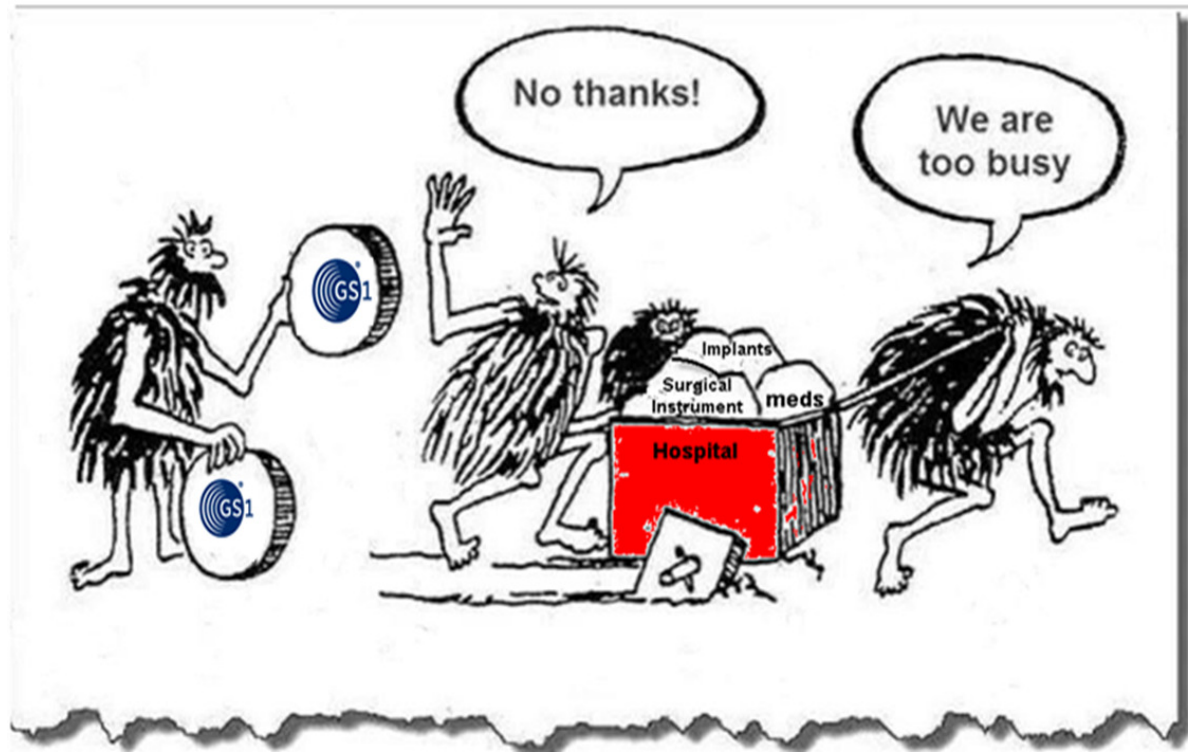
Solution

IDENTIFY

CAPTURE

SHARE

This is the challenge!

Hospital Implementation Session

Terry Hoy, Regional Supply Chain Manager, South West Supply & Logistics,
South West Healthcare, Australia

