Benefits of Standards in the National Decontamination Tracking System in use at St James’s Hospital

GS1 UK Healthcare Conference

Andrew Smith, HSSU Manager

9/10 April 2019
Agenda

- Introduction
- Overview of the National HSE programme
- Background to implementing GS1
- The process at SJH
- Benefits and learnings
- Next steps
In the news...

July 2013

Crumlin hospital apologises for contamination scare

“Hospital has apologised to 18 families who were wrongly identified as being at the centre of a contamination scare over a medical scope”
In the news...

July 2013

THE IRISH TIMES

Helpline for patients with CJD concerns attracts 1,300 calls

Fri, Jul 19, 2013, 15:39

Between 10 and 20 patients operated on with instruments used on patient with disease

“The HSE will contact up to 20 patients who were operated on using instruments which had been used on a patient who has been diagnosed with CJD disease”

Track and Trace?
Overview of Instrument Set Traceability

“Systems should be in place to record the decontamination process used on RIMD (tracking) and link them with service users on which they have been used (tracing)”


Project started in May 2008 – 1st “Go Live” site was St. James’s Hospital in July 2011
Decontamination Track and Trace - Timeframe

- **Phase 1**
  - Project Kickoff
  - GO LIVE
  - 8 CDUs
  - SJH first hospital to go live

- **Phase 2**
  - Business Case (including Endoscopy)
  - Approval Procurement/Finance
  - GO LIVE
  - 5 CDUs
  - 10 ERUs

- **Phase 2**
  - GO LIVE
  - 7 CDUs
  - 9 ERUs

- **Phase 2**
  - GO LIVE
  - 8 ERUs

- **Phase 3**
  - Business case
  - Remaining CDUs and ERUs (10% volume)
  - Commercial loan set providers
  - Private Hospitals

- **2008**
  - Phase 1 Project Kickoff
  - GO LIVE
  - 8 CDUs
  - SJH first hospital to GoLive

- **2011**
  - Phase 2 Business Case (including Endoscopy)
  - Approval Procurement/Finance

- **2012**
  - Phase 2 GO LIVE
  - 5 CDUs
  - 10 ERUs

- **2013**
  - Phase 2 GO LIVE
  - 7 CDUs
  - 9 ERUs

- **2014**
  - Phase 2 GO LIVE
  - 8 ERUs

- **2015/16**
  - Completion of Phase 2

- **2017/18**

**Key Points**

- **Only National Traceability Solution in the world (both trays and endoscopes)**
- **90% of volume will be utilising the solution by end 2015** (32 Hospitals)
- **Patient Safety was the key reason for implementation:**
  
  Clinical imperative to have traceability for high risk procedures
Clinical imperative to have traceability for high risk procedures
Track and Trace Solution
Tracking Instruments

Before

- Manual Check

After

Information available:
- Electronically & Post-event
- Dataloggers linked to tracking system
Instrument set lists

Before: Paper based

After: Scan of barcode and set list automatically printed

After
- Electronic (list printed when barcode is scanned)
- No need to search in cabinet
- No confusion on document version
Process log

Before

- Paper based

After

- Electronic
- Post-event can be retrieved at the touch of a button
Steriliser Cycle

Before

- Paper based
- Reports are subject to deterioration over time

After

- Electronic
- Post-event can be retrieved at the touch of a button (anytime)
Tracking in Theatres - After

Electronic
- Post-event – Can be retrieved at the touch of a button
- Linked to instrument tracking system

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Loan Sets
Major challenge for traceability

The Big Challenge !!
• Shared among hospitals (contents always changing)
• Traceability is very challenging
• Can come from a commercial loan set provider or another hospital (often not barcoded)
Loan set – Example
Which loan set would you rather process?

Loan sets with NO barcodes

Loan sets WITH barcodes
Loan set – Example

Which loan set would you rather process?

SJH HSSU during 1 week in Feb 2015

Not GS1 Coded

• 30 loan sets
• 60 reprocesses
• Huge paper trail
• Manual tracking
• Very time consuming
• Manual rekeying and transcription of data

Hours

VS

GS1 Coded

• 4 loan sets
• 8 reprocesses
• Huge paper saving
• Electronic tracking
• Very time efficient
• Unique identification of set (GS1 barcode)

Seconds
Loan set Checklists

Before

- Paper based (hand written)
- No certainty that list matches tray contents

After

- Electronic, fully legible
- Up to date
- List can be pulled from MS1 Cloud by scanning the tray/set barcode

Hours

Seconds
Loan set – **Best Practice Example (PEI)**

PEI Loan sets with GS1 barcodes

Loan sets from PEI scanned into Wash Room
- No need to re-key information (huge time saving)
- Full audit trail
Tracking information shared with the cloud (MS1)
Barcode (keydot) being added to supplementary instruments
Overview of the number of procedures year on year in SJH HSSU

* Between 2014 to 2018 increase in workload with less staff

Anecdotal evidence: Moved from 5,000 Transcriptions per day in one hospital
Key Benefits

National traceability solution for Instrument trays and endoscopes

• Automatic Tracking of Instrument Sets
• Much easier to share Loan Sets
• Tray Checklists printed when scanned
• All records stored digitally (huge paper saving)
• Link between tracking system and theatre to patient (EHR)
• Improved Workflow (time savings)
• Reporting and management of set inventory
Next Steps

• Adding Keydot barcode to all supplementary instruments
• Adding additional areas such as the Cath Lab & OPD which use sterile surgical sets
• Requesting all loan set providers to be compliant
Call to Action for Loan set providers!!

Not GS1 Coded

GS1 Coded

Medtronic

Fannin

DePuy Synthes

PEI

Tekno Surgical

OLYMPUS
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