



GS1 Global Healthcare Conference HPAC Working Lunch

Thursday 25th October 2012





Agenda

- Introduction – Janice Kite, Traceability Director, GS1 Global Office 10min
- Case Studies:
 - Andrew Smith, St James' (Ireland) 15min
 - Tom Pereboom, Hospital Amstelland (Netherlands) 15min
 - Frederique Fremont, C.H.I. Robert Ballanger Hospital (France) 15min
- Open Q&A, Discussion - Feargal McGroarty, Tri-Chair 50 min
 - Questions for our presenters
 - Implementation Pain Points
 - Call to Action > Position Papers





Introduction

Janice Kite

Traceability Director Healthcare

GS1 Global Office





HPAC – Who?



Tri-Chairs – Clinical

- Feargal Mc Groarty FIBMS, Project Manager, IMS Dept, St. James's Hospital, Dublin, Ireland



Tri-Chairs – Non-Clinical

- Martin Edwards, Director Information Systems, Health Purchasing Victoria – Australia



Tri-Chairs – GS1 Member Organisation (MO)

- Doris Nessim, Vice President Pharmacy, Patient Safety & eHealth, GS1 Canada



GS1 Facilitator

- Janice Kite MBA, Traceability Director Healthcare, GS1 Global Office



HPAC Objectives

- **Objective:**

- Be a forum for sharing and discussing the practical realities of implementation of GS1 Standards in the care giving environment in regards to the impact on clinical care and patient interaction
- To identify projects that support the adoption of GS1 Standards in Healthcare institutions and retail pharmacies
- To identify best practices and case studies for publication, presentation and sharing
- Be a source of expertise and provide feedback and advice to those involved in GS1 standards development, the wider Healthcare stakeholder community and senior executives/decision-makers to gain their buy-in and support for implementation of GS1 Standards

- **Scope:**

- The Advisory Council will consist of thought leaders and early adopters of GS1 Healthcare Standards from the global clinical provider environment (e.g. hospitals, retail and hospital pharmacies, clinics, care homes etc.).



HPAC achievements since Dec 2010?

- ✓ **Objective:** Be a forum for sharing and discussing the practical realities of implementation of GS1 Standards in the care giving environment in regards to the impact on clinical care and patient interaction
 - 1. Lack of awareness in provider environment** (Particularly C-Suite)
 - ✓ *Create C-Suite Slide Deck (Top download from cRoom)*
 - 2. 11 Pain Points** (aka Implementation Realities)
 - 4 Process related (e.g. clinical dispensing of generic medicines; tender categories; reporting analysis; scanning meds in OR)
 - Highlighted but not solved by GS1 Standards Implementation
 - 2 Information Technology/Systems/Applications related
 - Common across the organisation; whichever systems involved (clinical, non-clinical/admin)
 - 5 Bar code symbol related
 - No bar code symbol present
 - Poor quality bar code symbol
 - Placement of bar code symbols
 - More than one bar code symbol
 - Non-Standard bar code symbols
 - ✓ **2 Position Papers:** IT/IS Interoperability; Bar Code Symbology Issues
 - Launch and Call to Action at the end of the Hospital Plenary Session this Thursday!



HPAC achievements since Dec 2010?

- ✓ **Objective:** Be a source of expertise and provide feedback and advice to those involved in GS1 standards development, the wider Healthcare stakeholder community and senior executives/decision-makers to gain their buy-in and support for implementation of GS1 Standards
 - 1. Lack of awareness in provider environment** (Particularly C-Suite)
 - ✓ Create C-Suite Slide Deck (*Top download from cRoom*)
<http://community.gs1.org/apps/org/workgroup/gs1hpac/download.php/42550/latest>
 - 2. HPAC Monthly Calls**
 - ✓ Agenda items and on-going discussions
 - 3. Need to do more...**



HPAC – To Do?

- Objectives

- Be a forum for sharing and discussing the practical realities of implementation of GS1 Standards in the care giving environment in regards to the impact on clinical care and patient interaction
- Be a source of expertise and provide feedback and advice to those involved in GS1 standards development, the wider Healthcare stakeholder community and senior executives/decision-makers to gain their buy-in and support for implementation of GS1 Standards
- To identify projects that support the adoption of GS1 Standards in Healthcare institutions and retail pharmacies
- To identify best practices and case studies for publication, presentation and sharing

Current research/survey:

Are the original objectives still relevant?

Which will determine:

What next for HPAC?



Agenda

- ✓ Introduction – Janice Kite, Traceability Director, GS1 Global Office 10min
- Case Studies:
 - Tom Pereboom, Hospital Amstelland (Netherlands) 15min
 - Andrew Smith, St James' (Ireland) 15min
 - Frederique Fremont, C.H.I. Robert Ballanger Hospital (France) 15min
- Open Q&A, Discussion - Feargal McGroarty, Tri-Chair 50 min
 - Questions for our presenters
 - Implementation Pain Points
 - Call to Action > Position Papers





St James's Hospital Andrew Smith, HSSU

Innovative National Traceability in
Healthcare using GS1 Standards





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)”

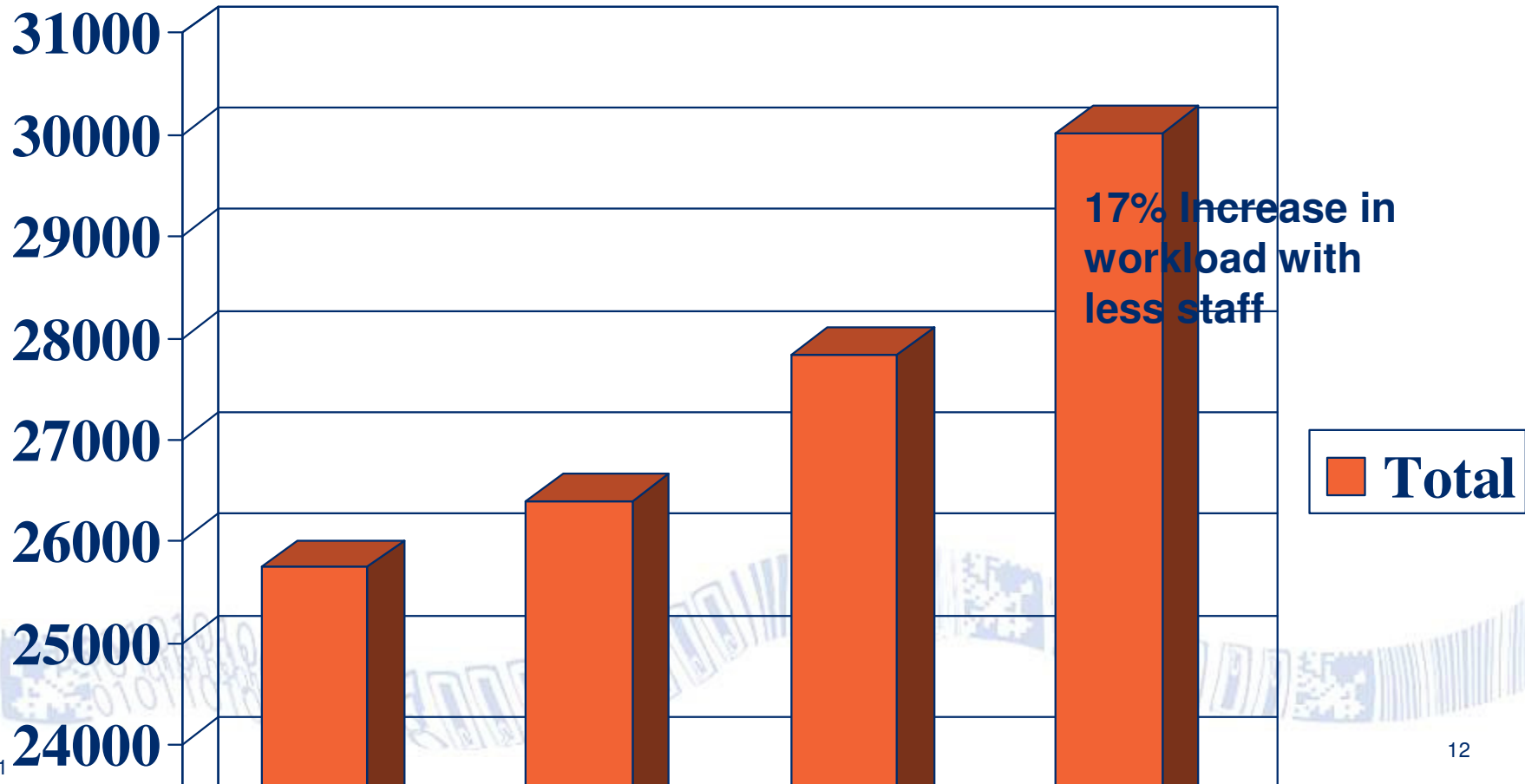
- HSE Recommended Practices for Central Decontamination Units. Version 2.0, 2011