Berlin, April 2017
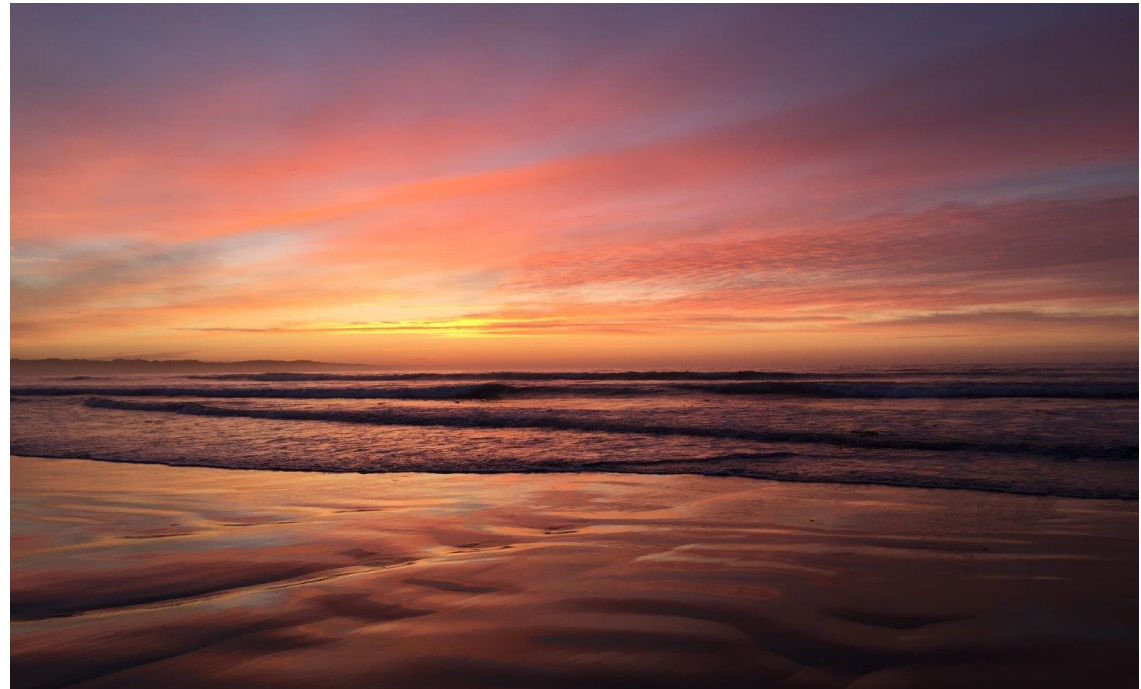
SWARH Supply Chain Reform: A collaboration
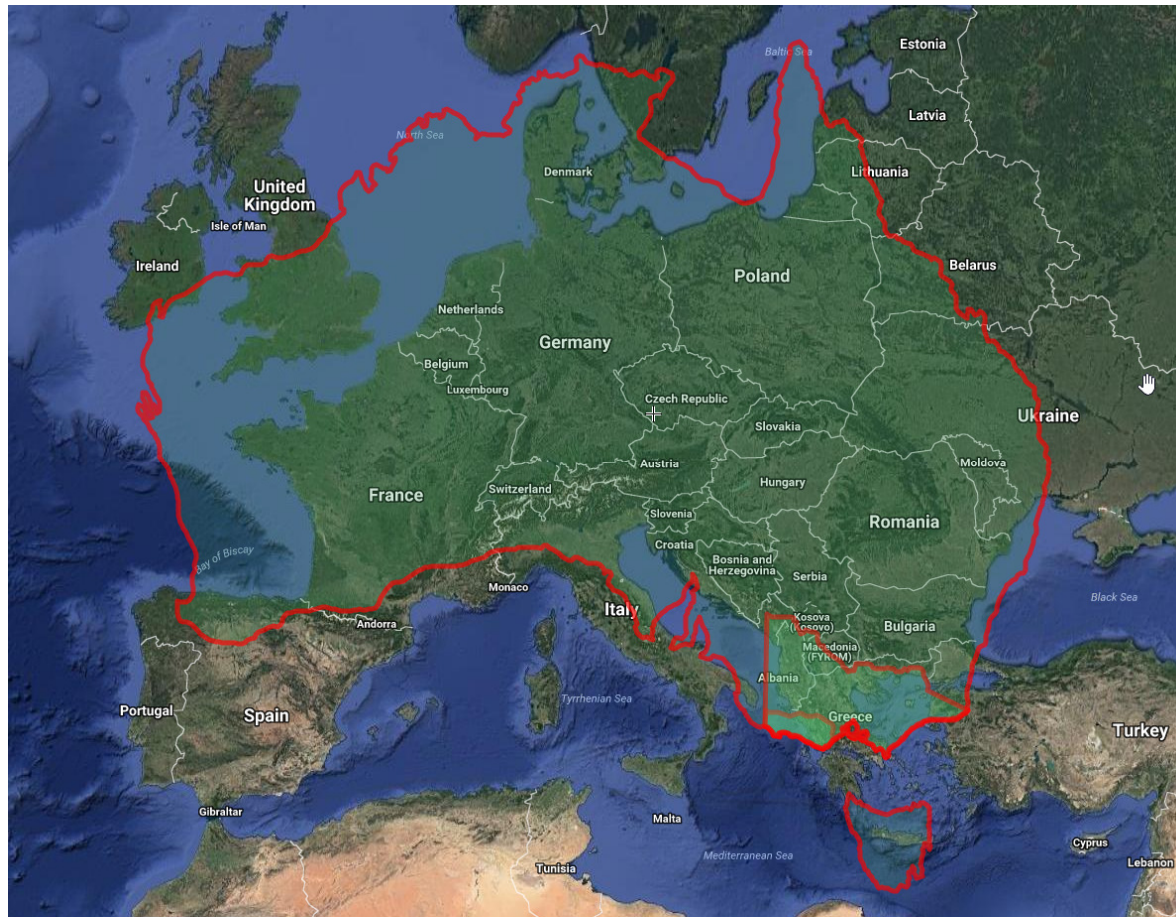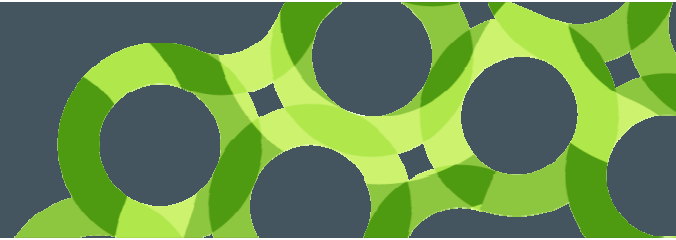
South West Supply & Logistics
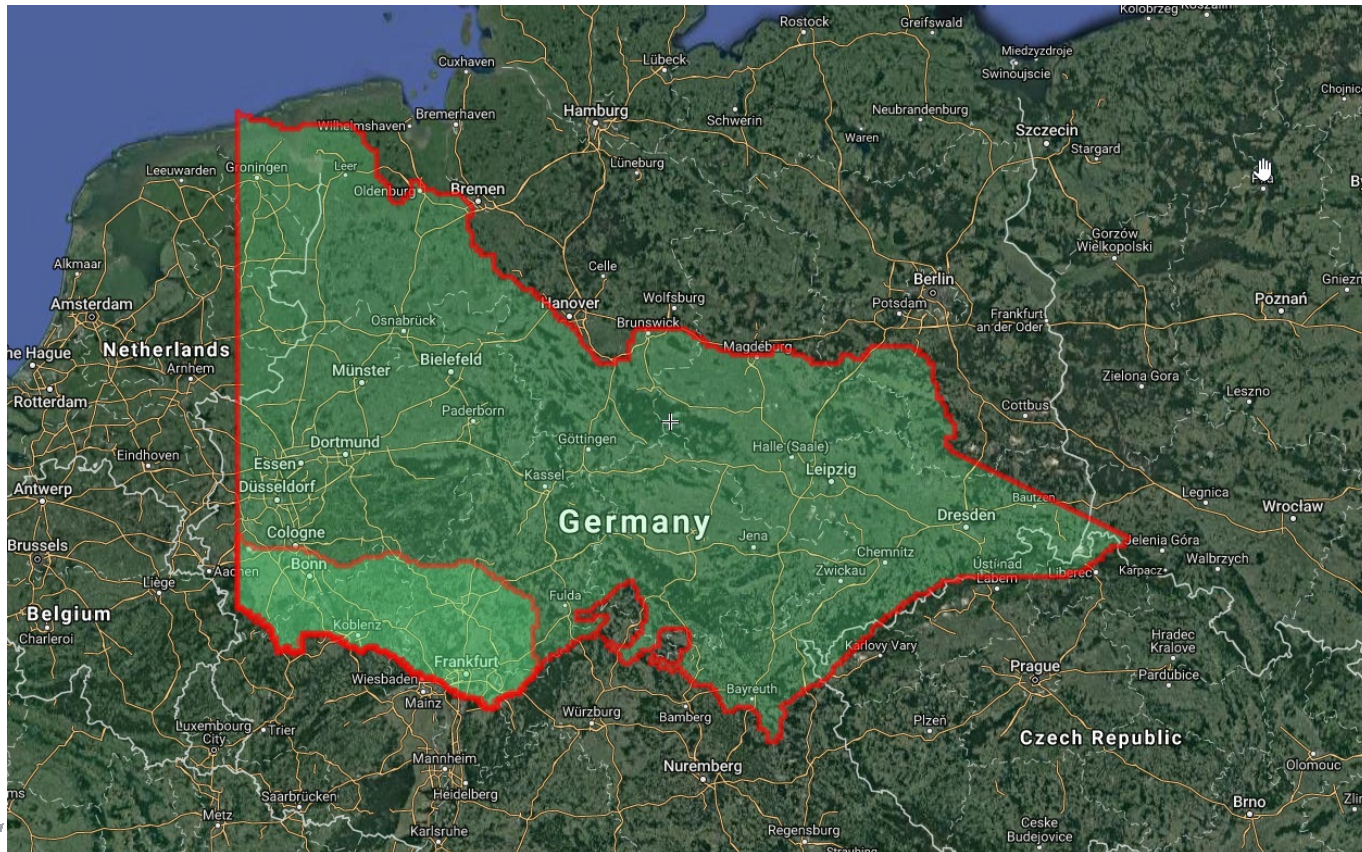
April 2017

