



The Global Language of Business

Data for better care – hospital operational efficiency

Panel Session

Tuesday, 17 October 1:30 - 3:00

GS1 Healthcare Conference, Chicago

Panelists



Feargal McGroarty,
National Haemophilia
System Project
Manager,
St. James's Hospital



Keith Jones,
Clinical Director of
Surgery,
Derby Teaching
Hospitals
NHS Foundation
Trust



Kevin Downs,
Director Finance,
Derby Teaching
Hospitals
NHS Foundation
Trust



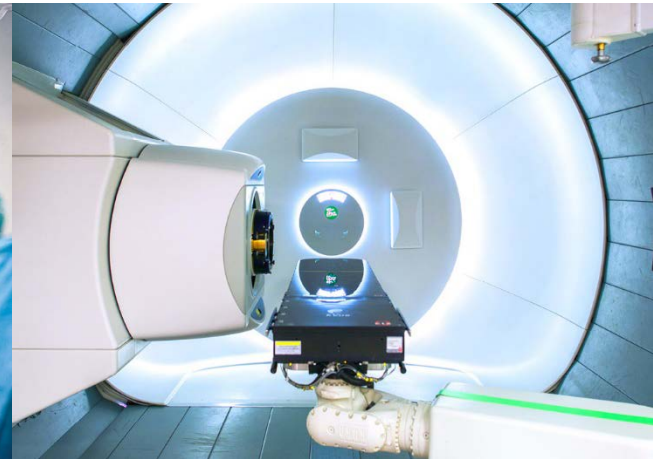
Wilfried Winzer,
Director,
University hospital
Dresden

Safer, more efficient care starts with a simple scan

Global GS1 Healthcare Conference

Chicago, October 17- 19, 2017

Wilfried Winzer, Chief Financial Officer, University Hospital Dresden, Germany



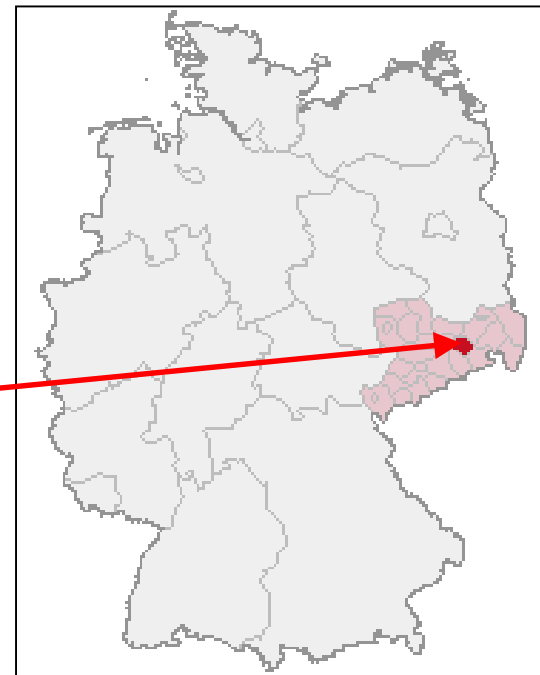
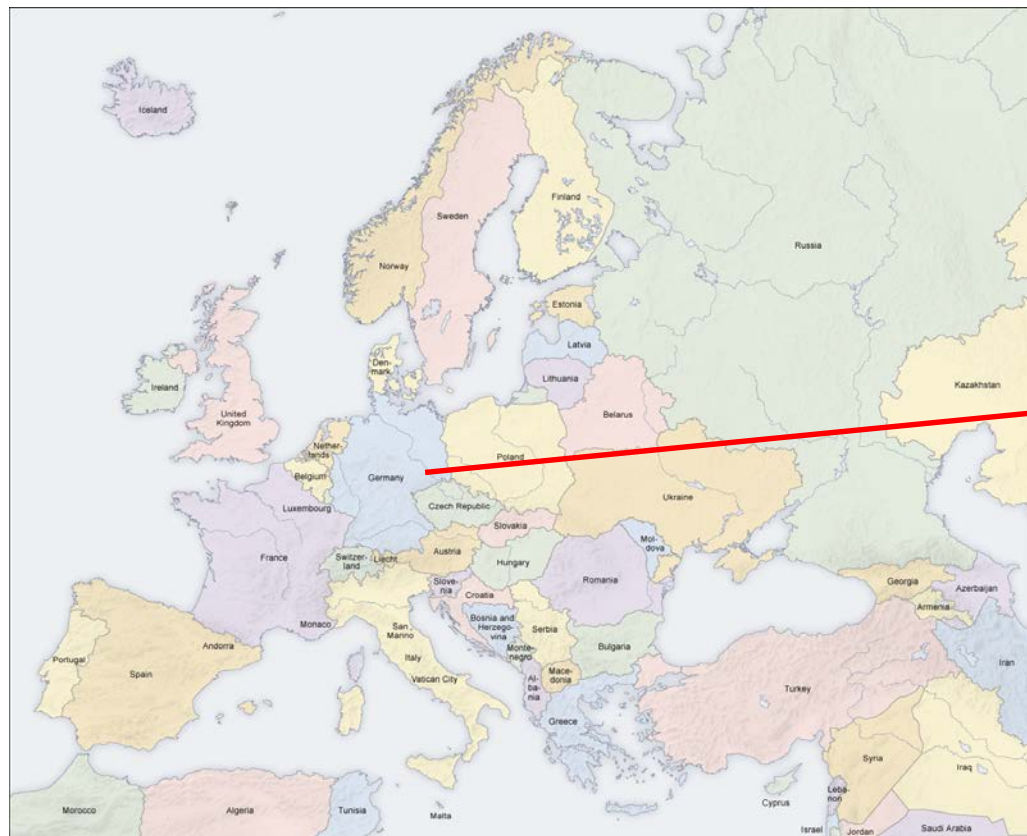
Agenda

- | The University Hospital Carl Gustav Carus in Dresden
- | Why do we need standards
- | Why we are using GS1 standards
- | New projects



University Hospital Dresden

Facts & Figures



Management Board



Prof. Dr. med. D. Michael Albrecht
Chief Executive Officer



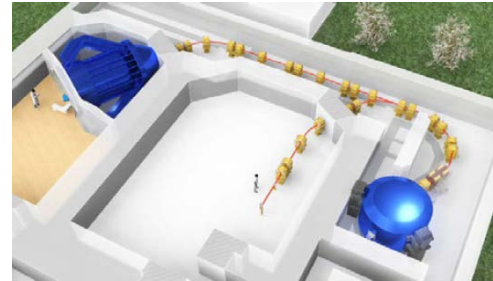
Wilfried E. B. Winzer
Chief Financial Officer

8



The University Hospital Dresden - Overview

- | Public hospital – institution under public law
- | Responsibilities in patient care, research, teaching and ongoing professional education
- | Operates its own technical schools



The University Hospital Dresden – Figures (1)

Number of clinics	20
Institutions	4
Interdisciplinary centres	10
Number of beds	1,295
Number of Employees hospital (FTE's)	5,273
— Thereof medical faculty	609
Number of trainees and pupils of Carus Academy	512

Status: Dec. 31, 2016

The University Hospital Dresden – Figures (2)

| Number of patients per year 329,998

thereof...

— Inpatients per year (cases) 57,451

— Day patients per year (cases) 10,484

— Outpatients (cases) 172,114

— Emergency cases 22,813

— Ambulant surgeries (cases) 6,788

Centers of Excellence funded by Federal Ministry for education and research

| Partner location of „**German Consortium for Translational Cancer Research**”:



- Advancement of proton therapy, cancer patients can be irradiated more effectively with less side effects
- Financed within the program “German centres for health research”
- Additionally, centre for innovation competence OncoRay

| German Centre for diabetes research – **Paul Langerhans Institute Dresden**



- Financed by Helmholtz Centre Munich and University Hospital Dresden
- Main focus: diabetes research

| Partner location of “**German Centre for Neurodegenerative Diseases (DZNE)**”



- Aim: to make the findings of stem cell and plasticity research operable in preventing and treating neurodegenerative disease



National Center for Tumor diseases (NCT)

- | Dresden is second institution of this kind, following the example set in Heidelberg



NATIONAL CENTER
FOR TUMOR DISEASES
PARTNER SITE DRESDEN
UNIVERSITY CANCER CENTER UCC

Supported by:
German Cancer Research Center
University Hospital Carl Gustav Carus Dresden
Carl Gustav Carus Faculty of Medicine, TU Dresden
Helmholtz-Zentrum Dresden-Rossendorf

- | Joint institution of the German Cancer Research Center (DKFZ), the University Hospital Carl Gustav Carus Dresden, the Carl Gustav Carus Faculty of Medicine at TU Dresden and the Helmholtz-Zentrum Dresden-Rossendorf (HZDR)
- | Main research areas of NCT Dresden focus on high-precision radiotherapy, novel surgical techniques, modern anti-cancer drugs, biological imaging methods and molecular tumor diagnostics
- | Both sites, Heidelberg and Dresden, are in close interactions and complement each other in expertise





Innovative care and patient safety based on standards

GS1 complete

GS1 Complete

- | Full tool box of GS1 standards: identification, marking, communication, process design
→ Patient safety, work facilitation, process speed

GS1 Identification standards → uniqueness of products, locations...

- GTIN / GLN / SSCC

GS1 data carrier standards → automatic information transfer to ERP and KIS

- EAN13 / GS1-128 / GS1-Datamatrix

GS1 communication standards → automatic information transfer with suppliers

- EANCOM / GS1-XML / WebEDI

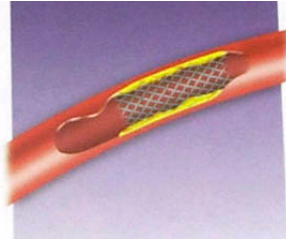
GDSN (Global Data Synchronization Network) → global product information

- 1WorldSync

Clear identification of medical products – a complex challenge for doctors and logistics

| Medical products are more and more specialized on smaller therapeutic fields due to new, innovative developments

| Example: STENTS



| 2006: **148** different stents were bought from 15 suppliers

| 2017: **749** different stents are bought from 31 suppliers

University hospital and industry

| Challenge

Logistical efforts for optimal patient care with innovative medical products increased over the last years and will continue increasing

| Counteractive measures

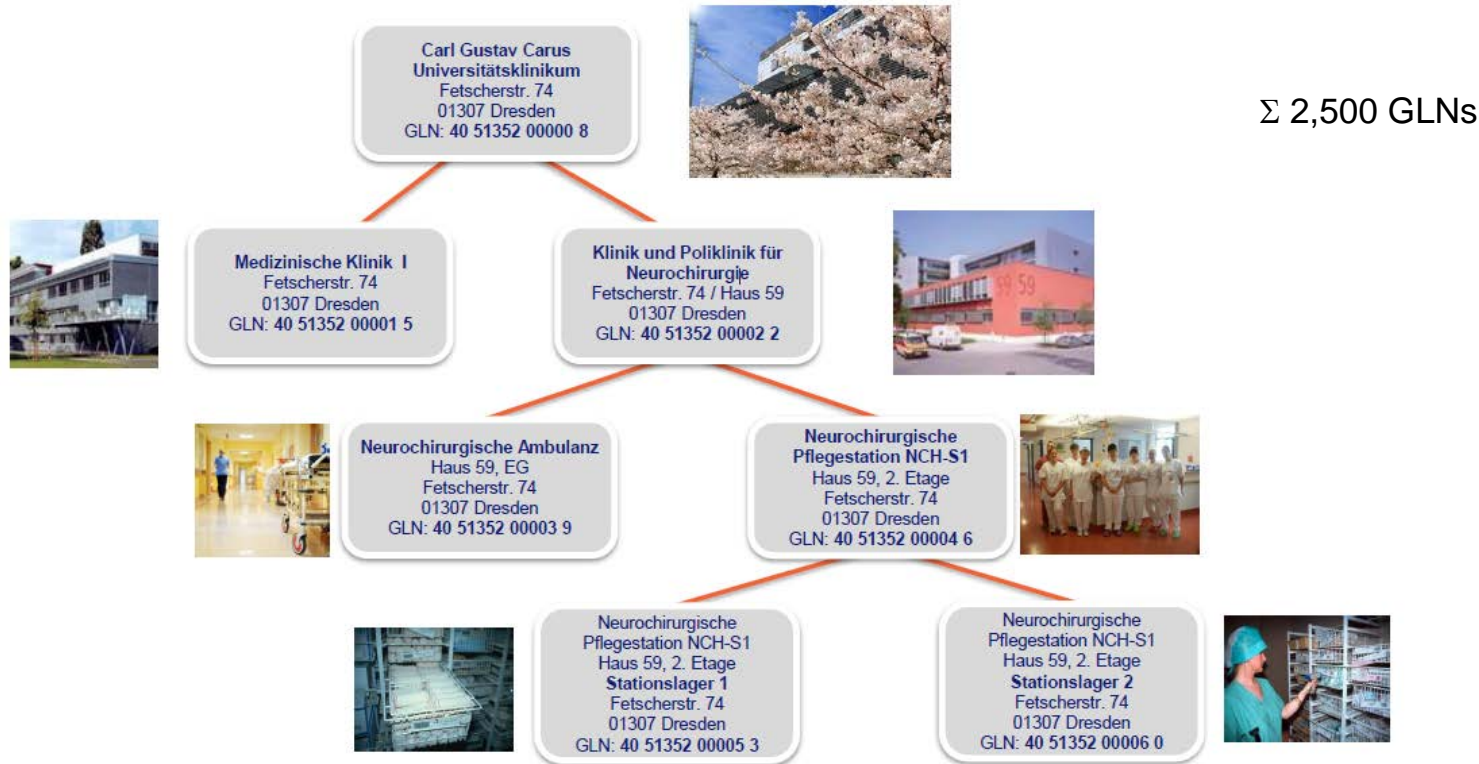
Reduction of efforts by using modern, electronically supported processes in procurement, distribution, storage, use and documentation of medical products