Project started in May 2008 – 1st “Go Live” site was St. James’s Hospital in July 2011





Innovative National Traceability in Healthcare using GS1 Standards





GS1 Standards help enable traceability of surgical instruments at St James's Hospital (as part of National HSE programme)



St James's Hospital –
1,000-bed hospital in Dublin,
Ireland



Issue(s)

- Ineffective traceability of surgical instruments from theatre through to hospital sterilisation process
- Time wasted on manual processes (searching for instruments, documentation etc.)

Solution

- Implementation of an integrated tracking and **traceability system**
- Identification of Instrument Trays using GS1 numbers
- Implementation of GS1 Standards, including GTIN, GLN and Global Traceability Standard

Results

Effective traceability of surgical instruments during sterilization process

- Reduced manual effort and increased efficiency due to automation
- Increased inventory management – better stock visibility
- Increased traceability from theatre through sterilisation
- Improved workflow through automation/scanning
- Process to share loan sets much more efficient and effective

Cost: Setup cost: €47k, Ongoing maintenance: €7.5k p.a.

Return: 17% increase in workload with less staff



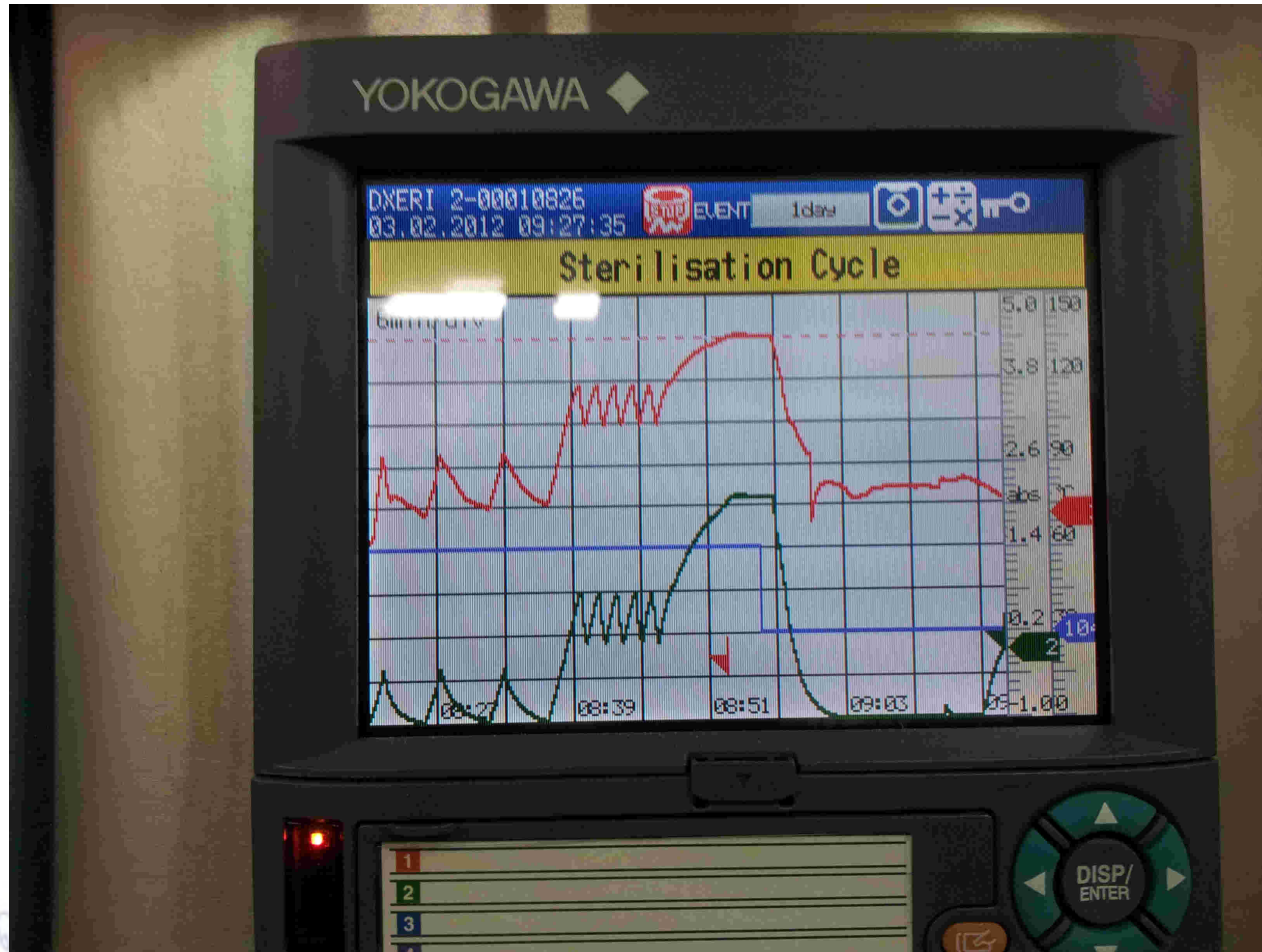
Tracking Stations



New Equipment



Dataloggers



Linked to Tracking system



Tracking Instruments - Before



Manual Check



Tracking Instruments - After



Barcode	User Code	Description	Quantity	Date In	Time In	Loaded By
▼ Washer : 1						
6000010	N/A	CONTAINERS		1 11/04/2012	14:00:57	AGNES
▼ Washer : 3						
10041850009	500	RHINO & SMR SET (PLASTICS)-02		1 11/04/2012	14:19:54	PAUL R
100377400043	59	CABG SET-05		1 11/04/2012	14:19:36	PAUL R
100293700031	3262	BARRE INSTRUMENTS SET		1 11/04/2012	14:17:01	PAUL R
100387500031	3322	BOOKWALTER RETRACTOR SET 2-02		1 11/04/2012	14:17:01	PAUL R
100302000011	3525	FINE STILLE OSTEOTOMES (TH 38/4)		1 11/04/2012	14:16:58	PAUL R
100368000029	3099	GYNAE ONCOLOGY SET-05		1 11/04/2012	14:16:52	PAUL R
100287700046	517	ABDOMINAL HYSTERECTOMY SET-01		1 11/04/2012	14:16:48	PAUL R
100322800049	3520	OPEN UROLOGY SET		1 11/04/2012	14:16:45	PAUL R