Introduction

- Who and where we are
- Background
- What has been achieved
- Savings
- Agencies' perspective
- Next step
- Questions

How Australia's size compares to Europe

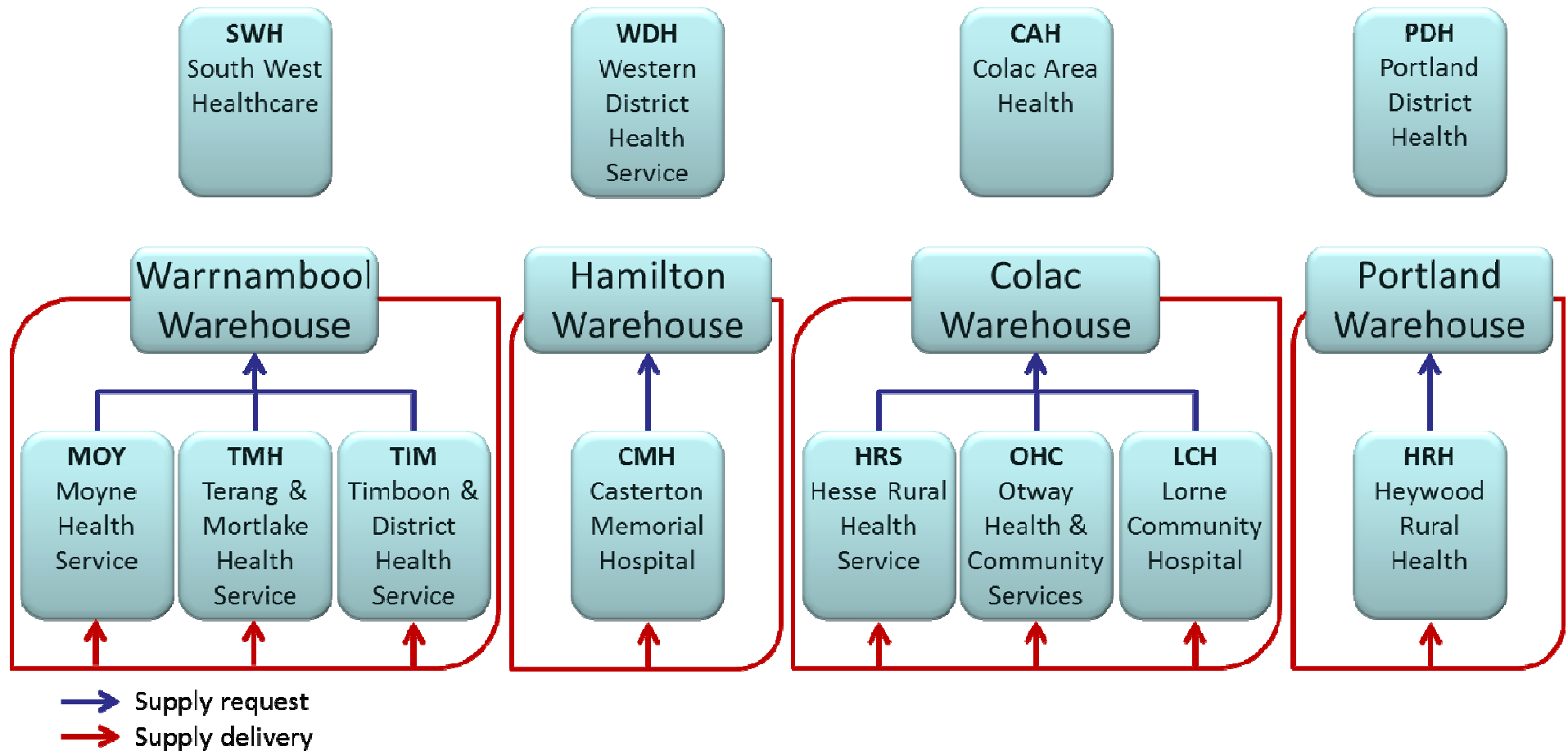# How Victoria's size compares to Germany