Innovative care based on standards

Example: electronic purchasing processes

- | Already since 2007, the University Hospital Dresden offers its suppliers the possibility to receive orders via the GHX-platform
- | Prerequisite: clearly handled item master data (synchronization of quantity units)
- | For all consignees in orders, GLNs are recorded
 - direct delivery: GLNs are part of the data sent
 - central delivery of goods: GLNs are used for internal distribution logistics
- | GLN: Global Location Number of GS1 standard

GLN in the University Hospital Dresden



Innovative care based on standards

Example: electronic delivery message

- | The SAP system used in the University Hospital Dresden is able to process electronically received delivery messages - this enables faster execution
- | DESAV: abbreviation for „despatch advice“, is a standardised delivery message according to GS1-EANCOM

University Hospital Dresden as partner of industry

Example: electronic invoices

- | Data systems of the University Hospital Dresden are able to automatically process, release and archive invoices that are received by email
 - Prerequisite: invoices are formatted as pdf A-3 ZUGFeRD, a standardised invoice format of the „Forum electronic invoice Germany“, which sends readable pdf invoices together with electronically processable xml-data in one file
- | For some suppliers, this format is already established and guarantees a fast and clean regulation of payments
- | In future, we expect more suppliers to deliver this format

University Hospital Dresden as partner of industry

Example: clean article master data

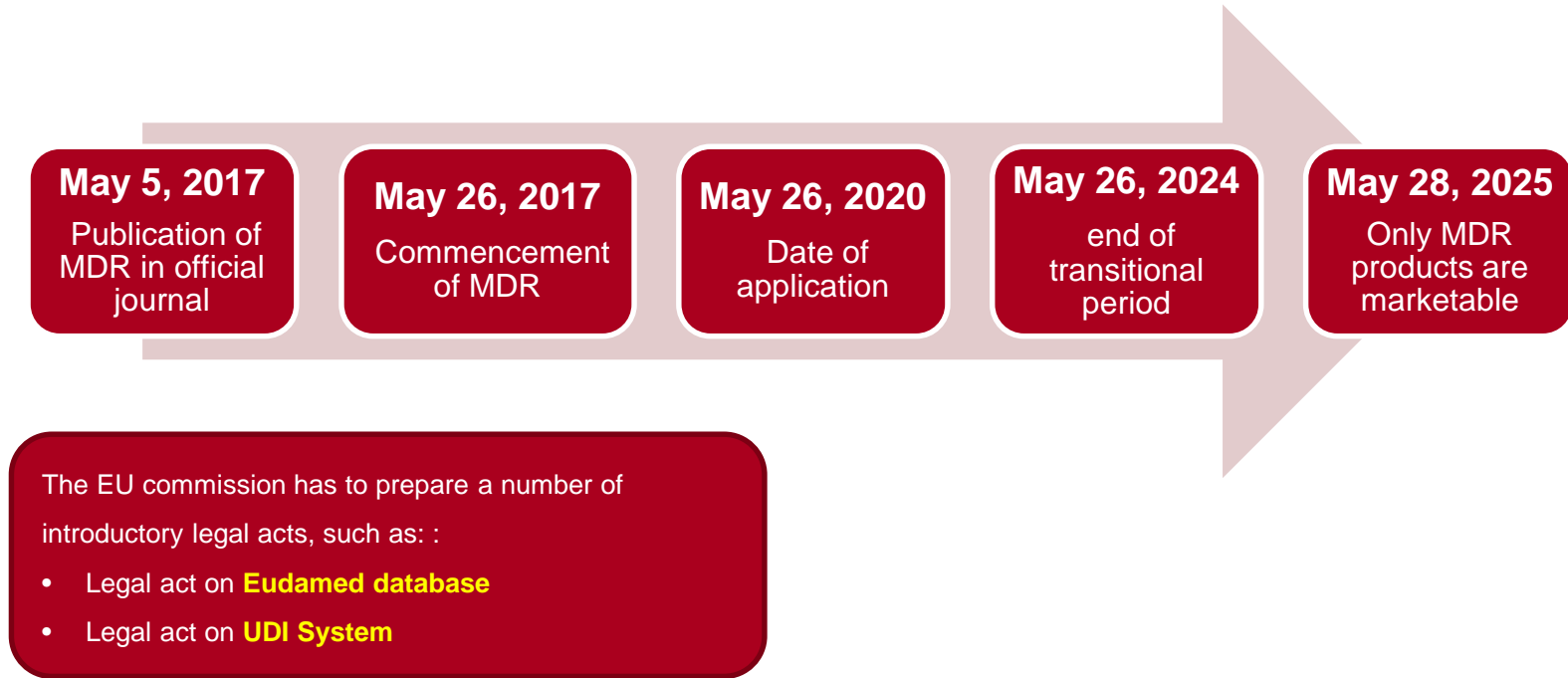
- | The SAP system of the University Hospital Dresden is able to process master data in the format BMEcat and GS1 xml CIN for entering and updating data
- | In a pilot project, the University Hospital Dresden will be able to directly transfer validated master data from the GDSN data pools of 1WorldSync in its SAP system in future
- | DMEcat: Standardised product catalogue format of the German Federal Association for Materials Management, Purchasing and Logistics
- | GS1 xml CIN: Standardized product catalogue format (Catalog Item Notification) of GS1
- | GDSN: Global Data Synchronisation Network
- | 1WorldSync: operator of GDSN data pool

University Hospital Dresden as partner of industry

Example: clean barcodes on medical products

- | The ERP and KIS systems of the University Hospital Dresden are able to process standard barcodes of all forms of the GS1 standard and HIBC
- | Prerequisite: standard barcodes on all packaging levels according to UDI guideline
- | UDI guideline: Unique Device Identification – an US FDA standard for medical products which is planned for Europe as well

Dates and periods of EU Medical Device Regulation (MDR)



Four pillars of EU Medical Device Regulation

Creation of one UDI = UDI-DI + UDI-PI

- Allocation of one UDI-DI für each product and each higher packaging level
- Determination of UDI-PI in accordance with product identification, which is already on the respective label

UDI-Carrier = AIDC + HRI

- Creation of UDI carrier according standardised process (e.g. GS1)
- Integration and installation of UDI Carrier on the respective label, including direct labelling

UDI-Datenbank in Eudamed

- Registration and care of the basic UDI-DI, the related UDI-Dis of the respective packaging level and the product data (UDI Modul and Product Modul)

Registration and use of UDI by economic players and healthcare institutions

Goals of EU Medical Device Regulation (MDR)

| Transparency and reasonable access to information by using of basic-UDI-DI/UDI-DI/UDI in:

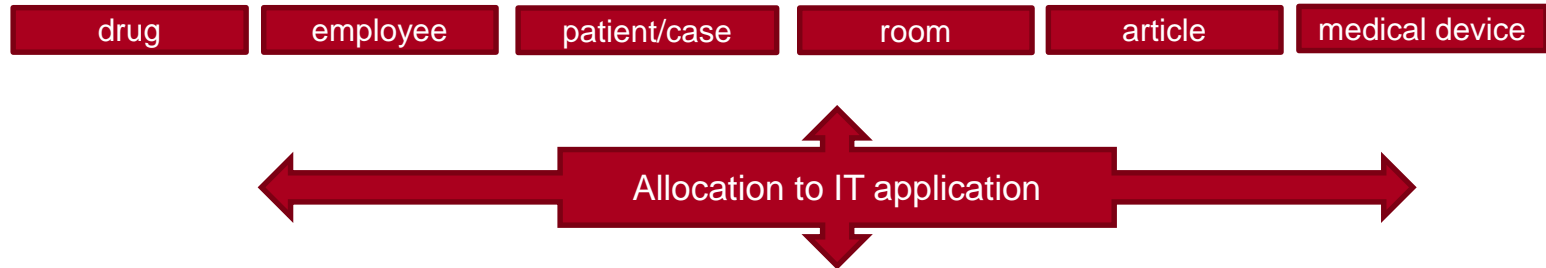
- Product marking (direct marking)
- Technical documentation
- Certificate and declaration of conformity
- Brief report on security and clinical performance
- Implant identification document and patient information
- Downstream market reports (vigilance reports, PMCF, PSUR, Trend reports)
- Field Safety Corrective Action (Recall, Withdrawal, Advisory)
- Certificate of Free sale

➔ Key to information in Eudamed Data base

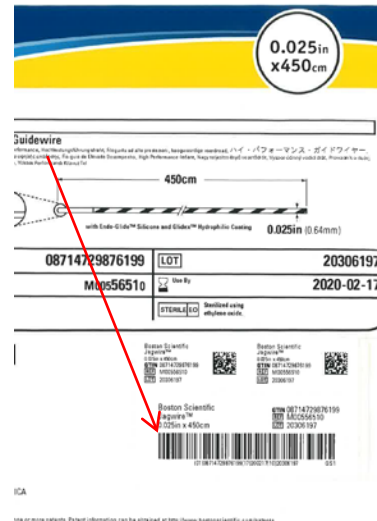
Link between information and context



CRID – **C**ode **R**eader, **I**nterpreter and **D**ispatcher
?



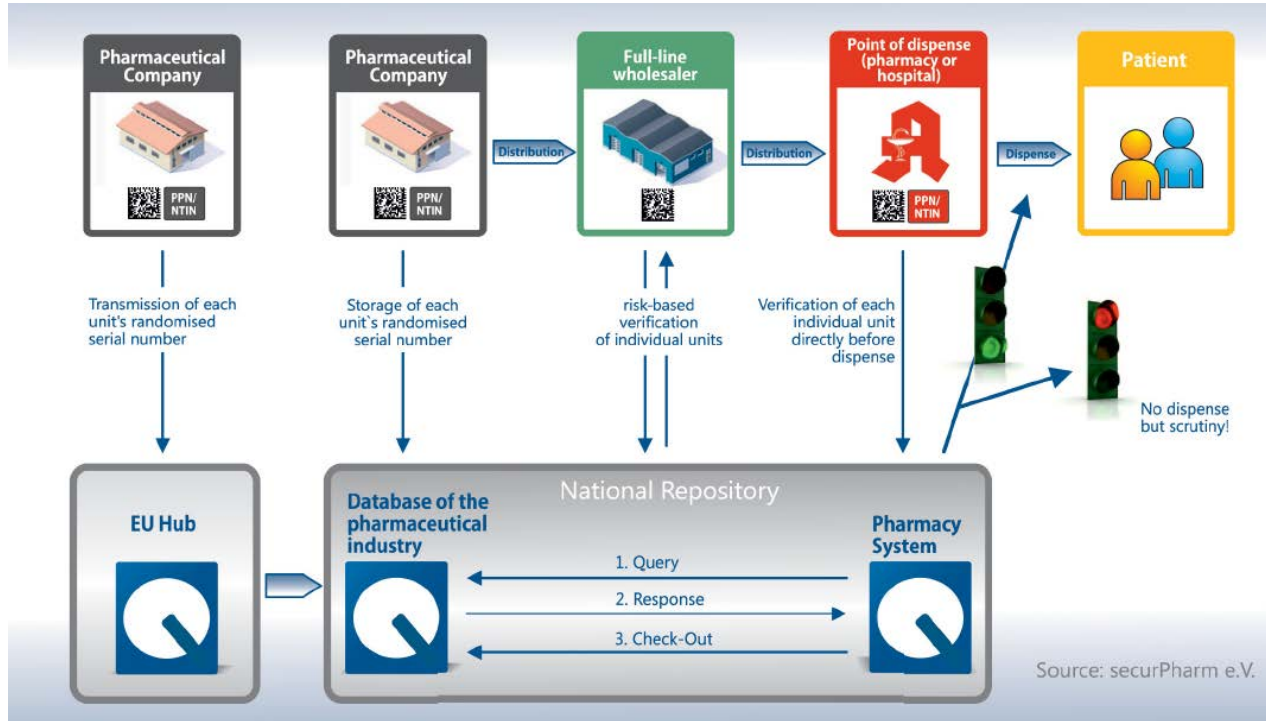
Barcodes in the University Hospital Dresden to optimize processes and patient safety



Drug counterfighting (no) problem?

- | Assessment of WHO: up to 50 % of all drugs sold in development countries are fake
- | Drugs in illegal supply chain; illegal drugs in legal supply chain
- | Preparations in fake packagings, without active ingredient, wrong active ingredient, wrong amount of active ingredient
- | Frequent source: online mail order business with prescription medicines from abroad
- | **Solution: Serialisation of drug packages**

Implementation in Germany: securPharm



Suppliers have two possibilities to mark packagings

GS1 GTIN = GS1 NTIN

NTIN (National Trade Item Number): 04150123456782

Ch.-B.: 1A234B5

Verfallsdatum: Dezember 2015

Seriennummer: 1234567890123456



PPN (no GS1 standard)

Pharmacy Product Number (PPN): 110375286414

Ch.-B.: 12345ABCD

Verfallsdatum: Juni 2015

Seriennummer: 12345ABCDEF98765

PPN



Pros and cons

- | Protection against drug counterfighting
- | Possibility of „track & trace“ on packaging level
- | Simplified batch and expiry date control
- | Linkage to central data storage necessary
- | Necessary to buy technical devices
- | Time and personnel effort

New pilot project: UDI for smaller implants

| Companies involved:



Innovative care based on standards

- | GS1 Germany Healthcare Award 2015
- | For their joint engagement, The University Hospital Dresden and Roche Diagnostics received the GS1 Germany Healthcare Award 2015
- | Project: Lot logistics and expiration date control of all laboratory chemicals fully operated via barcodes over the full supply chain



Thank you for your attention.