Information available:

- **Electronically & Post -event**



Instrument Set Lists - Before



Paper based



Instrument Set Lists - Before



Hard to find the right file and right version



Instrument Set Lists - After






Electronic, file printed when Tray is scanned
No need to search and certainty of document version



Eg: Printed Checklist



 100296200002 Version No. 0000 Printed On: 03/02/2012 09:22:54		LOT 00002 User Code 80		ST JAMES'S HOSPITAL DUBLIN THEATRE 1 CHAUX RETRACTOR CARDIAC-01					
Qty Tot	Check Mis	Check 1	Description	Qty Act	Check				
					2	3	4	5	
2			SIDE ARM	2					
1			INTERLOCKING BRACKET WITH MAIN ARM ATTACHED 34-1150	1					
1			INTERLOCKING BRACKET WITH HOLE FOR KEY	1					
2			SCREW	2					
1			TIGHTENING KEY	1					
2			BLADE	2					
					Place A Tick In The Box As Required				
9 Items In This Set.									
Clean Room (Check 1)				Theatre Number					
Sign		Date		Date Used					
		/ /				Hospital Reg. No.			
Wash Room (Check 5)									
Sign		Date							
		/ /							
Scrub Nurse Sign		Check 2		Check 3		Check 4			
Circ. Nurse Sign		Check 2		Check 3		Check 4			

DO NOT USE IF PACKING DAMAGED STORE IN A CLEAN, DRY, DUST FREE ENVIRONMENT <small>This Document Must Not Be Copied Or Reproduced © 2009 FingerPrint Medical Ltd</small>	 100296200002	USER CODE 80 LOT 00002	PAGE 1 of 1
---	---	---	-----------------------



CHAUX RETRACTOR CARDIAC-01
 THEATRE 1
 Tracker Ref: 1002962

Eg: Instrument
 Tray Label




2

 800453970219991000928
 Duplicate Label Tracker Ref: 1002962

ST JAMES'S HOSPITAL DUBLIN

THEATRE 1
CHAUX RETRACTOR
CARDIAC-01

ID 1002962
 LOT 00002

  
 2012-02-03 2013-02-02

CHAUX RETRACTOR CARDIAC-01
 CHAUX RETRACTOR CARDIAC-01

ID 1002962 ID - 1002962 LOT - 00002
 LOT 00002 UC - 80
 USER CODE 80

Version 0
 Category

STEAM **BROWN WHEN PROCESSED**

Re-order code FPM001 DO NOT USE IF PACKAGING IS DAMAGED OR OPEN
 Tel: +44 (0) 1454 338 742 STORE IN A CLEAN DUST FREE ENVIRONMENT





Process Log - Before



St. James's Hospital

R190

DATE	NAME OF SET	THEATRE	LIST OF INSTRUMENTS	SIGNATURE
2/6/11	Radiat Set no (235)	T		delantina
	BASIC VAS 437	T		Rumsey
	MINOR ORTHO 115	T		AlOthluis
	Cardiac Basic Set 46	T		Eileen Healy
	Micro Air Dull Ream 2963	T		John
	Abdom Hyster 520	T		delantina
	BASIC VAS 438	T		Rumsey
	MINOR ABDOM 282	T		Rumsey
	Basic Hip 3332	T		Eileen Healy
	Sternum Saw 3238	T		Eileen Healy
	UNGRAVED TIBIAL NAIL 172	T		AlOthluis
	INTESINAL 324	T		AlOthluis
	THORACOSCOPY 613	T		Rumsey
	Basic Plastic 357	T		E Healy
	GENERAL PLASTIC 394	T		AlOthluis
	GENERAL PLASTIC 392	T		AlOthluis
	MAJOR ABDOMINAL 306	T		John
	Basic Plastic 354	T		Eileen Healy
	MEGASALASCOPY 2316	T		Rumsey
	VEINS SET 479	T		AlOthluis
	Aiming Device / Radiolucent 3201	T		John
	Basic PLASTIC 3145	T		Rumsey
	CABG 724	T		AlOthluis
	Basic Plastic 349	T		E Healy
	THORASCOPY 2315	T		AlOthluis
	MAJ ABDOM 304	T		Rumsey
	MICRO NERVE 3709	T		AlOthluis
	Micro Air Dull 2963	T		John
	COMPACT AIR DUNE 2871	T		AlOthluis