SWARH Financial Management Information System (FMIS)

- FMIS Rural and Regional upgrade
  - Oracle FMIS fundamentally designed for large organisations
  - Ensured the most efficient model was considered and implemented
  - Region-wide approach required to gain longer term benefits and payback from system
  - Duplication of time and effort avoided where possible
  - Some centralisation of functions required
  - Benefits and costs shared equitably

Collaboration between Finance and Supply to achieve region-wide benefits with buy-in from all agencies

Original Supply structure

SWH — South West Healthcare

WDH — Western District Health Service

CAH — Colac Area Health

PDH — Portland District Health

Warrnambool Warehouse
- MOY — Moyne Health Service
- TMH — Terang & Mortlake Health Service
- TIM — Timboon & District Health Service

Hamilton Warehouse
- CMH — Casterton Memorial Hospital

Colac Warehouse
- HRS — Hesse Rural Health Service
- OHC — Otway Health & Community Services
- LCH — Lorne Community Hospital

Portland Warehouse
- HRH — Heywood Rural Health

→ Supply request
→ Supply delivery

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South West Supply and Logistics

Acute beds	476
Aged care beds	658
Acute psychiatric inpatient beds	20
Total beds	**1154**
Total operating theatres	**15**

What has been achieved

- Only rural alliance to implement a centralised supply model
  - One catalogue across all agencies, stock value AUD$800,000
  - Significant savings and efficiencies versus decentralised model
  - Centralised purchasing skill set
  - Improved inventory control and purchasing practices
  - Opportunities for small agencies
  - Improved buying power
  - Current stock value AUD$420,000

South West Healthcare

Invest in Supply Chain Reform

- Existing costs across the region — AUD$1.5M
- Central model costs
  - Phase 1 (like for like) — AUD$1.1M
  - **Initial Saving** — **AUD$394K**
- Phase 2 (improved purchasing/procurement)
  - **Reinvestment** — **AUD$316K**
    - 1.00 FTE Clinical Product Adviser
    - 2.00 Category Managers
- **Cash saving across sub region** — **AUD$78K**

Process Savings

- First agency in Victoria to implement Business to Business (B2B) transactions (partnership with Melbourne Health)
  - Stationery Punchout, health information forms, food services, prosthetic ordering

Orders	CXML suppliers (about 42)	All suppliers (about 800)	% of CXML orders
CXML POs p.a.	13,216	29,668	45%
PO lines p.a.	81,158	117,904	69%

Process savings	Minutes p.a.	Rate/minute	Savings p.a.
Process savings	101,448	$0.52	$52,753
Reduced on holds processing	24,347	$0.52	$12,661
Total	**125,795**		**$65,413**

Note: Statistics for Jul-Dec 2016 used to forecast per annum totals

Logistics Savings

- Collaboration with South West Linen Services distribution
- Avoid purchase of additional truck:
  - AUD$100,000 cost avoidance
- Distribution costs reduced 50%:
  - Driver redirected to Warehouse
- Further opportunities:
  - Pharmacy
  - Theatre packs
  - Food

Realised Savings SWSL

SWSL expenditure per annum (AUD$)

Total expenditure	$23,798,013
Percentage targeted savings (3%)	$713,940
Percentage reviewed to date	10.48%
Saving achieved	5.33%

SWSL savings per annum (AUD$)

Overall previous expenditure	$2,493,872
Overall forecast expenditure	$1,234,652
Overall realised savings	$1,268,490

- Savings based on review and action against 239 items

South West Cancer Centre

Imprest (ward product management) expansion review

Number of items on imprest at max level	192
Value of imprest at max level	$19,194.69
Number of items not scanned	91
Value of items not scanned	$ 9,192.66
Number of items to have level decreased	41
Value of items to have level decreased	$ 2,485.69
Number of items to have level increased	14
Value of items to have level increased	-$ 634.69
Potential savings	$11,043.66
Value of imprest if changes adopted	$ 8,151.04

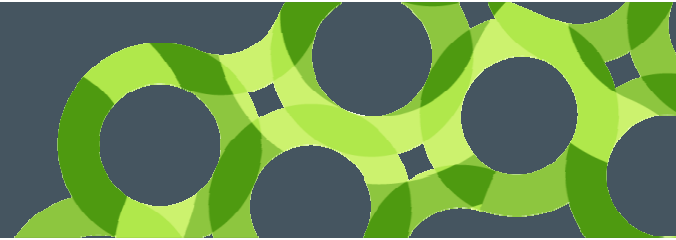- WDHS Anaesthetics imprest (ward product management) over three month period (21/3/16 to 21/6/16)