Contact:

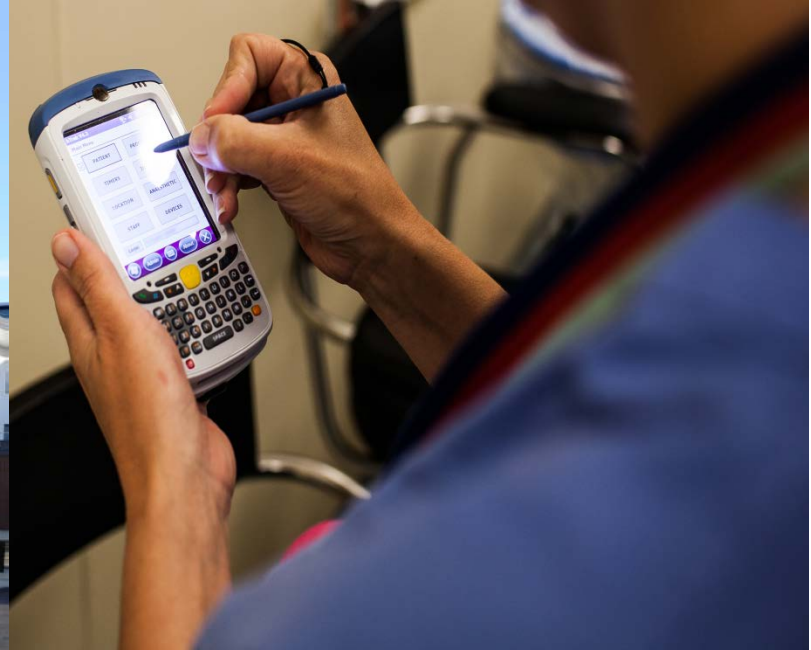
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an der TU Dresden AöR
Fetscherstraße 74, 01307 Dresden
Germany

DATA FOR BETTER CARE

-The Derby Journey-



Kevin Downs
Director of Finance
and Performance

Keith Jones
Head and Neck Surgeon
Clinical Director of Surgery



Facts about our hospital

- The Royal Derby Hospital is the newest hospital in the East Midlands
 - £334 million has been invested in the development
 - Annual budget of around £550 million
- Officially opened in April 2010 by Her Majesty The Queen and His Royal Highness The Duke of Edinburgh,
- We now care for more than 200,000 people as inpatients, outpatients, emergency patients and day cases.
- This equates to around 1,000,000 visits from patients each year.
- There are 1,159 beds in our 50 wards (Inc. 4 wards from our London Road site)
 - And 200 of them are in single rooms with en-suite facilities
 - Over 8,500 employees
- We have 35 operating theatres



Superhospital



Facts about our hospital

- The Trust provides both acute hospital and community based health services, serving a population of over 1,000,000 people in and around the East Midlands.
- We run two hospitals: the Royal Derby Hospital, which incorporates the Derbyshire Children's Hospital, is a busy acute teaching hospital. London Road is the Trust's Community Hospital. Our community services are based in health centres and GP practices across Southern Derbyshire providing care to patients in their own homes.
- The main Derby hospital site is 45 Acres
- Clinical excellence and compassionate care lie at the heart of the services we provide. These include a wide range of inpatient and outpatient surgical and medical specialities, intensive care, maternity services, community and children's services and accident and emergency care (Trauma Centre).
- For some of our specialist services such as vascular, Spinal , Bariatrics, Hands (Pulvertaft) cancer and stroke care we attract patients from a wide catchment area. We also undertake Urology surgery using our De Vinci Robot.



The Derby Journey – How it began?

- Feb 13 Audit Committee ‘Stock Report’

“A computerised system was required to manage some of the gaps
In the current system identifying stock usage, and recording
Patient level costing”



Master Data Catalogue Management: 2013



**424 HL Catalogues, resulting in
196,000 items in catalogues**

- Contract based item & price data
- Validated catalogue item data
- Consistent contract based item & price data
- Controlled ordering
- Standardisation of item choice



HL



hTrak

**Reduced Cost of Procurement
Eliminated PO Supplier queries**

SCAN  SAFETY

Why start in General Theatres?



- Positive and Engaging Theatre Manager
- 11 Specialities – Mix of everything
- Prove the concept
- Clinical Sponsors base
- Open to innovation
- History of successful delivery

Risk

- How motivating or de-motivating would a new stock system be for clinicians?

Two Committed Sponsors

Clinical Engagement – The Hook?

- Patient Safety - out of date stock
- Traceability - Instruments /implants
- Automatic update of external records – implants (registries)

Development Opportunities

- Getting valuable reports to key stakeholders / Costing
- Coding – Income Improvement/Reduce Cost
- Improve HSMR
- Ownership of data by clinicians



Challenges Identified

- Patient at risk – ‘Time diversion’
- Not enough resource – ‘Another job in a stressed environment’
- Scanner not sexy enough
- Not enough time and not our job
- Duplication of data capture ‘ORMIS’
- Threat of redundancy ‘Staff’

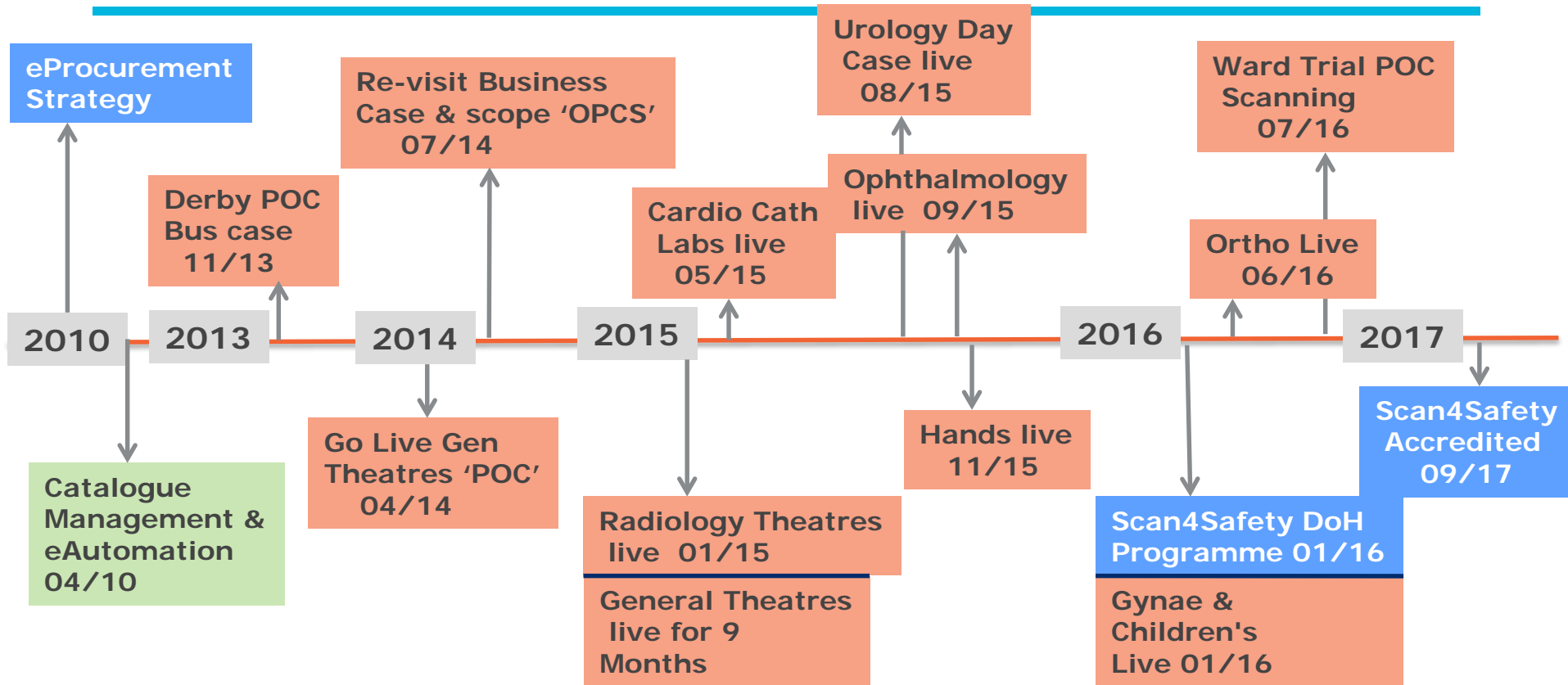


How did we overcome?

- Patient at risk – Proper training and ease of use – wall barcodes
- Not enough resource – Additional support
- Scanner isn't sexy enough – Best scanner on the market
- Not enough time and not our job – Saves time down the process
- Movers and shakers / Opinion formers
- Freeing up staff to care for patients



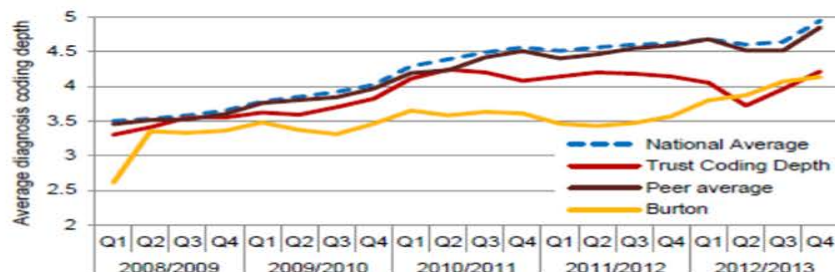
Key Milestones 2010 - Today



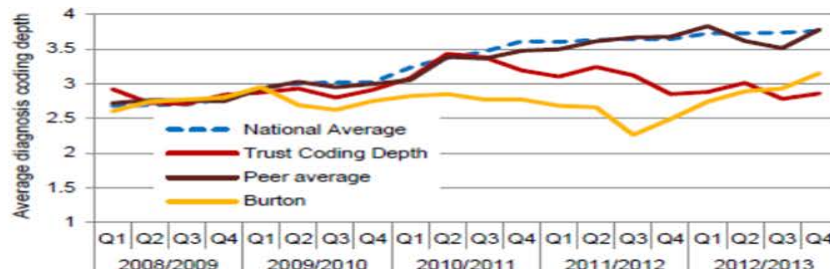
Coding Status

Derby Hospitals Clinical coding depth Average diagnosis coding depth by admission method

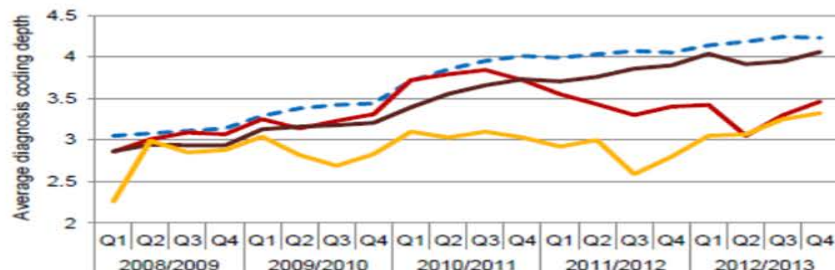
Overall



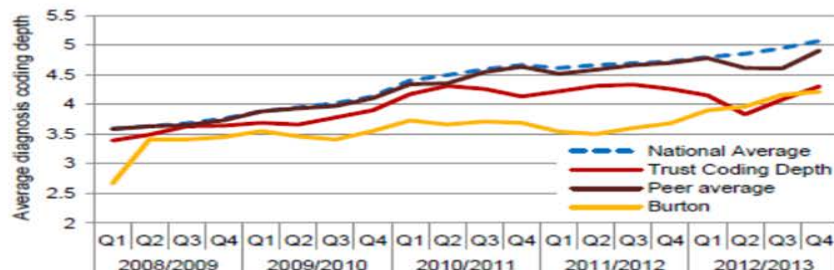
Day Case



Elective



Non - Elective

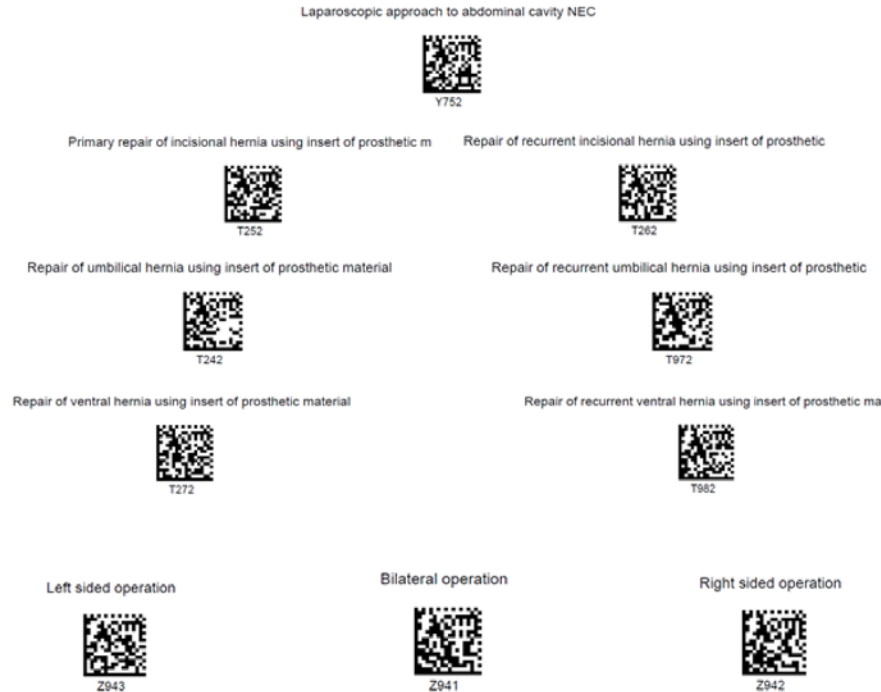


Coding Problem – Extra data feed highlighting what has been done at Point of Care.