Paper based



Process Log - After



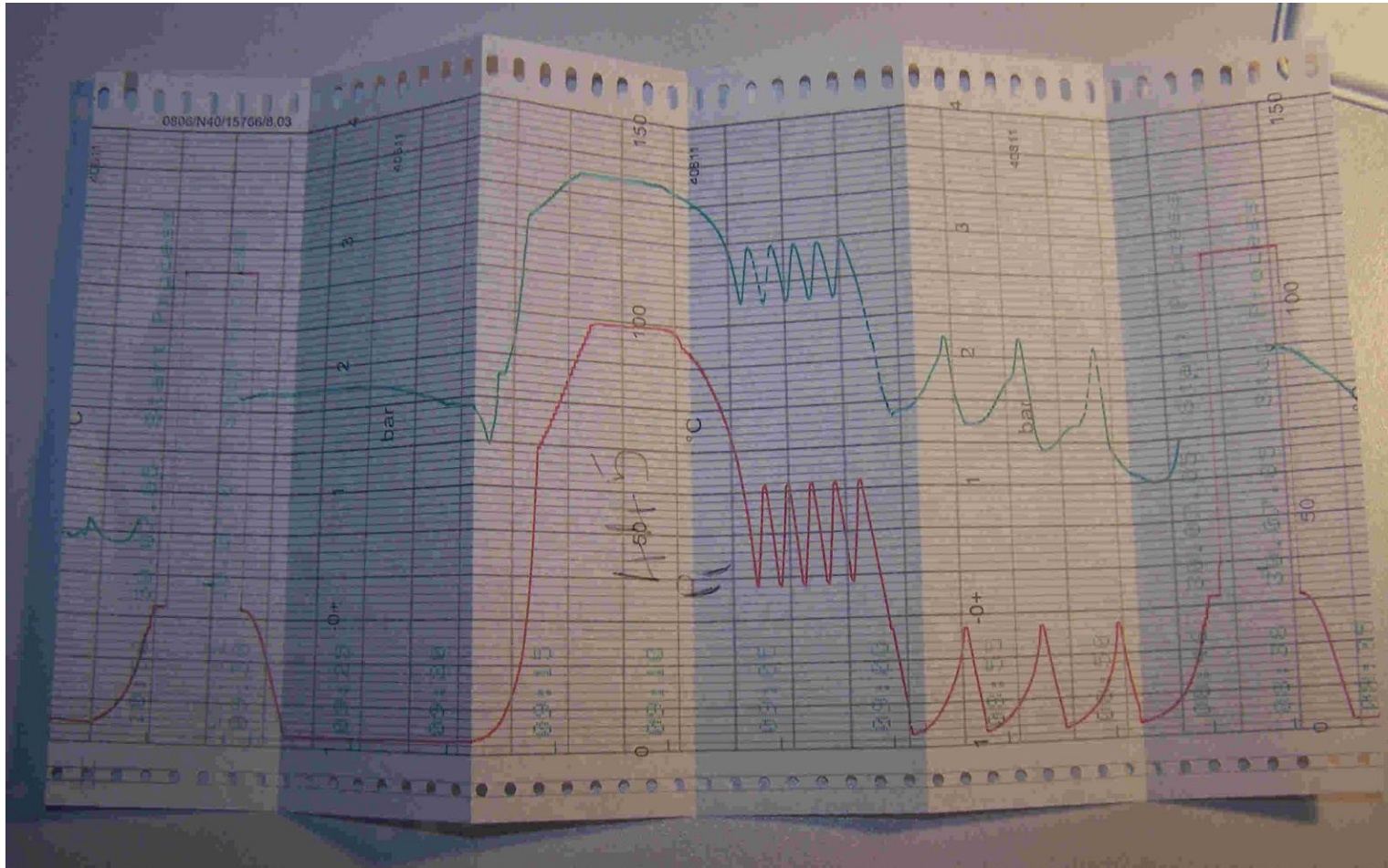
From : 05/04/2012		ST JAMES'S HOSPITAL DUBLIN			
To : 05/04/2012					
01:Packing Detail					
Unknown Type					
Barcode	UserCode	Operator	Date In	Time In	Description
100398700044	531	EILEEN H	05/04/2012	08:13:31	GYNAE LAPAROSCOPY SET-01
100458400011	2772	LINDA R	05/04/2012	08:54:05	30° LENS 4MM WOLF 433424 DSC
100457900012	2130	LINDA R	05/04/2012	09:01:13	0° LENS 4MM WOLF 427581 DSC
100458500018	2781	LINDA R	05/04/2012	09:05:31	30° LENS 4MM WOLF 433413 DSC
100460500024	4030	LINDA R	05/04/2012	09:08:52	HYSTEROSCOPE & SHEATH 5000193167 DSC
100303600088	2609	EILEEN H	05/04/2012	10:41:07	GENERAL LAPAROSCOPY SET NEW-01
100455100026	3768	LINDA R	05/04/2012	10:44:50	0° LENS 10MM WOLF 5000171714 DSC
100375400073	2938	PAUL R.	05/04/2012	11:42:50	GENERAL LAPAROSCOPY SET NEW-06
100452500029	3195	ANTHONY C	05/04/2012	12:11:05	0° LENS 5.3MM WOLF 468796
100454900009	3177	LINDA R	05/04/2012	14:15:57	30° LENS 10MM WOLF 436023 DSC
100475700020	6024	LINDA R	05/04/2012	14:16:29	0° LENS 5MM STORZ 1127861 DSC
100375200071	2936	DOROTA S	05/04/2012	14:31:34	GENERAL LAPAROSCOPY SET NEW-04
100321000006	2393	JOSEPHINE D	05/04/2012	17:12:41	NEPHROSCOPE
100453000042	3194	DEIRDRE C	05/04/2012	17:29:14	30° LENS 10MM WOLF 457074
100452400009	3304	DEIRDRE C	05/04/2012	17:33:15	0° LENS 5MM STORZ 930600
100416900029	3889	JOSEPHINE D	05/04/2012	17:36:06	URETEROSCOPE STRAIGHT TH 10 & 11-04
100453200048	3677	DEIRDRE C	05/04/2012	17:38:59	30° LENS 10MM WOLF 5000145118
100328200015	879	JOSEPHINE D	05/04/2012	17:42:33	WOLF LITHOCLAST FULL SET
100465500034	6000	DEIRDRE C	05/04/2012	17:44:08	30° LENS 4MM ACMI 739453
100453100047	3676	DEIRDRE C	05/04/2012	17:48:29	30° LENS 10MM WOLF 5000145117

Number Of Items : 20

**Electronic & Legible
Post-event – Can be retrieved at the touch of a button**



Steriliser Cycle Record - Before



**Paper based
Subject to deterioration over time**



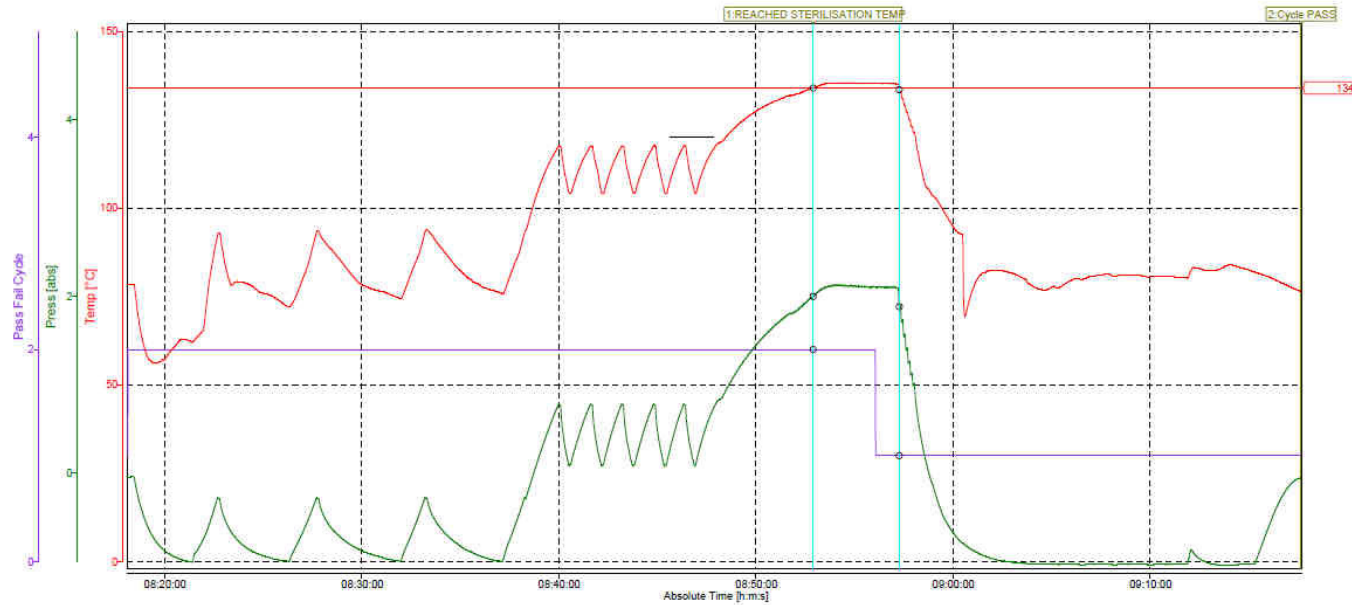
Steriliser Cycle Record - After



File Name : 001755_DXERI 2-00010825.DAE
Device Type : DX1000
Batch No. : DXERI 2
Lot No. : 00010825
Printed Group : STERILISER 2
Printed Range : 2012/02/03 08:18:08.000 - 2012/02/03 09:17:40.000
Comment : STERILISER CYCLE - PASS