Next step

- Further standardisation
- Patient bedside costs
- Contracts – regional collaboration
- Centralised procurement
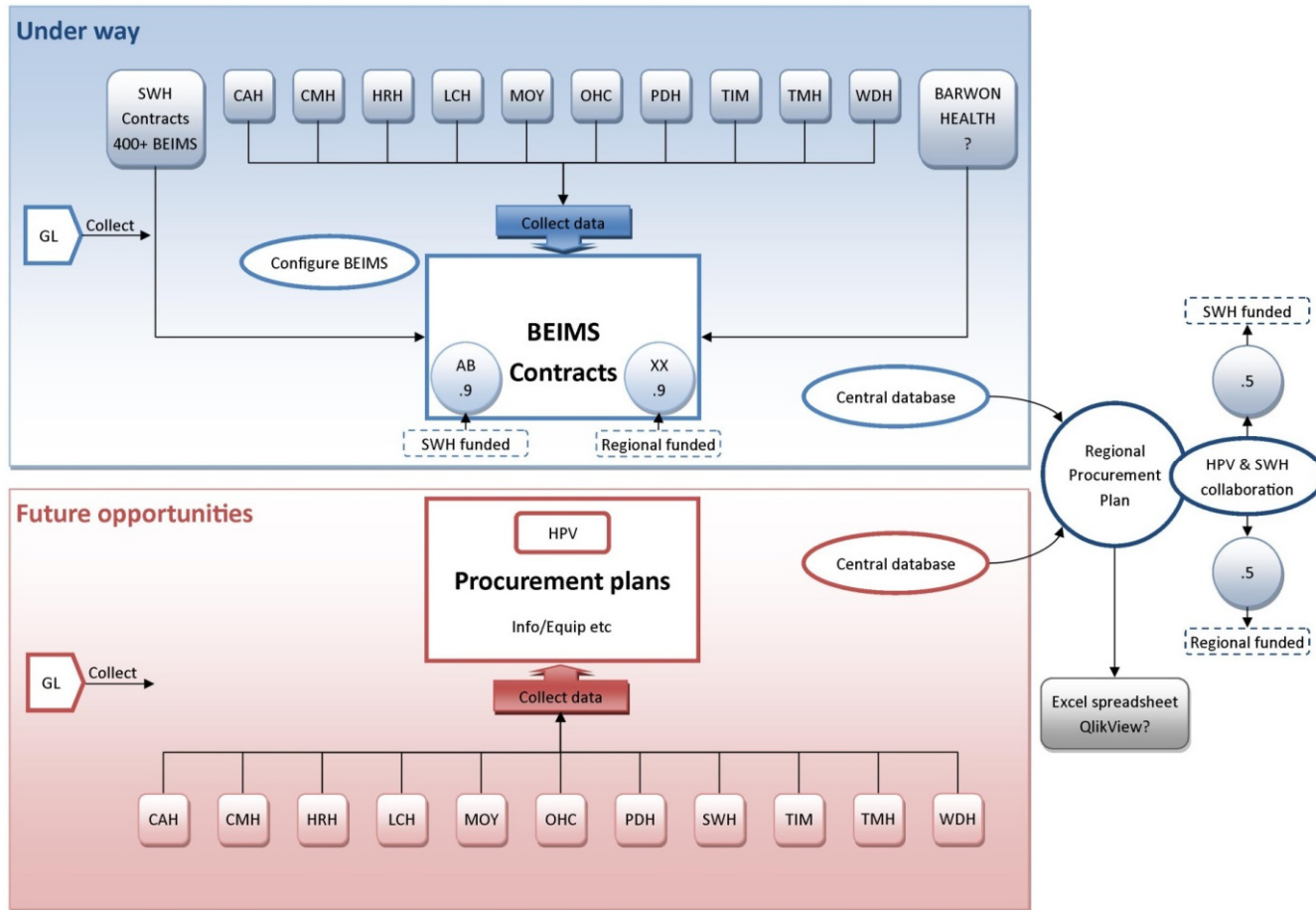
Questions

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South West
Supply &
Logistics

Hospital Implementation Session

Andrew Raynes, IM & T Director, Barking, Havering and Redbridge University Hospitals NHS Trust, UK

Berlin, April 2017

GLOBAL GS1
HEALTHCARE CONFERENCE
BERLIN 4 – 6 APRIL 2017

**Improving patient safety
and productivity
to drive performance**
A Health Records Odyssey

Andrew Raynes
IM & T Programme Director

TAKING PRIDE IN OUR CARE

Barking, Havering and
Redbridge University Hospitals
NHS Trust

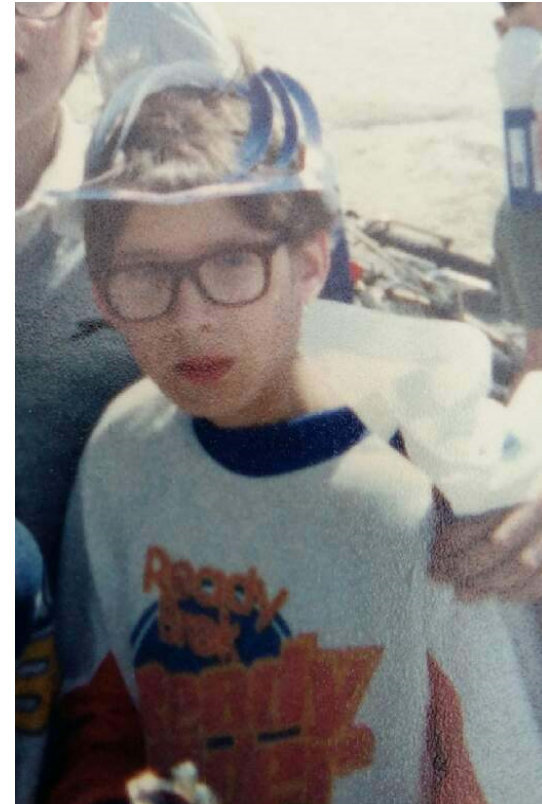# ABOUT ME...