Activity in the nine months to the end of December 2013 with a cost of £840K has an HRG code “Data invalid for grouping

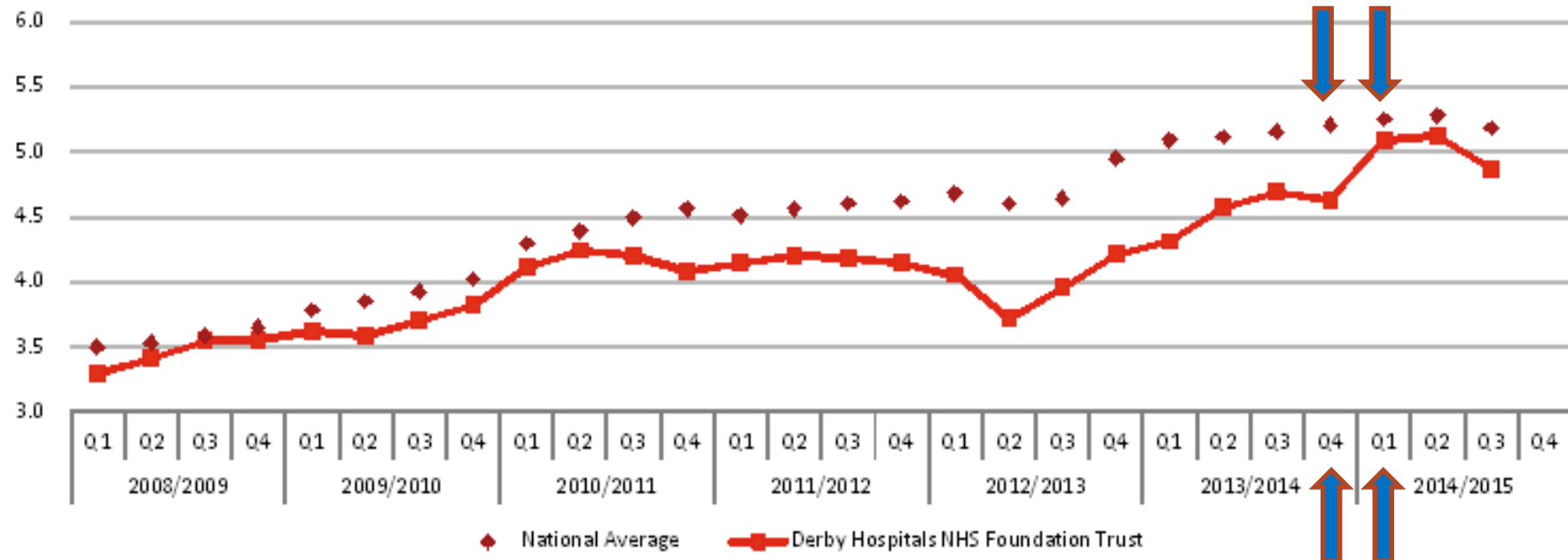
FCE HRG	Description	Activity	Total cost	Average cost	Minimum	Maximum
JZ01Z	Data invalid for grouping	580	£839,755	£1,448	£31	£12,714

July 2014 – OPCS Code now captured

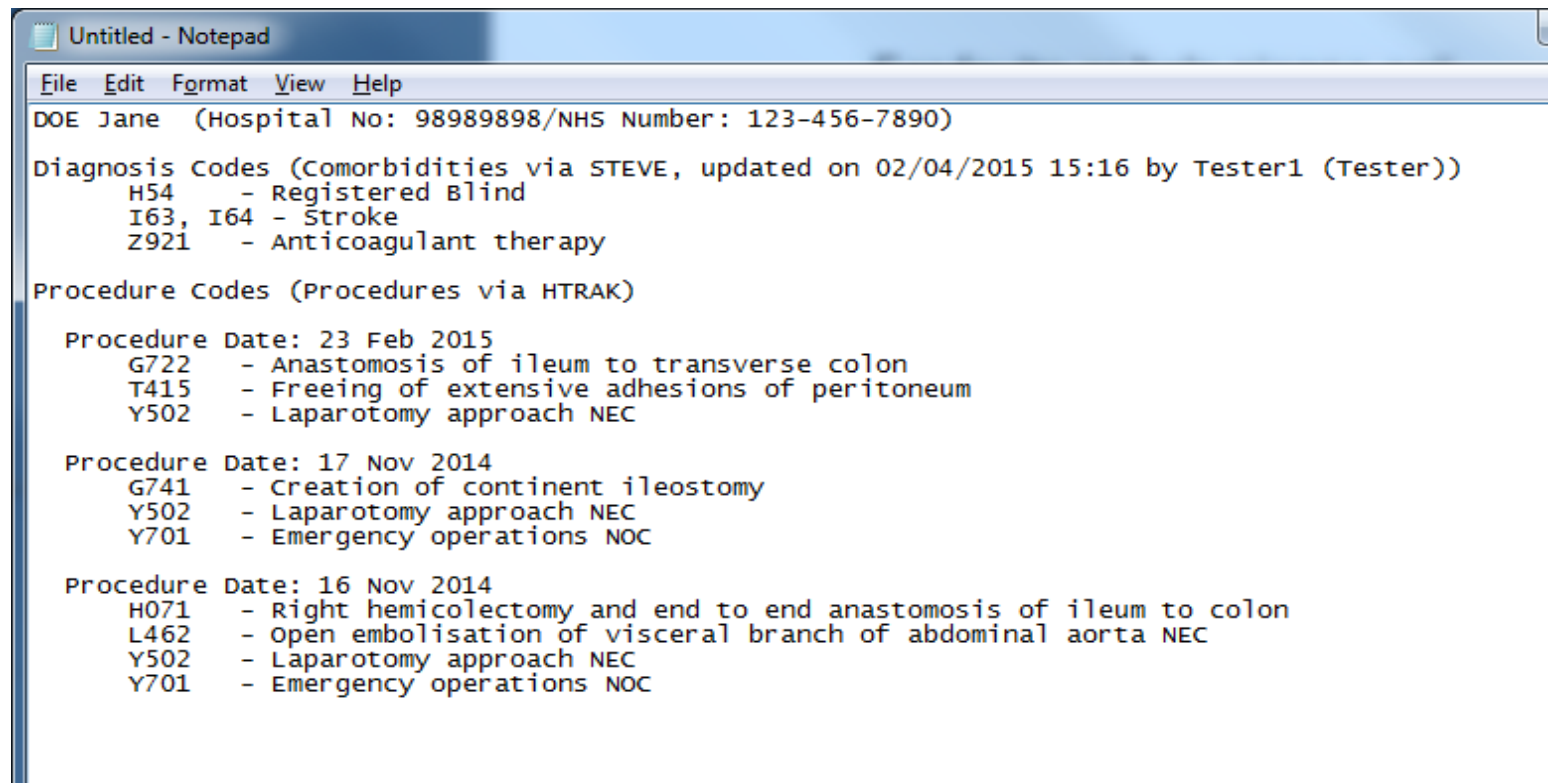


Coding Impact

Depth of coding - Derby vs National average



Coding datafeed



```
Untitled - Notepad
File Edit Format View Help
DOE Jane (Hospital No: 98989898/NHS Number: 123-456-7890)
Diagnosis Codes (Comorbidities via STEVE, updated on 02/04/2015 15:16 by Tester1 (Tester))
  H54 - Registered Blind
  I63, I64 - Stroke
  Z921 - Anticoagulant therapy
Procedure Codes (Procedures via HTRAK)
  Procedure Date: 23 Feb 2015
    G722 - Anastomosis of ileum to transverse colon
    T415 - Freeing of extensive adhesions of peritoneum
    Y502 - Laparotomy approach NEC
  Procedure Date: 17 Nov 2014
    G741 - Creation of continent ileostomy
    Y502 - Laparotomy approach NEC
    Y701 - Emergency operations NOC
  Procedure Date: 16 Nov 2014
    H071 - Right hemicolectomy and end to end anastomosis of ileum to colon
    L462 - Open embolisation of visceral branch of abdominal aorta NEC
    Y502 - Laparotomy approach NEC
    Y701 - Emergency operations NOC
```


COPD

- ☐ Unspecified
- ☐ Chronic bronchitis
- ☐ Emphysema
- ☐ Current smoker (or within 3 months)
- ☐ Past smoker
- ☐ Chronic respiratory failure (Home O2 inc CPAP)
- ☐ Asthma (on inhalers)
- ☐ Other chronic lung disease

☐ Registered Blind

☐ Severe or profound hearing loss

☐ Dysphagia

☐ Gastro oesophageal reflux

☐ Peptic ulcer

☐ Abnormal LFTs (including abnormal clotting)

☐ Jaundice

☐ Other liver disease

Details.....

☐ History of alcohol abuse (>28 units men > 21 Units women)

☐ Dependent diabetes

☐ Non-insulin dependent diabetes

Diabetic complications

☐ Neuropathy

☐ Vascular

☐ Renal

☐ Ophthalmic

☐ Autonomic

Cancer

☐ (any current primary)

☐ (any past history)

☐ Metastatic cancer

☐ Cancer - please document site(s)

.....

☐ HIV positive

☐ Epilepsy

☐ Parkinson's disease

☐ TIA

☐ Other cerebrovascular disease

☐ Dementia excluding Alzheimer's disease

☐ Alzheimer's disease

☐ Depressive disorders including bipolar disorder

☐ Anxiety disorders

☐ Developmental delay including learning disability

☐ Drug abuse

☐ Eating disorders

☐ Personal history of self harm

☐ Psychotic disorders including schizophrenia, delusional disorders

☐ Autism

☐ Multiple Sclerosis

☐ Stroke

☐ Hypertension

☐ History of ischaemic heart disease

☐ Acute Myocardial Infarction in last 28 days

☐ Congestive cardiac failure (any evidence of right heart failure)

☐ Left ventricular failure

☐ Atrial fibrillation

☐ Cardiac pacemaker in place

☐ Mitral valve disease

☐ Peripheral vascular disease

☐ Acute Kidney Injury

☐ Stage

☐ Kidney Disease: ☐ Dialysis

☐ ☐ Transplant

☐ Urinary retention (Catheter in place/inserted)

☐ Rheumatoid arthritis

☐ Any connective tissue disorder

☐ Obesity (BMI > 30)

☐ Hemiplegia

☐ Paraplegia

☐ Anticoagulant therapy

☐ PE or DVT

☐ Tendency to fall

☐ Living alone

“BIG STEVE”

Recording of Co-Morbidities

The data which is available now;

Affix Patient Label Here

Patient Ref: 154227

Procedure Date: 20-07-2016

Hospital: Derby Hospital

Department: Cardiology

hTrak Report

Patient Ref: 154227

Procedure Date: 20-07-2016

Page 1 of 3

Patient Class:	NHS	Facility:	LAB 2
Operation Type:	Elective	Facility Cost:	
		Hand Held User:	Nahman Khaliq

Procedure Codes					
Procedure	Item Codes	Theatre Band	Band Amount	Hand Held User	Scan Date/Time
PCI 1 ARTERY	K491, Y534			Nahman Khaliq	20-07-2016 17:38:45
LHC	K634, Y534			Nahman Khaliq	20-07-2016 17:38:50
3+ DES	K752, Y534			Nahman Khaliq	20-07-2016 17:38:53

Procedure Timing				
Timing Point Name	Date & Time Stamp	Hand Held/HRS User		Procedure Duration
Start of Procedure	20-07-2016 14:29:00	Nahman Khaliq		(HH:MM:SS)
End of Procedure	20-07-2016 17:38:00	Nahman Khaliq		03:09:00

Attending Staff				
Staff ID	Staff Name	Staff Type	Staff Role	Duration
10706133	Tariq Azeem	Consultant	1st Operator	03:09:00
24803882	Nahman Khaliq	Physiologist	Physiologist	03:09:00
25657217	Lea Slingsby	Radiographer	Radiographer	03:09:00
EXTRA	Company Rep	Extra Staff	Company Rep	03:09:00
EXTRA4	Visiting Consultant	Extra Staff	Company Rep	03:09:00

Anaesthetic			
Anaesthetic Key	Anaesthetic Description	Hand Held User	Scan Date/Time
LOCAL	Local Anaesthetic	Nahman Khaliq	20-07-2016 17:14:32
SEDATION	Sedation	Nahman Khaliq	20-07-2016 17:14:33

Detailed analysis of procedure

hTrak Report

Patient Ref: 154227

Procedure Date: 20-07-2016

Page 2 of 3

Affix Patient Label Here

Patient Ref: 154227

Procedure Date: 20-07-2016

Hospital: Derby Hospital

Department: Cardiology

Products Used								
Item No.	Supplier Product Code	Description	Qty	Price	Consumption Type	Lot No.	Expiry Date	Ext. Price
1	1010482-H	014 HI-TORQUE PILOT 200, 3CM H 190	4	90.00	Normal	6020271		360.00
2	1011767	GOWN,SURGICAL, NON-REINFORCED XL	4	0.10	Normal			0.40
3	1099440	Angio Pack	2	23.63	Normal			47.26
4	401-811M	SI BRITE TIP 8F 11CM STR	1	14.40	Normal			14.40
5	502-521	DGW .035 FC J3MM 150CM TEF	1	7.65	Normal			7.65
6	504-607X	SI AVANTI+ 7F STD W/GW NO OBT	1	10.80	Normal			10.80
7	5572	GuideLiner Catheter 7F	1	350.00	Normal	590184		350.00
8	5621	Turnpike Gold Catheter 135cm	1	800.00	Normal	586692	17-08-2017	800.00
9	5640	Turnpike Spiral Catheter 135cm	1	600.00	Normal	587821	24-09-2017	600.00
10	610133	Angio Seal VIP 8F	2	108.33	Normal	5398681	31-01-2017	216.66
11	64038200	MANIFOLD, 2V, WB FG, STAR H, R OFF	1	3.78	Normal			3.78
12	A2000	Multi-Use Syringe Kit	1	2.50	Normal			2.50
13	AC3205P	SURVIVAL KIT AC3205P EVEREST 30 TJM	1	18.00	Normal	50981667	26-04-2018	18.00
14	AGH143090	CONFianza PRO Asahi CTO Straight wire 20cm tapered tip 180cm	2	110.00	Normal	160123A21A	31-12-2018	220.00
15	AGP140002	FIELDER XT 190 straight tip	1	90.00	Normal	151024A10A	30-09-2018	90.00
16	AGP140002	FIELDER XT 190 straight tip	1	90.00	Normal	160127A12A	31-12-2018	90.00
17	AGP140002	FIELDER XT 190 straight tip	1	90.00	Normal	160328A23A	31-03-2019	90.00
18	AHW10S302S	Wire, RG3, Diameter 0.010" 330cm (SAS) Straight tip	1	120.00	Normal	151222A11A	30-11-2018	120.00
19	AHW14R001S	SION 180CM STRAIGHT TIP	1	60.00	Normal	160107A14A	31-12-2018	60.00
20	AHW14R004S	SION BLUE 0.014" 180cm Guidewire Straight tip	1	50.00	Normal	160121A04A	31-12-2018	50.00
21	ATP54	Angio Touch Kit	1	16.27	Normal			16.27
22	BT2000	Automated Manifold Kit Latex-Free	1	11.10	Normal			11.10
23	CSW135-26N	CORSAIR MICROCATHETER 135 CM	1	600.00	Normal	160323K021	28-02-2018	600.00
24	CSW150-26N	CORSAIR MICROCATHETER 150 CM	1	450.00	Normal	160112K061	31-12-2017	450.00
25	FFF302	TruWave(TM) Single Pressure Monitoring Set: Single IV no tubing (Cath Lab) (T001758A)	1	6.68	Normal			6.68
26	FTE501	BIOGEL GLOVES LATEX SZ 7.5 POWDER FREE	3	1.16	Normal			3.47