Start Time : 2012/02/03 08:18:08.000
Stop Time : 2012/02/03 09:17:40.000

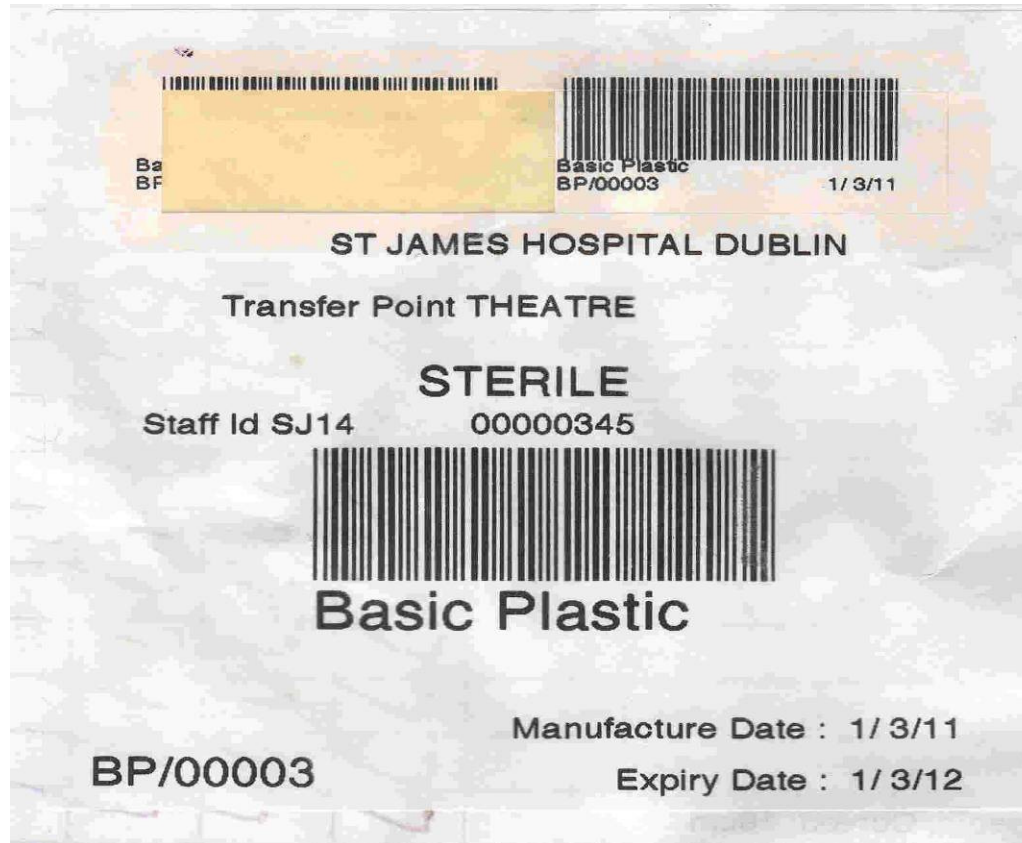
	Cursor A	Cursor B	Difference
Data No.	2087	2349	262
Absolute Time	2012/02/03 08:52:58.000	2012/02/03 08:57:17.000	00:04:22.000
Tag No.	Value A	Value B	Value B-A
Temp[°C]	134.0	133.5	-0.5
Press[abs]	2.000	1.886	-0.116
Pass/Fail Cycle[]	2	1	-1



Electronic Post-event – Can be retrieved at the touch of a button



Tracking in Theatres - Before



Paper based



Tracking in Theatres - After



Document List Report

Document Number: T200242		Patient ID: 1087474	Theatre: THEATRE 2
Document Created By %JESSIE S	Date & Time Created 02/02/2012 14:14:23	Amendments	
Code: 1003567 Lot No: 00035 Quantity: 1 Operator: %JESSIE S	Type: TRACKER Item: BASIC CARDIAC SET-04 Supplier: STERILE SERVICES Remarks:		
Code: 1003774 Lot No: 00033 Quantity: 1 Operator: %JESSIE S	Type: TRACKER Item: CABG SET-05 Supplier: STERILE SERVICES Remarks:		
Code: 1004160 Lot No: 00027 Quantity: 1 Operator: %JESSIE S	Type: TRACKER Item: CARDIAC MAMMARY RETRACTOR-03 Supplier: STERILE SERVICES Remarks: _____		
Code: 1003741 Lot No: 00049 Quantity: 1 Operator: %JESSIE S	Type: TRACKER Item: STERNAL SAW BATTERY POWERED-01 Supplier: STERILE SERVICES Remarks:		

Number Of Items: 4

Document Number: T200243		Patient ID: 1087474	Theatre: THEATRE 2
Document Created By %JENNIFER I	Date & Time Created 02/02/2012 15:29:26	Amendments	
Code: 1002962 Lot No: 00001 Quantity: 1 Operator: %JENNIFER I	Type: TRACKER Item: CHAUX RETRACTOR CARDIAC-01 Supplier: STERILE SERVICES Remarks:		

Number Of Items: 1

Total Items: 5

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



Loan Sets



The Big Challenge !!

- Shared among hospitals (contents always changing)
- Traceability is very challenging



Loan Set Checklists - Before



H.S.S.U. INSTRUMENT CHECKLIST - OPERATING THEATRE

SET NAME: Pinnacle Set (Tray 1)

Check 1	# of items	NAME OF ITEM	Check					Set No.
			2	3	4	5		
		Trial Cup Instruments						
1	1	Pinnacle acetabular cup trial 48mm 221701048					Packing & Control	
1	1	Pinnacle acetabular cup trial 50mm 221701050					Check 1	
1	1	Pinnacle acetabular cup trial 52mm 221701052						
1	1	Pinnacle acetabular cup trial 54mm 221701054					Sign:	
1	1	Pinnacle acetabular cup trial 56mm 221701056					Date:	
1	1	Pinnacle acetabular cup trial 58mm 221701058						
1	1	Pinnacle acetabular cup trial 60mm 221701060					Decontaminator	
1	1	Pinnacle acetabular cup trial 62mm 221701062						
1	1	Pinnacle acetabular cup trial 64mm 221701064					Check 5	
1	1	Pinnacle acetabular cup trial 66mm 221701066						
1	1	Pinnacle straight impactor 221750041					Sign	
1	1	Quickset ratchet screw driver handle 227402000					Theatre Number	
1	1	Quickset ridged tapered hex screw driver 227447000						
1	1	Green impactor tip 28mm 221750006					Date Used	
1	1	Blue impactor tip 32mm 221750007					Hospital Reg. No	
1	1	Orange impactor tip 36mm 221750008						
1	1	Celamie Suction Cup 221700020					Scrub Nurse Sign:	
1	1	Insulated Suction tip for cup 959910000					Check 1	
		Insulated Version guide (2 pieces) 221750014					Check 2	
		Heads:					Check 3	
1	1	28 Green +1.5					Circ. Nurse Sign:	
1	1	28 Brown +5						
1	1	28 Blue +8.5					Check 1	
1	1	28 Black +12						
1	1	32 Green +1					Check 2	
1	1	32 Brown +5						
1	1	32 Blue +9					Check 3	
1	1	32 Black +13						
1	1	36 Green +1.5						
1	1	36 Brown +5						
1	1	36 Blue +8.5						
1	1	36 Black +12						
		36 Light Brown -2:						