18+ years in NHS, Private sector UK and Overseas

- NHS National, Regional and Trust level
- Primary Care Trust, Community Trusts,
- Local Health Authority and Offender Care

Last 3 roles

- Service Improvement (Turnaround)
- Local Authority
- HMP Belmarsh and Thameside

Experience

- MSc Healthcare Education Informatics
- BCS Fellow

OUR ORGANISATION

Barking Havering and Redbridge University Hospitals NHS Trust

- 2 Major London Hospitals at Queen's (Romford) and King George's (Goodmayes),
- 7,000 staff and volunteers
- Approx 650,000 outpatients visits each year
- Up to 900 ED visits a day
- PRIDE Way

CASE STUDY: HEALTH RECORDS TRACKING

The Problem:

''You can't find your patient records''

- 40% of records out at one time,
- > 10% Casenote unavailability,
- Complaints and reputational damage

"Ok, Ms. Feldman, it says on your chart that you were discharged yesterday"

STRATEGIC VIEW

National and strategic Context

- 5 Year forward view, DH 2014
- Operational Productivity and performance in English NHS acute hospitals: Unwarranted variations; Lord Carter of Coles, DH 2016
- IG Toolkit and Caldicott 3, DH 2016
- Personalised Health and Care 2020, DH 2014
- Health and Social Care Act 2015
- eProcurement Strategy 2014, DH 2014
- The Power of Information, DH 2012

Local Context

- Digital by Design – IT strategy for BHRUT 2015
- Procurement Board, 2016
- Clinical Services Strategy, 2016

PRIDE

WHAT IS ''FIND-IT''?

- **FIND IT** - the name of our project to implement iFIT from Idox Health Ltd
- **''Live'' 28 November 2015**
- **Not just an 'add on'** of technology
- **Process change in the way we manage health records**
  - Uses location based filing with supporting technology
  - Staff track notes using mobile devices and barcoded locations / notes
  - Aim to reduce the time records spend out of the main file
  - Uses RFID technology with tagging of casenotes, mounted 'readers' and handheld scanners to track and locate notes around the hospital.

HOW DOES TAGGING WORK?
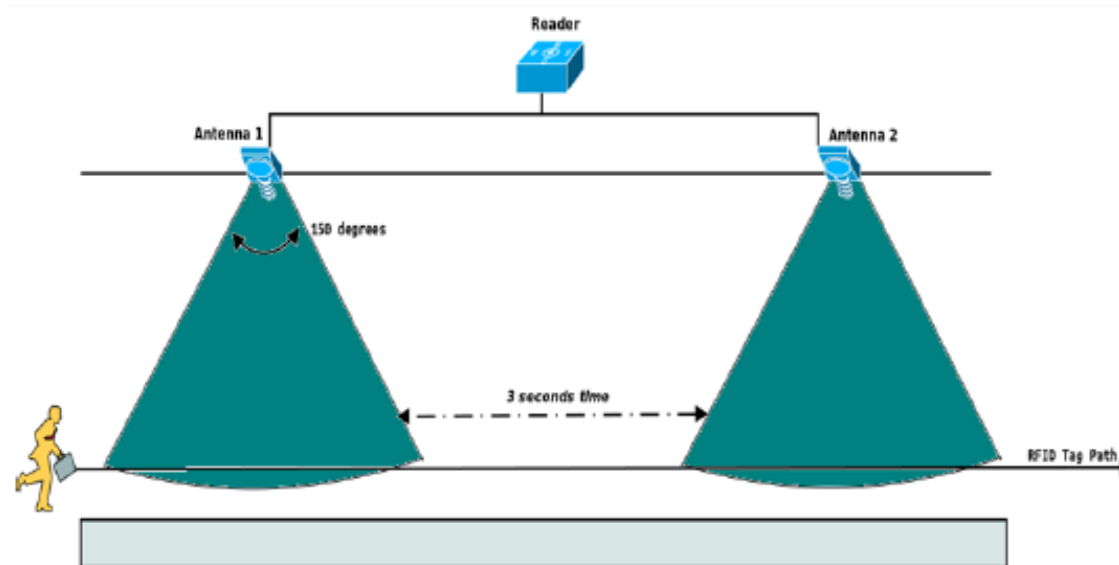
- Readers are placed at key locations around the hospital and show direction of travel as well as update the system as it moves.

EFFICIENCY BENEFITS
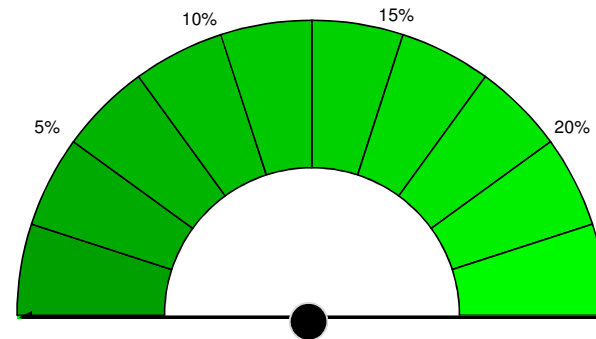
FINANCIAL BENEFITS

Headcount
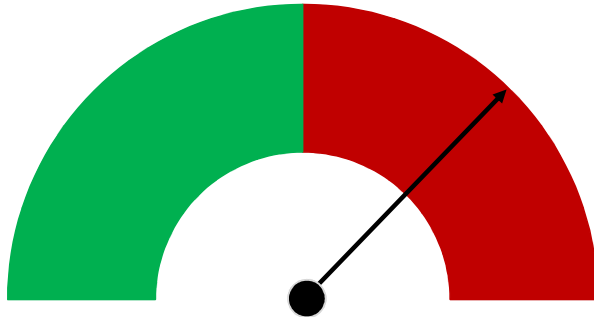
Pre iFIT Headcount = 58WTE
(19WTE of which was a cost pressure)