Detailed analysis of procedure

hTrak Report

Patient Ref: 154227

Procedure Date: 20-07-2016

Page 3 of 3

Affix Patient Label Here

Item No.	Supplier Product Code	Description	Qty	Price	Consumption Type	Lot No.	Expiry Date	Ext. Price
27	H7493912415300	NC Quantum Apex MR 15mm x 3.00mm	1	42.00	Normal	19142512	30-04-2019	42.00
28	H7493919312250	F/G, EMERGE, MR, OUS 12mm x 2.50mm	1	42.00	Normal	19374659	28-02-2019	42.00
29	H7493919312300	F/G, EMERGE, MR, OUS 12mm x 3.00mm	1	42.00	Normal	19138808	31-12-2018	42.00
30	H7493919315250	F/G, EMERGE, MR, OUS 15mm x 2.50mm	1	42.00	Normal	19395906	28-02-2019	42.00
31	H7493919320250	F/G, EMERGE, MR, OUS 20mm x 2.50mm	1	42.00	Normal	19292522	31-01-2019	42.00
32	H7493919320300	F/G, EMERGE, MR, OUS 20mm x 3.00mm	1	42.00	Normal	19359882	28-02-2019	42.00
33	H7493926212350	SYNERGY OUS MR 3.50 X 12	1	390.00	Normal	18869747	18-07-2017	390.00
34	H7493926216300	SYNERGY OUS MR 3.00 X 16	1	390.00	Not Used - Wrong Size	1992378	15-08-2017	390.00
35	H7493926224300	SYNERGY OUS MR 3.00 X 24	1	390.00	Normal	18787023	02-07-2017	390.00
36	H7493926238250	SYNERGY OUS MR 2.50 X 38	1	390.00	Normal	18717797	30-05-2017	390.00
37	H7493926238270	SYNERGY OUS MR 2.75 X 38	1	390.00	Normal	18713694	30-05-2017	390.00
38	KESU0002	SUPERKETCH Y CONNECTOR PLUS	1	18.00	Normal	1601084577	31-12-2019	18.00
39	LA7EBU35	CATHETER LA7EBU35 LA 7F 100CM EB35	1	21.00	Normal			21.00
40	LA8AL75SH	CATHETER LA8AL75SH LA 8F 100CM AL75	1	21.00	Normal			21.00
41	QR-80-A/10	BLUE SENSOR RADIOTRANSLUCENT QR	6	0.80	Normal			
Product Totals			57					6,505.77

Name: _____

Signature: _____



The team can and do identify when a product is opened but not used, due to wrong size.

Patient Ref: 154227

Procedure Date: 20-07-2016

Hospital: Derby Hospital

Department: Cardiology

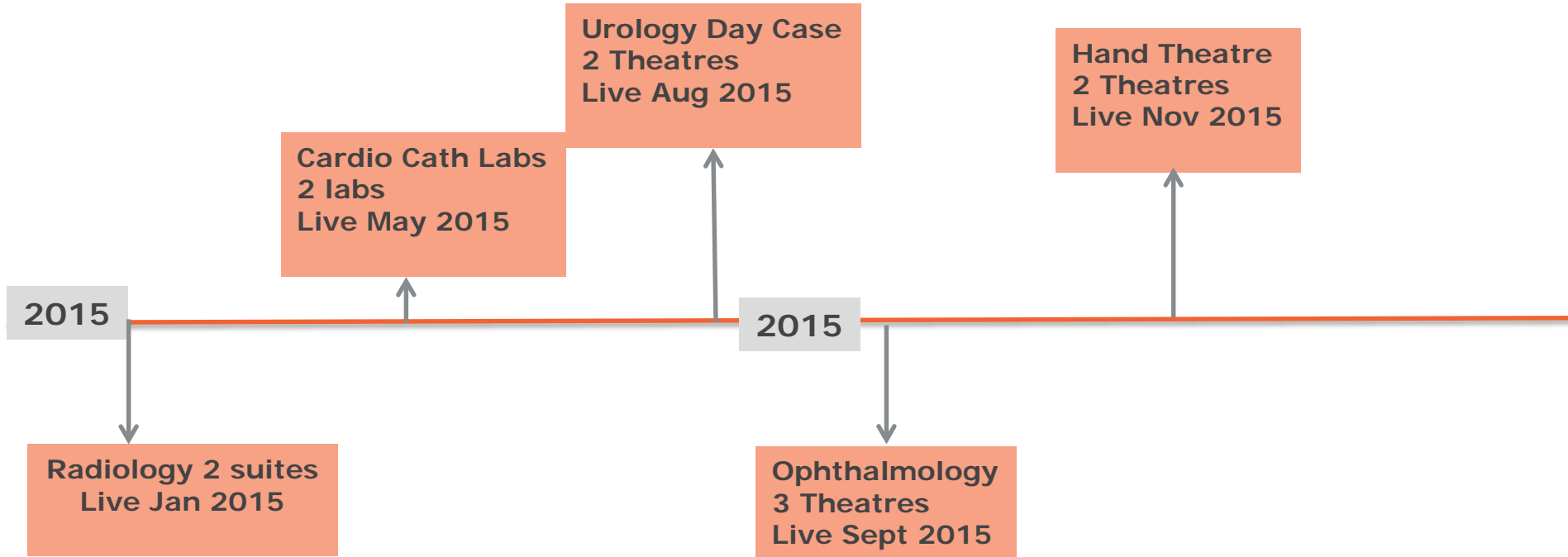
hTrak reports theatres – HFMA Costing



December 2014



Key Milestones 2015



Making it easy for clinicians Frequently Used Items

Any Blade



Discard-A-pad



Handheld Diathermy



Scratch Pad



Any Syringe



Any Needle



Suction Tubing



1 Litre Jug



Gallipot



Disposable Receiver



Fred



Pledgets



Lap Chole Scanning Sheet 'Mr Leeder' – Bespoke

Kit - Gowns/Gloves/Drapes for up to 3



(240)DERBYKIT015

Kit - LEEDER - Lap Chole



(240)MrLeeder005

Kit - General Anaesthetic Kit



(240)DERBYKIT002

Kit Contents		
Part No.	Description	Qty
BDS3000	GAS TUBING	1
CTF12	5mm PORT	1
CTF73	10mm PORT & TROCAR	1
CTS22	10mm PORT	1
CV65-701	FRED	1
FAL024	PURPLE BERT BAG	1
FBE10128	CAMERA COVER	1
FDJ136	DIATHERMY PAD	1
FSF230	11 BLADE	1
FSL114	SHARPS PAD	1
FTR044	GREEN HYPO	1
FVU240	W9221 VICRYL	1
FVU331	W9932 VICRYL RAPIDE	1
FWC021	20ml SYRINGE	1
IJ022141	LAP SWABS	1
PFT301	GENERAL DRAPES	1

Kit and Anaesthetic Procedure Packs



Kit and Anaesthetic Procedure Packs

Kit Scanning Sheet
Derby Hospitals NHS Foundation Trust



Kit - Tracheostomy



(240)DERBYKIT004

Kit Contents		
Part No.	Description	Qty
1623	CONNECTOR,ELBOW (CE)	1
409426	Hartmann PermaFoam Tracheostomy Foam Dressing non adhesive shaped 8cmx8cm 10 pieces	1
FDB136	Yankauer Sucker Derby	1
FGK011	Fine tip marker pen	1
FSL114	Disposafe Foam Mat	1
FTH000	Tracheostomy Tape	1
FVR180	SILK BLK 45CM M3 USP2/0 SGLE ARMED X-1	2
FVU408	VICRYL VIO 12X45CM M3 USP2/0 NON NEEDLED	1
FWC128	10ml Syringe	1
FWP173	Female Suction tube	1
ILN024	Solo Supra Dental Needle 27G LONG	1

Kit Scanning Sheet
Derby Hospitals NHS Foundation Trust



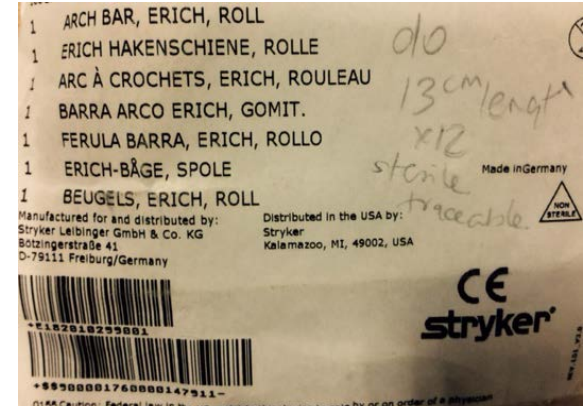
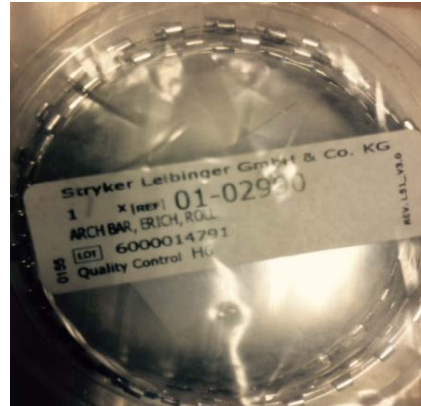
Kit - Oral Basic

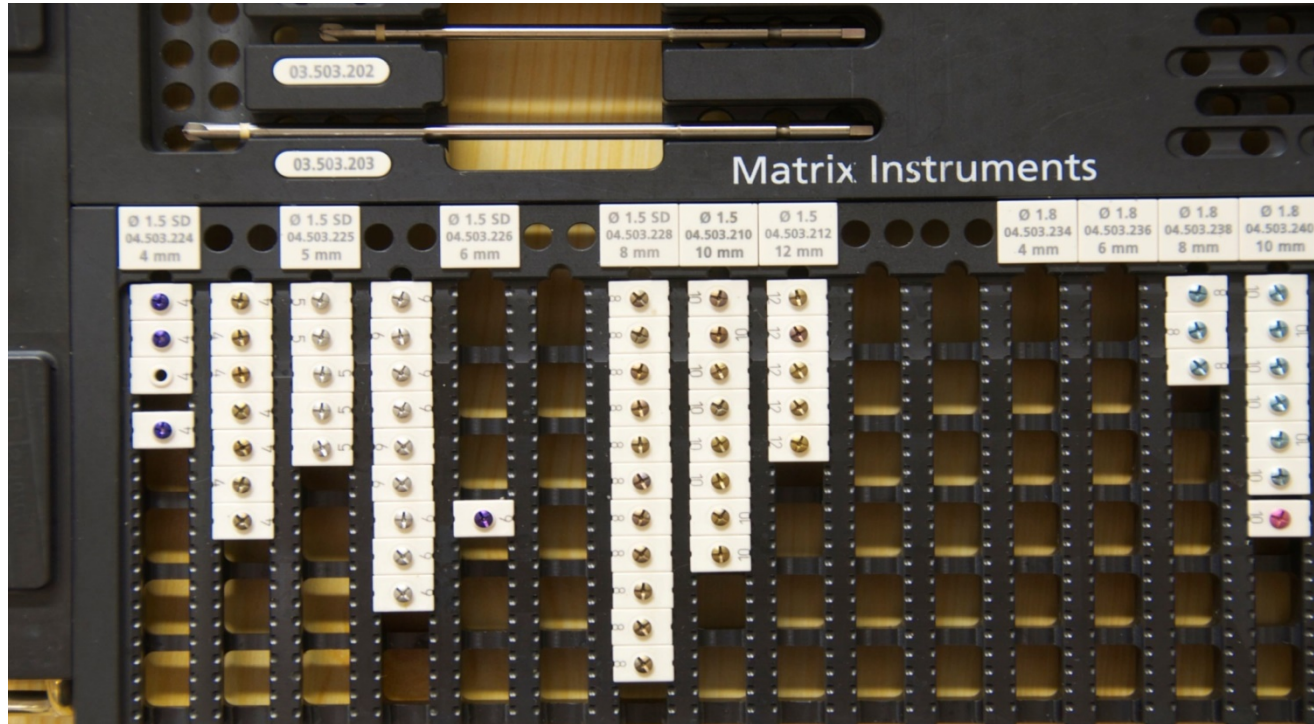


(240)DERBYKIT003

Kit Contents		
Part No.	Description	Qty
FDB136	Yankauer Sucker Derby	1
FSF240	SWANN-MORTON Standard Blades No. 15 Sterile Fit handles 3/3L/5/7/9 & B3 Box 100	1
FSL114	Disposafe Foam Mat	1
FTR285	Blunt Needle 18G	2
FVU066	VICRYL UND 45CM M1.5 USP4/0 SGLE ARMED PS-2	1
FWC021	SYRINGE LUER SLIP 20ml	2
FWP173	Female Suction tube	1
ILN024	Solo Supra Dental Needle 27G LONG	1

Our findings along the way... Product review





Sterile v Non-Sterile –Patient Traceability and other opportunities?