- Paper based
- No certainty that list matched tray contents



Loan Set Checklists - After



ST JAMES'S HOSPITAL DUBLIN
00001
User Code
SET00219
AO COMPACT HAND SET, TH9

Qty	Description	Qty	Check
0	STANDARD INSTRUMENTS:	0	
1	HANDLE MEDIUM WITH QUICK COUPLING	1	
1	DEPT GAUGE	1	
1	DEPT GAUGE	1	
2	PLIERS FLAT NOSED	2	
1	SCREW HOLDING FORCEPS	1	
1	BENDING CUTTING PLIERS	1	
0	ADDITIONAL INSTRUMENTS:	0	
1	SHARP HOOK	1	
1	REDUCTION FORCEPS WITH POINTS	1	
1	HOLDING FORCEPS WITH SWIVEL FOOT	1	
1	SMALL REDUCTION FORCEPS	1	
1	REDUCTION FORCEPS	1	
1	SMALL BONE LEVER	1	
1	SMALL BONE LEVER	1	
1	PERIOSTEAL ELEVATOR	1	
1	DOUBLE GUIDE IN TRAY	1	
1	DRILL LOCKING SLEEVE	1	
0	COMPACT HAND 1.5 TITANIUM IMPLANTS & INSTRUMENTS:	0	
1	COUNTERSINK	1	
1	DRILL BIT 1.1MM	1	
1	DRILL BIT 1.5MM	1	
1	SCREWDRIVER SHAFT AND HOLDING SLEEVE	1	
1	DOUBLE DRILL GUIDE	1	
1	COMPACT HAND 2.0 LCP TITANIUM IMPLANTS & INSTRUMENTS	1	
0	TOP TRAY:	0	
1	COUNTERSINK	1	
1	DRILL BIT SHORT 1.5MM	1	
1	DRILL BIT LONG 1.5MM	1	
1	DRILL BIT 2.0MM	1	
1	SCREWDRIVER SHAFT STARDRIVE SHORT	1	
0	BOTTOM TRAY:	0	
1	UNIVERSAL DRILL GUIDE	1	
1	SCREWDRIVER SHAFT STARDRIVE & HOLDING SLEEVE	1	
1	LCP DRILL SLEEVE	1	
1	LCP BENDING PIN	1	

Place A Tick In The Box As Required

DO NOT USE IF PACKING DAMAGED
STORE IN A CLEAN, DRY, DUST FREE ENVIRONMENT

USER CODE: SE100219
PAGE: 1 of 2
LOT: 00001

- Electronic
- Fully Legible
- Up to date
- List can be pulled from MS1 database just by scanning the tray



Loan Set Tracking in Theatres



Document List Report

Document Number: D100090	Patient ID: 1018678	Theatre: DAY THEATRE 1
Document Created By: %LEENA J.P.	Date & Time Created: 19/08/2011 11:45:48	Amendments
Code: 1003849 Lot No: 00004 Quantity: 1 Operator: %LEENA J.P.	Type: TRACKER Item: BASIC PLASTIC SET DSC-14 Supplier: STERILE SERVICES Remarks:	
Code: 1004400 Lot No: 00003 Quantity: 1 Operator: %LEENA J.P.	Type: TRACKER Item: FINE OSTEOTOME SET DSC-02 Supplier: STERILE SERVICES Remarks:	
Code: 1004414 Lot No: 00002 Quantity: 1 Operator: %LEENA J.P.	Type: TRACKER Item: MICRO AIRE SMART DRIVER DSC-02 Supplier: STERILE SERVICES Remarks:	
		Number Of Items: 3

Document Number: D100092	Patient ID: 1018678	Theatre: DAY THEATRE 1
Document Created By: %ANDREW	Date & Time Created: 22/08/2011 11:54:31	Amendments
Code: 00045293009990027 Lot No: 02793 Quantity: 1 Operator: %ANDREW	Type: MS1 Download Item: AG COMPACT HAND SET, TH9 Supplier: 53030900009 Remarks:	
		Number Of Items: 1
		Total Items: 4



Example of Reports # 1



From : 02/02/2012						ST JAMES'S HOSPITAL DUBLIN			
To : 02/02/2012									
Washer Report Washer Report Washer Report Washer Report Washer Report Washer Report Washer Report Washer Report									
01:Machine Detailed Report									
Machine No. 5									
Code	User Code	Description	Cycle Rack	Qty	LoadedBy Date In	Time In	Unloaded By DateOut	Time Out	
1004160	1943	CARDIAC MAMMARY RETRACTOR-03	9484	1	RAJAN D 02/02/2012	17:15:50	SEAMUS L 02/02/2012	18:35:30	
1002962	80	CHAUX RETRACTOR CARDIAC-01	9484	1	RAJAN D 02/02/2012	17:15:48	SEAMUS L 02/02/2012	18:35:31	
1003611	132	BASIC ORTHOPAEDIC SET-10	9484	1	RAJAN D 02/02/2012	17:20:39	SEAMUS L 02/02/2012	18:35:31	
1004137	3719	SELLORS RETRACTOR, CARDIAC-03	9484	1	RAJAN D 02/02/2012	17:15:44	SEAMUS L 02/02/2012	18:35:31	
1003695	252	THORACOTOMY SET-07	9484	1	RAJAN D 02/02/2012	17:15:39	SEAMUS L 02/02/2012	18:35:31	
1002981	2867	COMPACT AIR DRIVE, 23009	9484	1	RAJAN D 02/02/2012	17:15:20	SEAMUS L 02/02/2012	18:35:31	
1003174	2964	MICRO AIRE DRILL REAMER SET NO 4	9484	1	RAJAN D 02/02/2012	17:16:10	SEAMUS L 02/02/2012	18:35:32	
1003248	3717	SELLORS RETRACTOR, CARDIAC-01	9484	1	RAJAN D 02/02/2012	17:15:56	SEAMUS L 02/02/2012	18:35:32	
				8					





Example of Reports # 2



From : 01/02/2012
To : 03/02/2012

ST JAMES'S HOSPITAL DUBLIN

Audit Report

Date	Time	Code	Operator	Description	Machine	Cycle	Status
02/02/2012	18:22:16	100296200001	PAUL R	CHAUX RETRACTOR CARDIAC-01	0	0	DIRTY RETURNS
02/02/2012	17:15:48	100296200001	RAJAN D	CHAUX RETRACTOR CARDIAC-01	5	9484	WASHER LOAD
02/02/2012	18:35:31	100296200001	SEAMUS L	CHAUX RETRACTOR CARDIAC-01	5	9484	WASHER UNLOADED
02/02/2012	18:59:34	100296200002	SUSAN O B	CHAUX RETRACTOR CARDIAC-01	0	0	PACKING 1st SCAN
03/02/2012	08:18:22	100296200002	DEIRDRE C	CHAUX RETRACTOR CARDIAC-01	2	10825	AUTOCLAVE LOAD
03/02/2012	09:35:09	100296200002	DEIRDRE C	CHAUX RETRACTOR CARDIAC-01	2	10825	AUTOCLAVE UNLOAD
03/02/2012	09:35:09	100296200002	DEIRDRE C	CHAUX RETRACTOR CARDIAC-01	2	10825	ISSUED OFFSITE