iFIT allowed us to remove our cost
pressure

Post iFIT Headcount = 39WTE
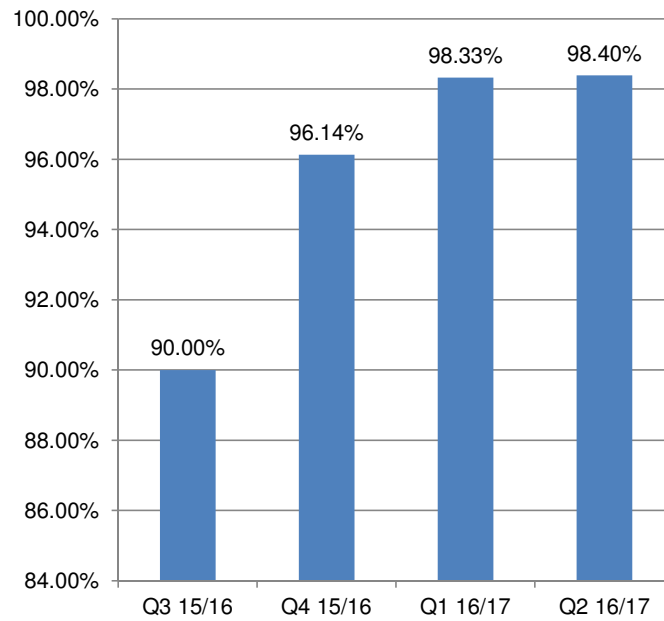
Elective Attendance Activity

In addition we have been able to
absorb a 12% increase in support for
elective activity

SERVICE IMPROVEMENTS

**Reduction in Casenote Unavailability
(From 10% - 1.6%)**

Further Benefits

- ✓ 20% reduction in library space required
- ✓ 75% increase in efficiency in handling casenotes
- ✓ Downstream headcount reductions
- ✓ Platform for expansion
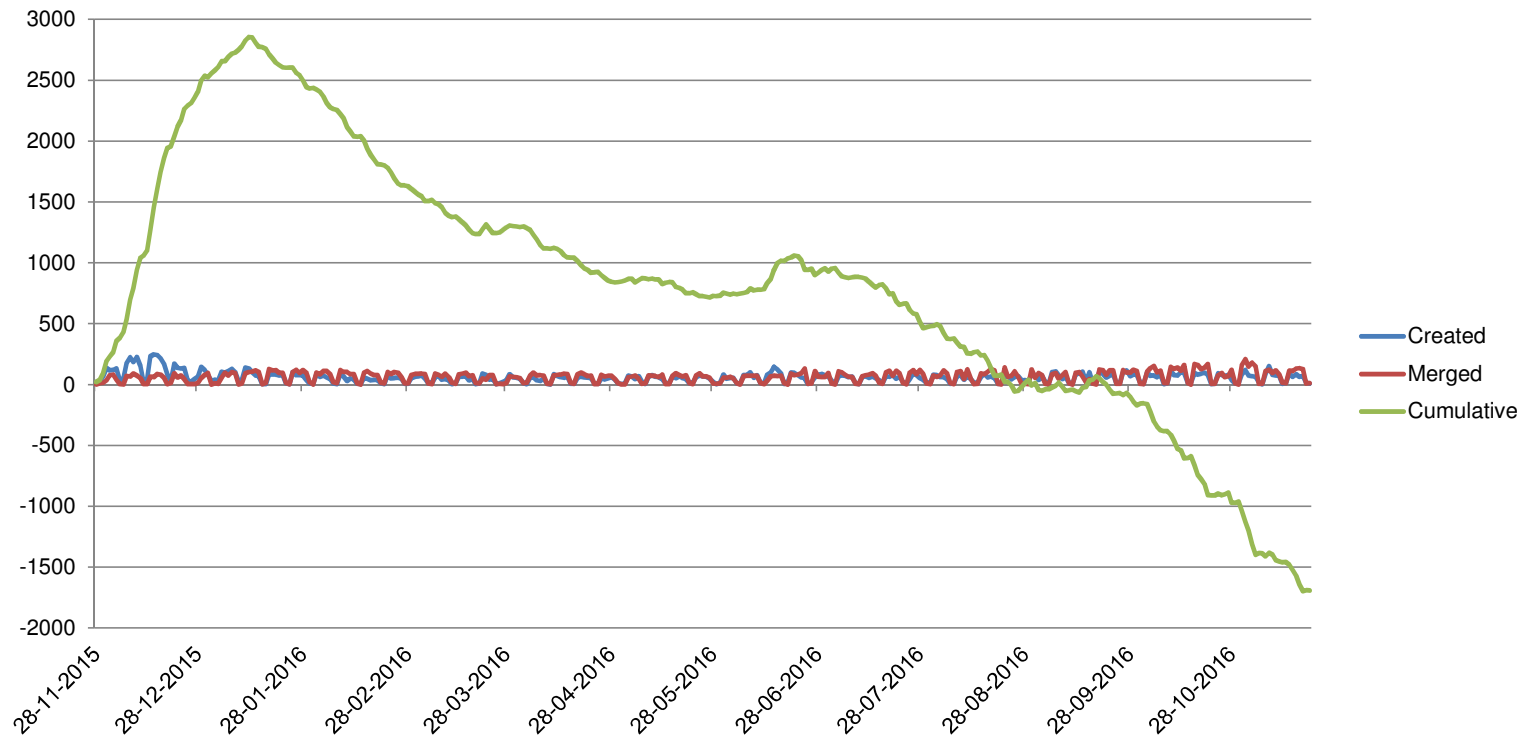- ✓ Compliance with CQC Recommendations

Clinical Coding
Cage Area

King George

King George Notes
only
For tracking to KGH
box

MEDICAL RECORDS

TEMP NOTES ANALYSIS

BETTER VISIBILITY OF OUR RECORDS

Missing Casenotes by Type

Missing Casenotes Summary

Total Missing	1,884
Total 'Active' Casenotes	468,866
% Missing	0.40%

Data Cleansing
Initial reviews suggest that the majority of missing temps are migrated temps that have historically been physically merged in to the original, but the system had not been updated to reflect this.