**Individual Screw
Pack**

2015



Multiple Screw Pack

Jaw Plates – Straight or Curved?



Staff Savings

Cardio Cath Labs

2 x Advanced Clinical Physiologist - Devices and Cardiac Catheter Band 7's
– Dealing with Inventory, equivalent of almost 1 FTE £35,000

General Theatres

1 x Band 6 Senior Theatre Practitioner – Ordering Non-Sterile Screws (0.5 FTE)
£20,000

Total saving £55,000

Important to note that all time saved has not been turned into £'s.
Staff to spend more time with patients and carry out other value added activity / delivering better care.



Scan4Safety at Derby recap: Benefits Delivered

- **£1.2m annual saving in consumption reduction in theatres**
- £360k savings identified in inventory reduction (to be actioned)
- Traceability of implantable products by batch/lot number to patient record
- Auditable evidence – resolution of SUI
- Product standardisation and switching opportunities
- Reduction in clinical time spent on non-clinical activities
- Improved clinical coding
- Ability to analyse clinical variation in practice
- Improved visibility of inventory
- Automated ordering and invoicing through PEPPOL access point

Combined Areas	Go Live H Track	Year			Impact		Yr Notes
		201415	201516	201617	Actual 201516	Actual 201617	
Cardiology	Mar-15	1,613,562	1,509,061	1,783,025			
Activity		2,209	2,490	2,770	309,757	240,319	
Average Cost per Patient		730	606	644			
Day Case & General Theatres	Sep-14	3,599,042	4,039,230	4,156,683			
Activity		11,266	14,171	14,563	487,845	495,620	
Average Cost per Patient		319	285	285			
Eyes	Sep-15	972,976	968,496	1,121,827			
Activity		5,203	4,886	5,435		0	
Average Cost per Patient		187	198	206			
Gynaecology Theatres	Feb-16	581,045	804,940	1,023,037			
Activity		5,701	5,288	4,548		0	Significant shift of activity to outpatient procedures, therefore increase in complexity in theatres not
Average Cost per Patient		102	152	225			
Hands Day Case Unit	Oct-15	754,162	728,678	866,677			
Activity		4,925	4,998	5,420		0	
Average Cost per Patient		153	146	160			
Orthopaedic Theatres	Jul-16	8,566,173	8,925,574	9,185,353			
Activity		10,821	10,792	11,222		95,855	
Average Cost per Patient		792	827	819			
Paediatric Theatres	May-16	202,130	221,232	215,079			
Activity		3,043	3,070	3,163		12,855	
Average Cost per Patient		66	72	68			
Radiology	Jan-15	2,468,643	3,777,183	3,836,597			
Activity		2,580	2,750	3,073		384,233	
Average Cost per Patient		957	1,374	1,248			
Urology	Aug-15	190,930	176,692	211,640			
Activity		1,768	3,478	5,171		51,062	
Average Cost per Patient		108	51	41			

Total Savings	797,602	1,279,944
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H Track Costs	-128,395	-188,010
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Net Savings	669,207	1,091,934
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Never Events - Where we can help...

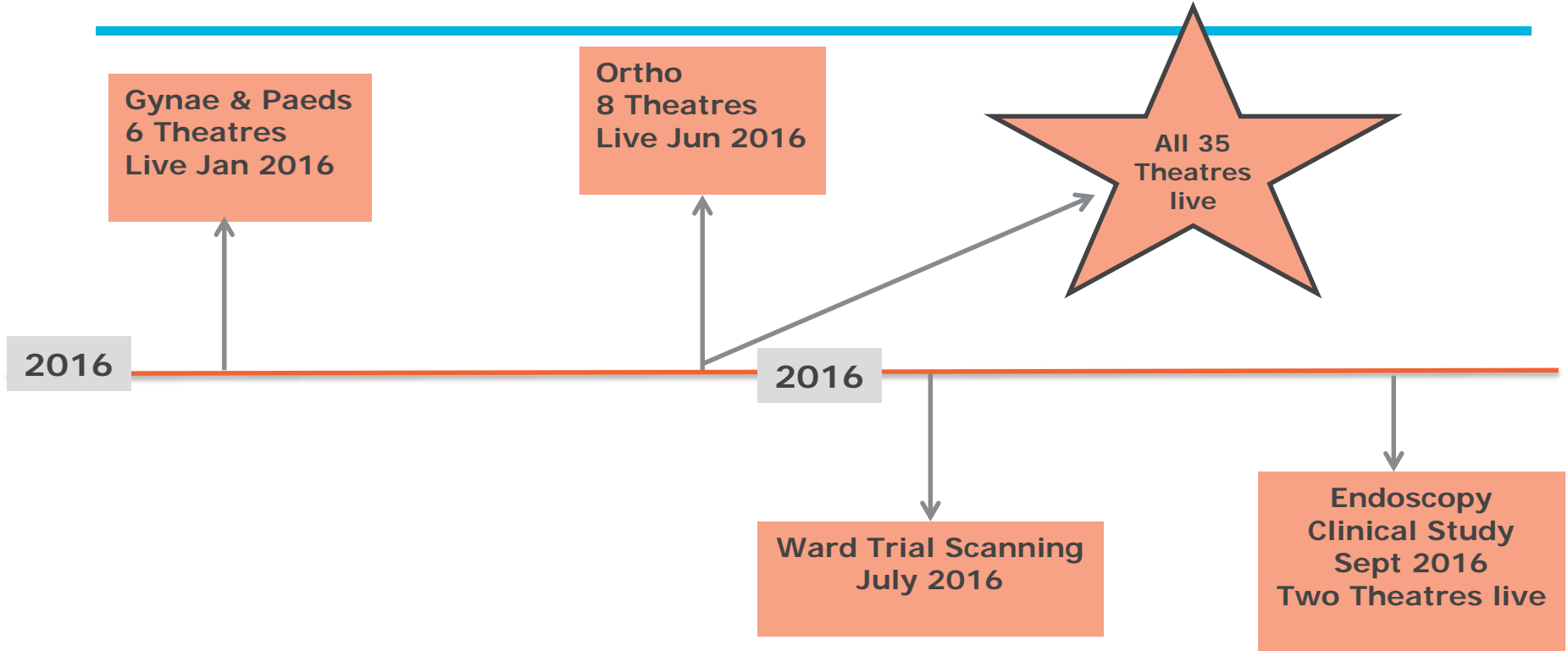
- April 16 – March 17 512
- Of the 2016/17 events:
 - Wrong site surgery
 - Retained foreign objects post procedure **79%**
 - Wrong implant / prosthesis
- Medication error (has to cause harm to be recorded) **12%**

Total £10,280,000 in Litigation premiums
An increase of £3m from 2015/2016!

Derby Never Events

2015/2016	7	<p>Incorrect lens implant</p> <p>Wrong site surgery – injection to joint Bartholin's cyst -- Stent on wrong side</p> <p>Retained foreign object during surgery – drill sleeve</p> <p>Retained guidewire – asitic drain</p> <p>An overdose of Methotrexate – oral and subcutaneous</p>
2017	3	<p>Wrong Site Surgery – wrong tooth removed</p> <p>Wrong route medication - Drug given intravenously instead of via the epidural x 2</p>

Key Milestones 2016



THE THEATRE DATA COLLECTED



Patient

Wristband
(GSRN)



Timers

Knife to skin,
time in recovery



Anaesthetic

Type used



Location

Products,
procedures,
patients (GLN's)



Procedure

Operations linked
to OPCS codes



Devices

Products, trays &
implants used
(GTIN)



Staff

Operations linked
to OPCS codes



In theatre

Questions



Inventory

Stock levels, shelf
life

100,000 + theatre episodes now recorded

Our Ward Data Capture Device July 2016

- No need for multiple devices
- Embedded in existing eObs
- **Location:** Records locations
- **Staff:** Who is present and carrying out the task
- **Procedure:** Task Captured
- **Ward:** Additional data available
- **Devices:** Products, (GTIN's)

Future scope;

- Workflow / efficiency notifications
- Training / Infection data
- Patient path way easily documented

Cancel Submit 15:19

0 **1Test, 2.1.18**
Local: 999000 / NHS -
Female, 04-Sep-1972, 44y
Ward / Bed : RDMHL1ACW / 1

Patient Wristband

8018505089841806136466 Clear Scan

Barcode

{17}200531(10)P5E0621KX Clear Scan

Global Trade Item Number (GTIN)

Expiration date

2020/05/31

Batch or lot number

P5E0621KX

q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123 . , Go



Ward 403 - Definition of a relevant product

Relevant product, should fall within one or more of these classifications below;
Transferable across wards?

- Invasive device
- Potential risk to patient's safety
- Traceability LOT/Batch Number
- Capture high value & wastage

Items include:

- Chest Drainage Kits
- NIV/BI/CPAP Masks
- Nasopharyngeal
- Tracheostomy Tubes & Cuffs
- Suction Catheter
- IV Venflons
- Urinary catheters:



What is a relevant procedure? Ward 403;

Tracheostomy

- Insertion of temporary tracheostomy
- Replacement of tracheostomy tube
- Removal of tracheostomy tube
- Suction

Ventilation

- Invasive ventilation
- Patient on non-invasive ventilation

Cannulation

- Insertion of IV Cannulation
- Removal of IV Cannula
- Failure of Cannulation

Urinary catheterisation

- Insertion of catheter
- Removal of catheter
- Change of catheter

NG Tube

- Insertion of NG Tube

Chest Drain

- Paracentesis of pleural cavity
- Aspiration of pleural cavity (pleural tap)
- Insertion of chest drain
- Removal of chest drain
- Attention to chest drain

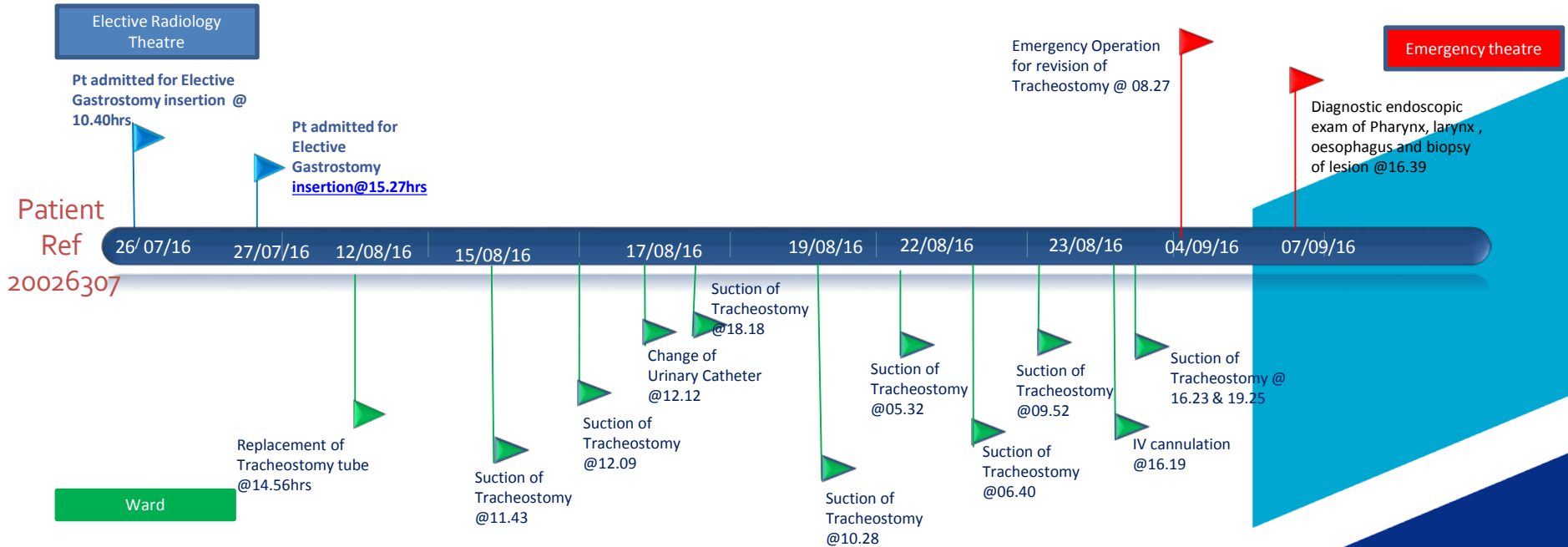


Requirements – What notifications could be useful? What would aid patient safety / nurse efficiency?

E.g. Cannula monitoring SLA's

E.g. Training

A high Level Patient Pathway



Data from PatienTrak would have all other nursing interactions e.g. Observations, fluid balance etc.

As of Today: Scan4Safety Collective Benefits

Consolidate Benefit Position as at 31 August 2017 across all Demonstrator Sites:

- £5.2m Forecast Financial Benefits (31.8.17)
- £4.5m Actual Financial Benefits delivered (31.8.17)
- Overall, we are expecting the Overall financial benefits to overtake the forecast benefits by the turn of the year.