Example of Reports # 3



Document List Report

Document Number	Patient ID	Theatre
T300041	1062332	THEATRE 3
Document Created By: %THERESE G Date & Time Created: 18/08/2011 10:09:42	Amendments	
Code: 1002912 Lot No: 00004 Quantity: 1 Operator: %THERESE G	Type: TRACKER Item: BASIC VASCULAR SET-01 Supplier: STERILE SERVICES Remarks:	Number Of Items: 1
T300243	1069539	THEATRE 3
Document Created By: %DOLLY B Date & Time Created: 03/11/2011 19:11:21	Amendments	
Code: 1002912 Lot No: 00011 Quantity: 1 Operator: %DOLLY B	Type: TRACKER Item: BASIC VASCULAR SET-01 Supplier: STERILE SERVICES Remarks:	Number Of Items: 1
T300356	1076379	THEATRE 3
Document Created By: %THERESE G Date & Time Created: 16/12/2011 11:44:52	Amendments	
Code: 1002912 Lot No: 00014 Quantity: 1 Operator: %THERESE G	Type: TRACKER Item: BASIC VASCULAR SET-01 Supplier: STERILE SERVICES Remarks:	Number Of Items: 1
T400014	1049242	THEATRE 4
Document Created By: %GERALDINE R Date & Time Created: 28/07/2011 12:37:53	Amendments	
Code: 1002912 Lot No: 00001 Quantity: 1 Operator: %GERALDINE R	Type: TRACKER Item: BASIC VASCULAR SET-01 Supplier: STERILE SERVICES Remarks:	Number Of Items: 1
T500061	0359190	THEATRE 6
Document Created By: %DANIELLE K Date & Time Created: 01/09/2011 15:31:40	Amendments	
Code: 1002912 Lot No: 00005 Quantity: 1 Operator: %DANIELLE K	Type: TRACKER Item: BASIC VASCULAR SET-01 Supplier: STERILE SERVICES Remarks:	Number Of Items: 1
T500071	1065680	THEATRE 6
Document Created By: 100291200006 Date & Time Created: 06/09/2011 10:44:17	Amendments	
Code: 1002912 Lot No: 00006 Quantity: 1 Operator: 100291200006	Type: TRACKER Item: BASIC VASCULAR SET-01 Supplier: STERILE SERVICES Remarks:	Number Of Items: 1
T500110	0778425	THEATRE 6
Document Created By: %FETZY M Date & Time Created: 20/09/2011 12:46:25	Amendments	
Code: 1002912 Lot No: 00009 Quantity: 1 Operator: %FETZY M	Type: TRACKER Item: BASIC VASCULAR SET-01 Supplier: STERILE SERVICES Remarks:	Number Of Items: 1



Example of Incident Investigation



From : 25/09/2012
To : 01/10/2012

ST JAMES'S HOSPITAL DUBLIN

EXAMPLE OF INVESTIGATING A PROBLEM WITH A SET - SEAL TAGS

Date	Time	Code	Operator	Description	Machine	Cycle	Status
25/09/2012	07:30:06	100412800058	ANDREW	PROF. REYNOLDS' INSTRUMENT SET-03	0	0	DIRTY RETURNS
25/09/2012	08:48:18	100412800058	RAJAN D	PROF. REYNOLDS' INSTRUMENT SET-03	1	7901	WASHER LOAD
25/09/2012	09:51:29	100412800058	CAROLINE F	PROF. REYNOLDS' INSTRUMENT SET-03	1	7901	WASHER UNLOADED
25/09/2012	10:41:38	100412800059	DOROTA S	PROF. REYNOLDS' INSTRUMENT SET-03	0	0	PACKING 1st SCAN
25/09/2012	10:48:25	100412800059	SEAMUS L	PROF. REYNOLDS' INSTRUMENT SET-03	2	11958	AUTOCLAVE LOAD
25/09/2012	11:47:07	100412800059	SEAMUS L	PROF. REYNOLDS' INSTRUMENT SET-03	2	11958	AUTOCLAVE UNLOAD
25/09/2012	11:47:07	100412800059	SEAMUS L	PROF. REYNOLDS' INSTRUMENT SET-03	2	11958	ISSUED OFFSITE
01/10/2012	15:29:53	100412800059	RUTH D	PROF. REYNOLDS' INSTRUMENT SET-03	0	0	ISSUED OFFSITE
01/10/2012	20:27:07	100412800059	CATHAL O C	PROF. REYNOLDS' INSTRUMENT SET-03	0	0	CREDIT



Key Benefits

Innovative National Traceability in Healthcare using GS1 Standards



- **Automatic Tracking of Instrument Sets**
 - No longer need to stick head in the washer
- **Much easier to share Loan Sets**
 - Interoperability between hospitals
 - Lists more accurate and legible
- **Tray Checklists printed when scanned**
 - Accurate and right version, no longer need to search
- **All records stored digitally**
 - Can be referenced post-event
- **Link between tracking system and theatre**
 - Closes the link between patients and sets reprocessed
- **Improved Workflow**
 - Scanning of instrument sets mean team has to communicate and be more organised
- **Reporting**
 - More reports (doing more audits), Enables asset management





Key Takeaways & Next Steps



- **Numerous Benefits**

- By adopting the HSE Instrument Track and Trace solution using GS1 coding, the ability to track and trace instruments through the HSSU process is greatly improved

- **Role of Manufacturers**

- Real benefits are when manufacturers start to mark their own products
 - Synthes are the first in Ireland to put GS1 codes on their loan set trays
 - **Need more Manufacturers to follow this lead! – and need more hospitals to request this when speaking to Manufacturers**

- **Next Steps**

- Phase 2 Instrument tracking and Phase 1 Endoscopy tracking
- Implant tracking





Contact Details

Andrew Smith

HSSU, St James's Hospital

James's Street, Dublin, Ireland

T + 353 1 416 2557

E ASmith@stjames.ie





Hospital Amstelland / GS1 Netherlands Tom Pereboom

**Translating the Dutch
business case**





Overview of instrument and/or implant traceability

- Traceability Dutch business case: “Patient safety and efficiency in the OR.”
- Start date October 2012
- Key drivers: traceability and availability of implants
- Benefits: waste reduction, inventory reduction and flexibility
- Challenge: convincing senior management





Translating the Dutch business case

- **Goal:** Improving availability and traceability of implants
- **Who?** Number of beds 255, 7 OR clinical areas supported, 88 clinicians and 650 FTE hospital employers, 6 operating theatres and 1 day treatment room
- **What was the Business Issue?** The patient related cost were not transparent. The hospital can not calculate and manage treatment cost based on realistic figures
- **When?** October 2012 – 12 months
- **How?** Translating the Dutch business case to hospital level. Creating a sense of urgency



Translating the Dutch business case

cont.