Volumes 4

General 528

1352

Temps
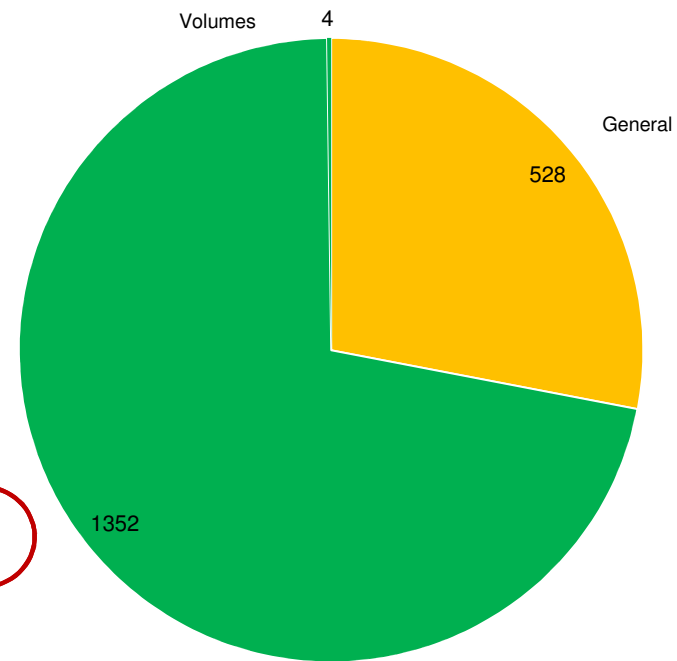
GS1 BENEFITS

Benefit	Before FIND IT	After FIND IT
GS1 standards met (Identification Keys)	0	All relevant keys
GS1 Core Enablers (Catalogue, Patient, Location)	0	GS1 Locations adopted (GLN)
Global Location Numbers (GLN) Issued	0	65,000
Total financial realisation of the business case (at 3yrs)	0	84%

An infrastructure and hunger to do much much more….

PRIDE

#DIGITAL BY DESIGN

Developing relationships to support change

TAKING **PRIDE** IN OUR CARE

Barking, Havering and
Redbridge University Hospitals
NHS
NHS Trust

UNDERSTAND THE RELATIONSHIP

The Triangle

- **The business**: Spend more time with patients and less time looking for stuff: Safe, Effective, Responsive, Well led, Caring.

- **The finance**: Benefits: Standardisation, Stock, Supply Chain, Ensuring money is invested with tangible RoI.

- **Technology and GS1**: What is the problem we are trying to fix.

#DIGITAL BY DESIGN

Next steps

Barking, Havering and **NHS**
Redbridge University Hospitals
NHS Trust

WHAT'S NEXT...?

- Identifying and solving the problem
  - Finding stuff: Sample/Asset/Equipment Management
  - ePrescribing
  - Supply chain
  - Standardisation, Systems, Uses

- Resource and investment
  - Scan4Safety – demonstrator DH proposal (2m)

- Plan, Communication and Doing

PRIDE

ASSET MANAGEMENT AS A PILOT

Current challenges:

- 33 incidents in 2016 logged as missing equipment for care
- 18,000 medical devices - majority of which are portable
- 1,000 Trust medical devices recorded missing in last 3 years
- Equipment is often difficult to find for maintenance/recalls in a timely way

Asset management:

- Existing infrastructure in place
- NHS moves to implement GS1 standards in the management of medical devices
- 'Proof of concept project' Infusion and syringe pumps (1000-1500 tags)
- 22 additional RFID readers around the sites and 6 handheld RFID guns
- Realistic testing to choose the right RFID tags for different equipment types.
- GIAI Identification keys adopted for medical device assets

PRIDE

EVALUATING BENEFITS OF ASSET TAGGING

- Test: how easy to find tagged equipment versus non-tagged
- Time taken to find and associated cost benefits
- Percentage of items found within a defined time
- Sample testing
- KPIs on maintenance performance for tagged and untagged medical devices
- Number of medical devices with a GS1 barcode attached

IN SUMMARY: ROUTE CAUSE TO ADDRESS THE PROBLEM

- **Safer Care,**
  - Tracking and deploying equipment, **where and when it is needed**: People, Stock, Standards,

- **Save money,**
  - reduced waste, less time looking for stuff, hanging on to equipment…

By-product….
- Compliance
  - CQC, Lord Carter of Coles, GS1 and interoperability

"It's worse than a piece of surgical equipment.
We accidentally left the surgeon inside you."

MESSAGE FROM THE HEALTH SECRETARY

https://www.youtube.com/watch?v=0Y0kTP5BQi8

#DIGITAL BY DESIGN

Your Questions

Andrew Raynes
IM & T Programme Director

@bhrutIT

Evolving care through technology

Hospital Implementation Session

Berlin, April 2017

Discussion and Questions

GS1 Healthcare Provider Activities

HPAC-webinars

- Monthly webinars open to all stakeholders interested in learning about GS1 standards implementation in the care giving environment.

- http://www.gs1.org/healthcare/hpac_webinars

- Shared with ISQua for purposes of continuous learning of healthcare professionals

- Planning:

  - April 12: Richard Price, Plymouth Hospitals

  - May 10: Rob Drag, Salisbury Hospital

  - June 14: Prof Pascal Bonnabry, Geneva Hospital & vice-chair Patient Safety Switzerland

- Requests or suggestions for topics / speakers: mail to els.vanderwilden@gs1.org

Hospital Implementation Session