In terms of Derby:

- £907k Forecast Financial Benefits (31.8.17)
- £1.6m Actual Financial Benefits delivered (31.8.17)

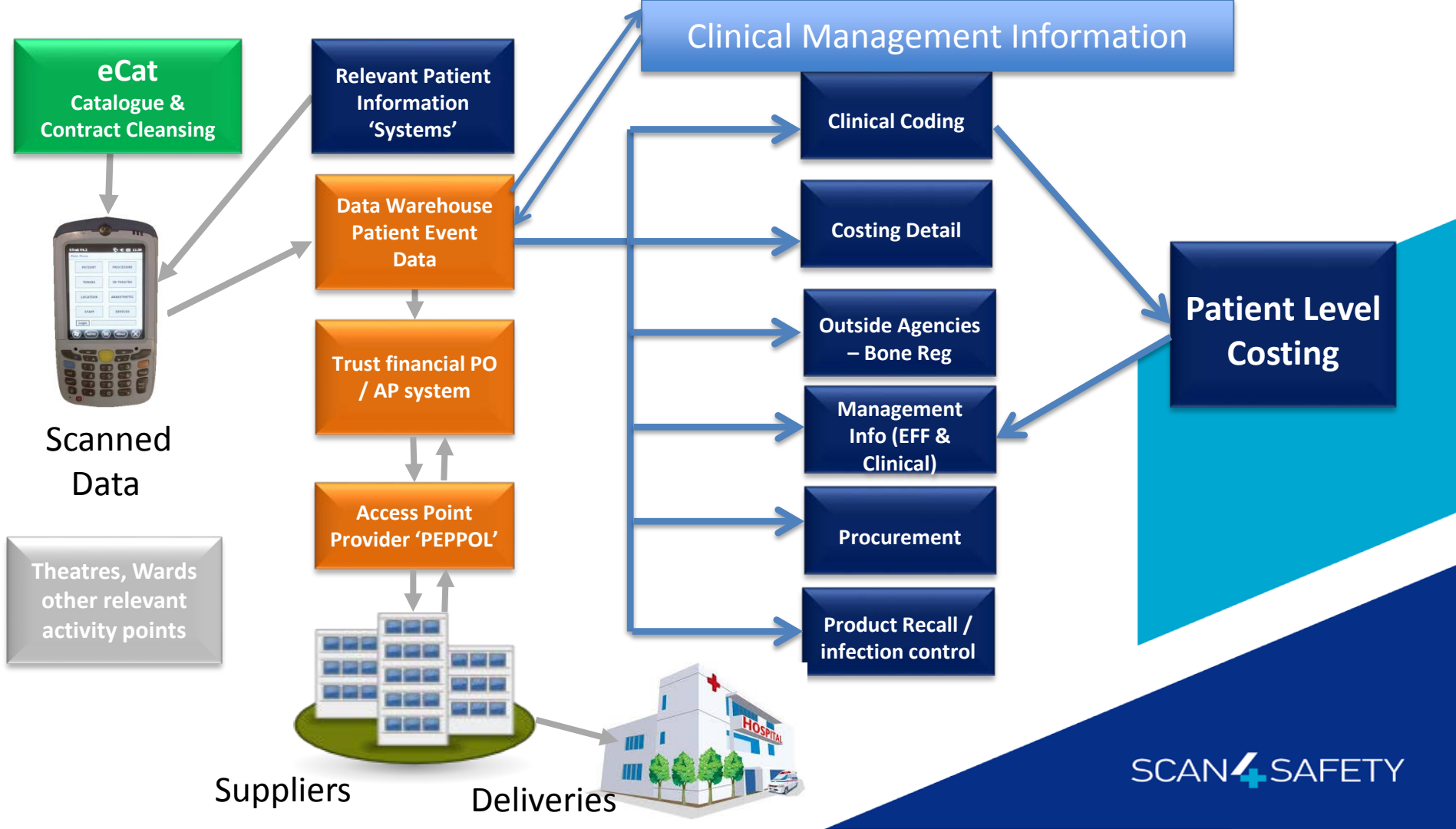
Combined Areas	Go Live H Track	Year				Impact		Notes
		201415	201516	201617	6mths 201718	Actual 201718	Full Yr 201718	
Cardiology	Mar-15	1,613,562	1,509,061	1,783,025	665,349	369,698	739,395	
Activity		2,209	2,490	2,770	1,417			
Average Cost per Patient		730	606	644	470			
Day Case & General Theatres	Sep-14	3,599,042	4,039,230	4,156,683	2,018,770	314,250	628,500	
Activity		11,266	14,171	14,563	7,303			
Average Cost per Patient		319	285	285	276			
Eyes	Sep-15	972,976	968,496	1,121,827	528,084	112,925	225,849	
Activity		5,203	4,886	5,435	2,949			
Average Cost per Patient		187	198	206	179			
Gynaecology Theatres	Feb-16	581,045	804,940	1,023,037	454,209	0		Significant shift of activity to outpatient procedures, therefore increase in complexity in theatres not
Activity		5,701	5,288	4,548	2,371			
Average Cost per Patient		102	152	225	192			
Hands Day Case Unit	Oct-15	754,162	728,678	866,677	375,131	35,133	70,266	
Activity		4,925	4,998	5,420	2,814			
Average Cost per Patient		153	146	160	133			
Orthopaedic Theatres	Jul-16	8,566,173	8,925,574	9,185,353	4,230,205	546,036	1,092,072	
Activity		10,821	10,792	11,222	5,775			
Average Cost per Patient		792	827	819	733			
Paediatric Theatres	May-16	202,130	221,232	215,079	73,977	40,314	80,628	
Activity		3,043	3,070	3,163	1,586			
Average Cost per Patient		66	72	68	47			
Radiology	Jan-15	2,468,643	3,777,183	3,836,597	2,146,347	38,925	77,850	
Activity		2,580	2,750	3,073	1,591			
Average Cost per Patient		957	1,374	1,248	1,349			
Urology	Aug-15	190,930	176,692	211,640	123,905	6,354	12,707	
Activity		1,768	3,478	5,171	2,564			
Average Cost per Patient		108	51	41	48			

Total Savings		1,463,634	2,927,267
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H Track Costs		-110,712	-221,424
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Net Savings		1,352,922	2,705,843
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Forecasted Savings 2017/18



What Intelligence does the data capture provide ?





- Patient Safety – Track and Traceability of implants and other relevant products
Importance of this information being accurate at the end of each procedure is a collective responsibility not just the handheld user.
- PLICS Information – Accurate patient level reports, detailing patient costs.
- Inventory Management – Helping Reduce stock and waste
 - Total Stock £ and Total Consignment £ (hTrak live areas)
- Procurement Benefits; Can view the consumption of products used in all areas enabling us to negotiate cost effective contracts.
- Other beneficial MI that enables operational discussions. E.g. Consultant variation / scheduling / volumes / capacity planning etc

WHAT DOES THE DATA REVEAL?

CLINICAL VARIATION / PRODUCT STANDARDISATION





Surgeon 1



	Avg. cost of products	£285
	Avg. no. of staff	5
	Avg. Minutes	181
	No. of Procedures	1





Surgeon 2



	Avg. cost of products	£239
	Avg. no. of staff	7
	Avg. Minutes	127
	No. of Procedures	3

Surgeon 3



	Avg. cost of products	£227
	Avg. no. of staff	6
	Avg. Minutes	98
	No. of Procedures	9

Full traceability across our theatres and suites;

Product Recall; PC: H7493926224300 LOT:18787023



Select From and To Dates for Product Usage Report

User: jaynegreen
Password:

Year Month Day
Select From Date: 2016 04 01
Select To Date: 2017 02 09

Select Supplier from list: ALL SUPPLIERS		Specify a Supplier Product Code (SPC): H7493926224300
Select Facility from list: (Ignore)	Select Operation Type from list: (Ignore)	Specify a Account Code: (All) Sort By
Select a Staff Member from list: (Ignore)	Select Patient Class from list: (Ignore)	Select Consumption Type from list: (All Consumption Types)
Specify a Procedure Type: (Ignore)	Specify a Procedure Category: (Any)	Specify a Procedure Item Code: (Any)
<input checked="" type="checkbox"/> Display Patient Ref. and Procedure Date <input type="checkbox"/> Sort By Patient Ref. <input type="checkbox"/> Sort By Procedure Date	Specify a Rebate Code: (All)	Specify a Stock Type: (Ignore)

☐ **Summarise Report.** The Summarised Report omits UPN, Consumption Type, Lot Number and Expiry Date.

Reset EMAIL REPORT DISPLAY REPORT
MENU

hTrak
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Full traceability across our theatres and suites;

Product Usage Report for Derby Teaching Hospitals NHS Foundation Trust - Cath Lab from 01-04-2016 to 09-02-2017

User: jaynegreen
Password:

Report only for SPC: H7493926224300

Item No.	Supplier	Contract	SPC	Description	Qty	Scanned UPN	Trust Product Code	Account Code	Category	Cur.	Price	Patient Ref	Procedure Date	Consumption Type	Lot Number	Expiry Date	Ext. Price
1	Boston Scientific Ltd	PRu.1	H7493926224300	SYNERGY OUS MR 3.00 X 24	1	08714729841197	H7493926224300	3786	FRK	GBP	0.00	711346	14-06-2016	Normal	18753167	12-06-2017	0.00
2	Boston Scientific Ltd	PRu.1	H7493926224300	SYNERGY OUS MR 3.00 X 24	1	08714729841197	H7493926224300	3786	FRK	GBP	390.00	154227	20-07-2016	Normal	18787023	02-07-2017	390.00
3	Boston Scientific Ltd	PRu.1	H7493926224300	SYNERGY OUS MR 3.00 X 24	1	08714729841197	H7493926224300	3786	FRK	GBP	390.00	20016279	21-09-2016	Unable To Deploy	18753167	12-06-2017	390.00
4	Boston Scientific Ltd	PRu.1	H7493926224300	SYNERGY OUS MR 3.00 X 24	1	08714729841197	H7493926224300	3786	FRK	GBP	390.00	669474	01-02-2017	Normal	19615155	07-02-2018	390.00
5	Boston Scientific Ltd	PRu.1	H7493926224300	SYNERGY OUS MR 3.00 X 24	1	08714729841197	H7493926224300	3786	FRK	GBP	390.00	912489	01-12-2016	Normal	19552994	18-01-2018	390.00
Product Total(s)					5					GBP							1,560.00

EMAIL REPORT

BACK

MENU

hTrak
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Once Identified the Patient – Case Study

Affix Patient Label Here

Patient Ref: 154227

Procedure Date: 20-07-2016

Hospital: Derby Hospital

Department: Cardiology

hTrak Report

Patient Ref: 154227

Procedure Date: 20-07-2016

Page 1 of 3

Patient Class:	NHS	Facility:	LAB 2
Operation Type:	Elective	Facility Cost:	
		Hand Held User:	Nahman Khaliq

Procedure Codes					
Procedure	Item Codes	Theatre Band	Band Amount	Hand Held User	Scan Date/Time
PCI 1 ARTERY	K491, Y534			Nahman Khaliq	20-07-2016 17:38:45
LHC	K634, Y534			Nahman Khaliq	20-07-2016 17:38:50
3+ DES	K752, Y534			Nahman Khaliq	20-07-2016 17:38:53

Procedure Timing				
Timing Point Name	Date & Time Stamp	Hand Held/HRS User		Procedure Duration
Start of Procedure	20-07-2016 14:29:00	Nahman Khaliq		(HH:MM:SS)
End of Procedure	20-07-2016 17:38:00	Nahman Khaliq		03:09:00

Attending Staff				
Staff ID	Staff Name	Staff Type	Staff Role	Duration
10706133	Tariq Azeem	Consultant	1st Operator	03:09:00
24803882	Nahman Khaliq	Physiologist	Physiologist	03:09:00
25657217	Lea Slingsby	Radiographer	Radiographer	03:09:00
EXTRA	Company Rep	Extra Staff	Company Rep	03:09:00
EXTRA4	Visiting Consultant	Extra Staff	Company Rep	03:09:00

Anaesthetic			
Anaesthetic Key	Anaesthetic Description	Hand Held User	Scan Date/Time
LOCAL	Local Anaesthetic	Nahman Khaliq	20-07-2016 17:14:32
SEDATION	Sedation	Nahman Khaliq	20-07-2016 17:14:33

Full Product Traceability:

hTrak Report

Patient Ref: 154227

Procedure Date: 20-07-2016

Page 3 of 3

Affix Patient Label Here

Item No.	Supplier Product Code	Description	Qty	Price	Consumption Type	Lot No.	Expiry Date	Ext. Price
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28	H7493919312250	F/G, EMERGE, MR, OUS 12mm x 2.50mm	1	42.00	Normal	19374659	28-02-2019	42.00
29	H7493919312300	F/G, EMERGE, MR, OUS 12mm x 3.00mm	1	42.00	Normal	19138808	31-12-2018	42.00
30	H7493919315250	F/G, EMERGE, MR, OUS 15mm x 2.50mm	1	42.00	Normal	19395906	28-02-2019	42.00
31	H7493919320250	F/G, EMERGE, MR, OUS 20mm x 2.50mm	1	42.00	Normal	19292522	31-01-2019	42.00
32	H7493919320300	F/G, EMERGE, MR, OUS 20mm x 3.00mm	1	42.00	Normal	19359882	28-02-2019	42.00
33	H7493926212350	SYNERGY OUS MR 3.50 X 12	1	390.00	Normal	18869747	18-07-2017	390.00
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36	H7493926238250	SYNERGY OUS MR 2.50 X 38	1	390.00	Normal	18713694	30-05-2017	390.00
37	H7493926238270	SYNERGY OUS MR 2.75 X 38	1	390.00	Normal	18713694	30-05-2017	390.00
38	KESU0002	SUPERKETCH Y CONNECTOR PLUS	1	18.00	Normal	1601084577	31-12-2019	18.00
39	LA7EBU35	CATHETER LA7EBU35 LA 7F 100CM EB35	1	21.00	Normal			21.00
40	LA8AL75SH	CATHETER LA8AL75SH LA 8F 100CM AL75	1	21.00	Normal			21.00
41	QR-80-A/10	BLUE SENSOR RADIOTRANSLUCENT QR	6	0.80	Normal			4.80
Product Totals			57					6,505.77

Name: _____

Signature: _____

Patient Ref: 154227

Procedure Date: 20-07-2016

Hospital: Derby Hospital

Department: Cardiology

Tray Traceability 'Infection Control'

Pre Scanning Solution:



- Min. 50 hour review per patient
- Cannot be 100% confident that ALL patients who subsequently came into contact with the contaminated trays could be identified

☹ 50 hours work per patient
☹ Low confidence in results

NOW:



- 30 minutes to identify ALL affected trays and patients
- High level of confidence in the findings as all information electronically captures

✓ 30 mins work for all patients
✓ High confidence in results



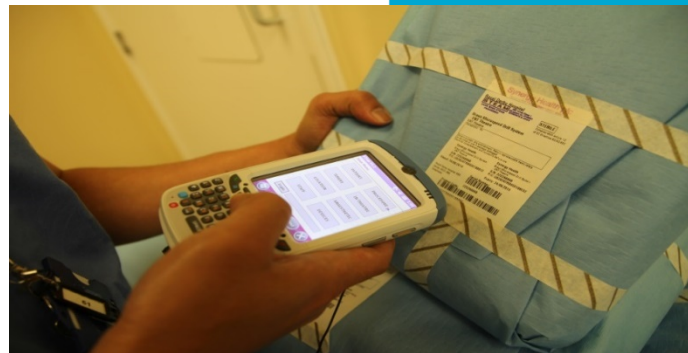
Test Case Study – CJD Scare ‘Trays and Instruments’

Trust / Theatre	Synergy Instrument / Tray No:	Patient Ref (Highlighted affected)	Procedure Date	Description
Derby Teaching Hospitals - Trauma & Orthopaedics	0101009801	01019779	07-12-2016	Anterior Cervical Retractors
		01160829	13-01-2017	Anterior Cervical Retractors
		02118555	06-03-2017	Anterior Cervical Retractors
		248951	19-12-2016	Anterior Cervical Retractors
		570185	23-12-2016	Anterior Cervical Retractors
		596164	09-01-2017	Anterior Cervical Retractors
		61192448	03-03-2017	Anterior Cervical Retractors
		626871	05-12-2016	Anterior Cervical Retractors
		81092340	03-12-2016	Anterior Cervical Retractors
		81110568	17-02-2017	Anterior Cervical Retractors
		881941	17-11-2016	Anterior Cervical Retractors
		969808	14-12-2016	Anterior Cervical Retractors
		01151839	21-11-2016	Anterior Cervical Retractors
		01160829	13-01-2017	Anterior Cervical Retractors
		02050810	06-02-2017	Anterior Cervical Retractors
		02108012	27-02-2017	Anterior Cervical Retractors
		02139076	16-01-2017	Anterior Cervical Retractors
		331104	16-02-2017	Anterior Cervical Retractors
		520109	17-01-2017	Anterior Cervical Retractors
		61132647	28-11-2016	Anterior Cervical Retractors
		61538196	01-12-2016	Anterior Cervical Retractors
		623946	31-01-2017	Anterior Cervical Retractors
		752982	30-01-2017	Anterior Cervical Retractors
		81087219	09-03-2017	Anterior Cervical Retractors
		859389	13-02-2017	Anterior Cervical Retractors
		887330	02-03-2017	Anterior Cervical Retractors
		881941	17-11-2016	Anterior Cervical Retractors
		979386	07-03-2017	Anterior Cervical Retractors
		01019779	07-12-2016	No 2 Mr Bomireddy - Cervical Spine Instruments
		477421	29-11-2016	No 2 Mr Bomireddy - Cervical Spine Instruments
		570116	16-02-2017	No 2 Mr Bomireddy - Cervical Spine Instruments
		81087219	09-03-2017	No 2 Mr Bomireddy - Cervical Spine Instruments
		881941	17-11-2016	No 2 Mr Bomireddy - Cervical Spine Instruments
		930630	23-11-2016	No 2 Mr Bomireddy - Cervical Spine Instruments
		979386	07-03-2017	No 2 Mr Bomireddy - Cervical Spine Instruments
03AG051701	03AG051701	01019779	07-12-2016	Anterior Cervical Extra's No 1
		01151839	21-11-2016	Anterior Cervical Extra's No 1
		02050810	06-02-2017	Anterior Cervical Extra's No 1
		02139076	16-01-2017	Anterior Cervical Extra's No 1
		248951	19-12-2016	Anterior Cervical Extra's No 1
		301045	30-11-2016	Anterior Cervical Extra's No 1
		392879	01-02-2017	Anterior Cervical Extra's No 1
		596164	09-01-2017	Anterior Cervical Extra's No 1
		61132647	28-11-2016	Anterior Cervical Extra's No 1
		61538196	01-12-2016	Anterior Cervical Extra's No 1
		623946	31-01-2017	Anterior Cervical Extra's No 1
		81041050	12-01-2017	Anterior Cervical Extra's No 1
		81092340	03-12-2016	Anterior Cervical Extra's No 1
		81106955	15-12-2016	Anterior Cervical Extra's No 1
		859389	13-02-2017	Anterior Cervical Extra's No 1
		881941	17-11-2016	Anterior Cervical Extra's No 1
03AG061201	03AG061201	01019779	07-12-2016	Anterior Cervical Extra's No 1
		01151839	21-11-2016	Anterior Cervical Extra's No 1
		02050810	06-02-2017	Anterior Cervical Extra's No 1
		02139076	16-01-2017	Anterior Cervical Extra's No 1
		248951	19-12-2016	Anterior Cervical Extra's No 1
		301045	30-11-2016	Anterior Cervical Extra's No 1
		392879	01-02-2017	Anterior Cervical Extra's No 1
		596164	09-01-2017	Anterior Cervical Extra's No 1
		61132647	28-11-2016	Anterior Cervical Extra's No 1
		61538196	01-12-2016	Anterior Cervical Extra's No 1
		623946	31-01-2017	Anterior Cervical Extra's No 1
		81041050	12-01-2017	Anterior Cervical Extra's No 1
		81092340	03-12-2016	Anterior Cervical Extra's No 1
		81106955	15-12-2016	Anterior Cervical Extra's No 1
		859389	13-02-2017	Anterior Cervical Extra's No 1
		881941	17-11-2016	Anterior Cervical Extra's No 1

Test Case 5

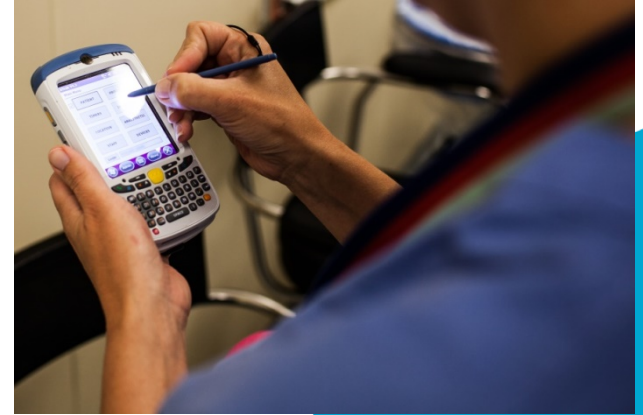
Four Patients;

- Identified Patient
- Tray and Instrument used
- Other Patients affected?
- Significant Time and Accuracy benefits.
- 30 mins versus Weeks!



The Future

- Patient Outcomes/Complications
- Pathology
- Pharmacy/ Medicines Management
- Asset Management Tracking
- RFID – Staff / Patient
- WHO Moment – Electronic Capture
- STOP Moment – Electronic Capture
- Reporting – Agenda items
- Central Stores
- National Benchmarking



Live in Day case: Other areas imminent. Positive Patient ID

100% of Trust patients are issued with GS1 compliant wristbands.

This includes covers:

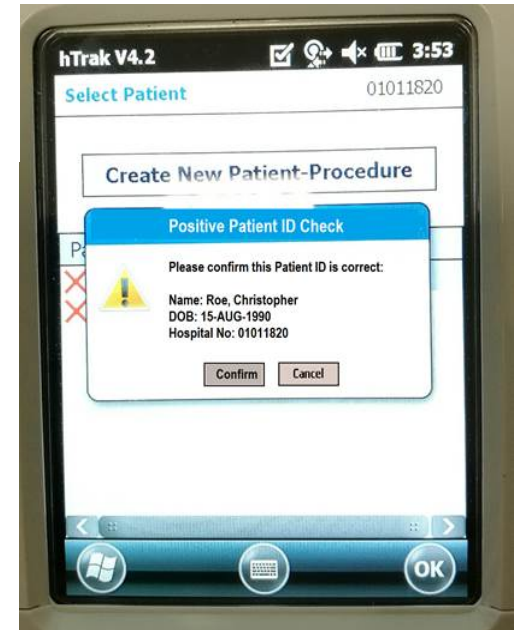
- Adult wristbands
- Child wristbands
- Neonatal wristbands



Surname **ELEVENSES**
Forename **Pas**
D.O.B. **17-Apr-1967**
Hospital No. **98989898**
NHS No. **123 456 7890**



1. Scanning wristbands ensures we have the right patient!
2. Data is then accurately captured feeding trust systems, enabling analysis, reporting and decisions to be made.



The future: What doing, Allergies, wrong product...

Consultant Pre-Op information



Knowledge of implants prior to procedure:

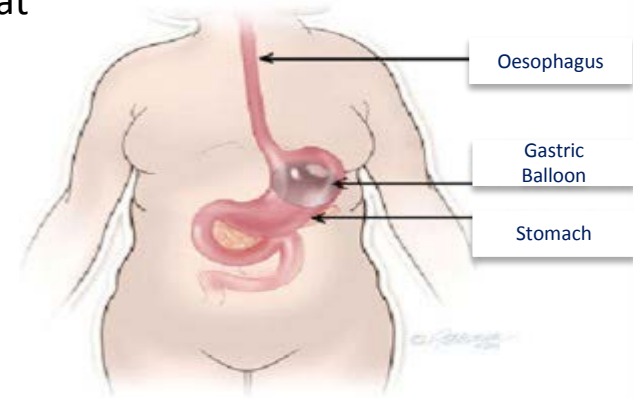
- How many plates / screws are in already
- Types of screw heads to expect
- The right equipment to hand
- Not going in blind!

Driving Product Recalls when faulty products are identified;

Patient 1 - Faulty Device identified intraoperatively and replaced with second device. Patient discharged home. Same day arrives at Darlington for removal of second device which also failed. Faulty product fitted at Derby

Patient 2 – Arrives at Derby for removal of faulty product, inserted in London hospital. Identified as same product.

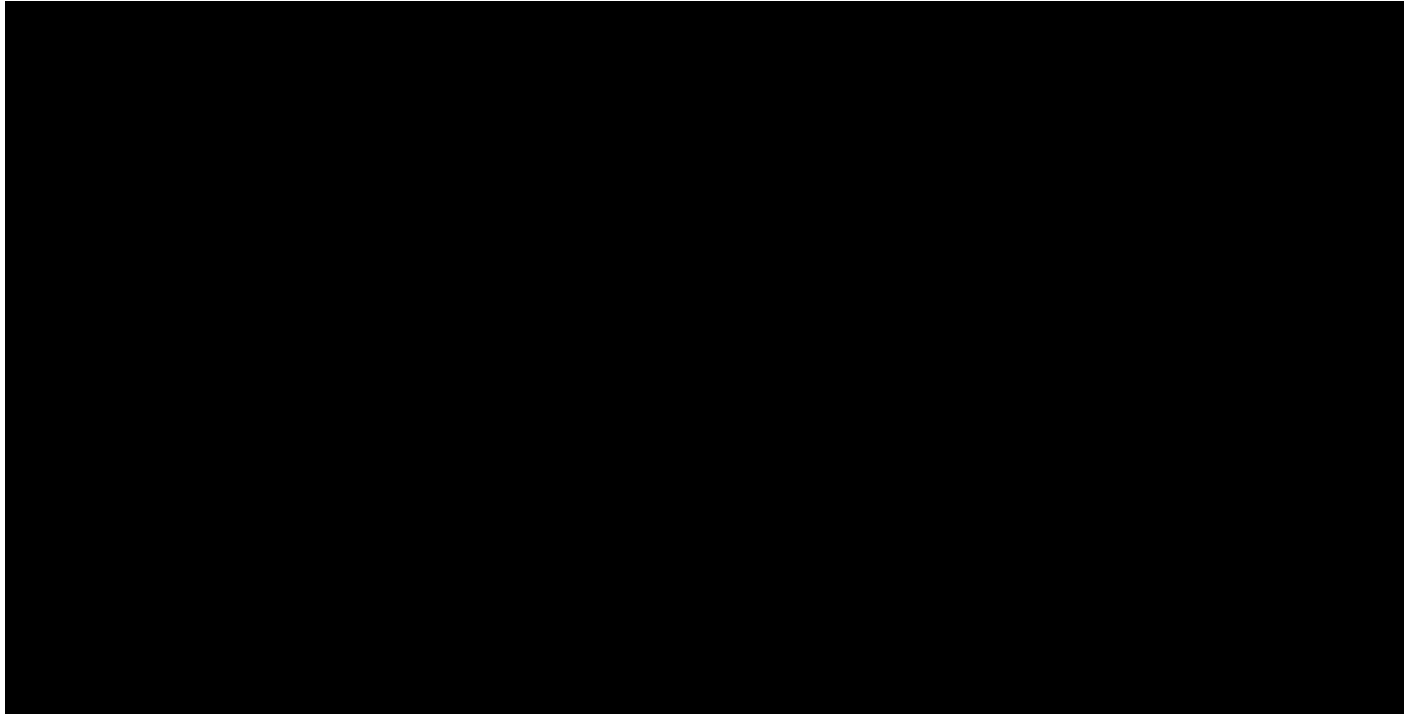
Patient 3 – Operated on in Derby and removal of faulty product in Derby.



Derby:

- Can trace product and batch in seconds.
- Can identify location of store room where other faulty products are located

Developments in Intensive Care



Thank you for listening

Any Questions?

Panelists



Feargal McGroarty,
National Haemophilia
System Project
Manager,
St. James's Hospital



Keith Jones,
Clinical Director of
Surgery,
Derby Teaching
Hospitals
NHS Foundation
Trust



Kevin Downs,
Director Finance,
Derby Teaching
Hospitals
NHS Foundation
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Wilfried Winzer,
Director,
University hospital
Dresden