- **Where we started:**
Becoming a member of GS1 – GLN code
- **Where were the business benefits?**
Improving patient safety
 - Recall
 - Planning
 - Quality checkWaste reduction, replenishment process, inventory
- **What were the key implementation challenges experienced?**
 - Lack of barcodes – relabeling issues?
 - Stalemate with SAP environment choices
 - Supply chain is not an issue in hospitals
- **What next?**
Standardization of assortment and barcodes





Contact Details

Hospital Amstelland

Tom Pereboom

Laan van de helende Meesters 8

1186 AM Amstelveen, The Netherlands

T + 31207556715

@ tope@zha.nl





C.H.I Robert Ballanger Frédérique Frémont

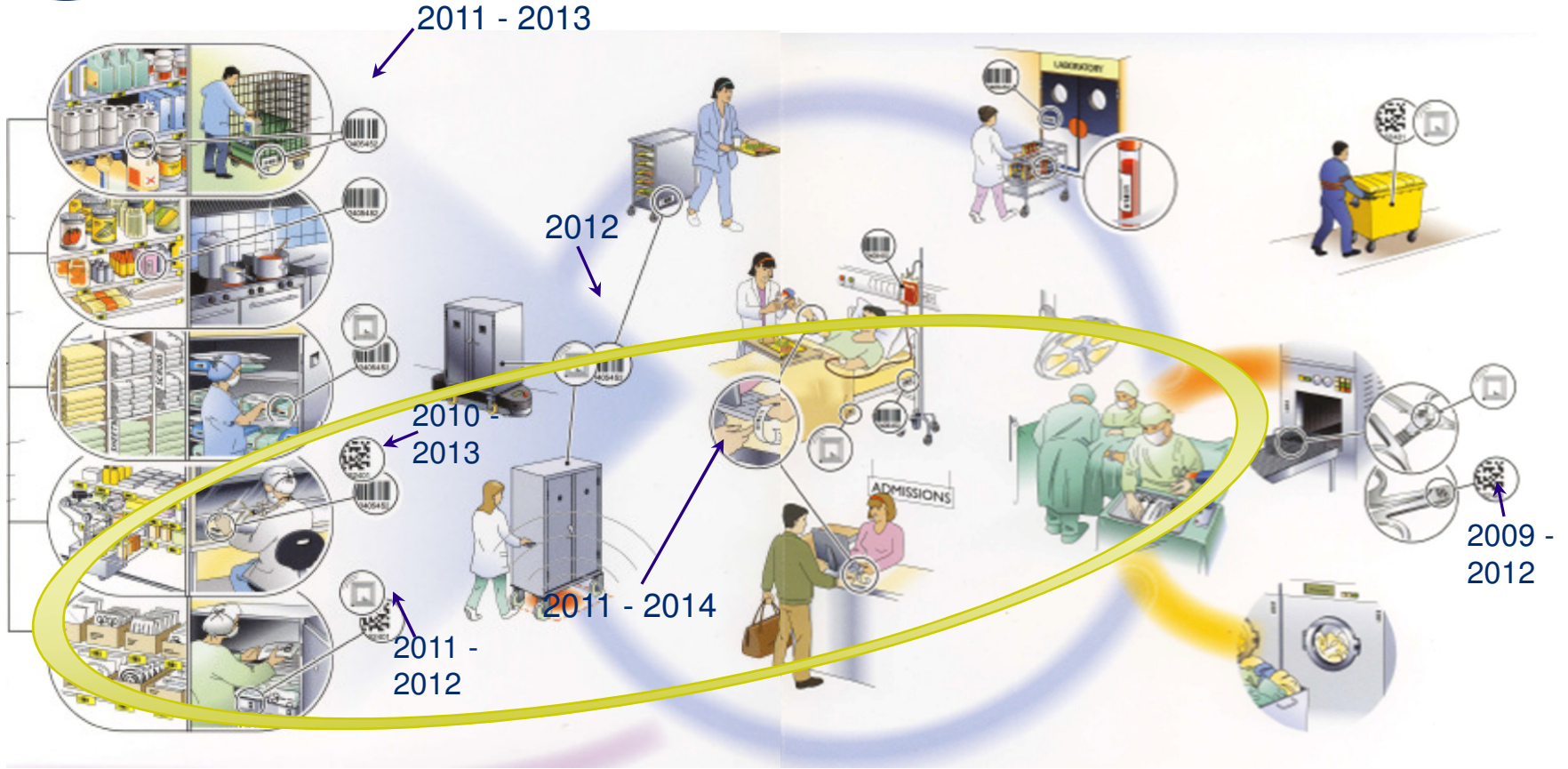
**Patient security and supply chain
optimization**

Medical Devices Traceability and scanning





Overview of instrument and implant traceability



Goal: Full traceability as it is mandatory and French Pharmacists are personally liable for Drugs and Sterile Medical Devices

Challenges : Managing the projects which are fundamentally linked together with too few resources (pharmacists, IT, ;..)



Medical Devices Traceability and scanning

- **Hi!** Intercity hospital serving a population of 400,000 persons, 670 beds
 - 450 beds in acute care (medical, chirurgical and maternity), 50 beds physical medecine and rehabilitation; 170 psychiatry beds
 - Outpatient clinic and pharmacy inside Villepinte detention center
 - CDG airport hospital
- **Business Issue** : Surgical Instruments
 - Due to Creutzfeldt-Jakob risk, the last 5 patients on which the instruments have been used must be known
 - Applies to hospital owned or loaned instruments
- **Business Issue** : Implants and high value Medical Devices
 - Implants : traceability is mandatory
 - Itemized billing to the patient (not included in the hospital bundled payment)
- **Standards** were needed because we wanted to engrave the existing instruments and buy the new ones already marked by the manufacturer
- **Who?** The head of the pharmacy has been the leading sponsor but it took 2 years to convince the top management to go to a full GS1 hospital
- **Where?** At first, no capital funding was needed as we decided to externalize the engraving
- **When?** We began in 2009 and now that a new supplier entered the field, it will be finished before the end of 2012
- **Next?** Engraving is beginning for the instruments of another hospital (same size than us) as we are going to take the activity of their sterilization unit beginning January 2013



Medical Devices Traceability and scanning **cont.**

- **Where we started:**
 - Using GTINs for the instruments, then for all the transport containers. We thought doing GLNs at the same time but did not due to lack of human resources
- **Where were the business benefits?**
 - Patient security :
 - Instrument and process traceability
 - Supply chain efficiency :
 - The surgical boxes are made by the sterilization operators
 - Traceability of instrument localization : sterilization unit, O.R, repair contractor, loan to other hospitals (2012)
 - Cost reduction : ROI around 24 weeks
 - Decrease in non-conformance and decrease of cost per box per surgical procedure
- **What were the key implementation challenges experienced?**
 - At first, only one: engraving supplier (second entered the market in 2012)
 - Scanners are one of the biggest challenge in instrument engraving (reading of very small data matrix, 1mm x 1mm)
 - Interoperability with IT process traceability
- **What next?**
 - End of 2012 – Beginning 2013 we want to trace the implants and manage the operating theater stock with the WMS we have now implemented in a new Medical Devices warehouse
 - Link with automated dispensing cabinets in the operating rooms through GS1 DataMatrix or bar code reading



Q&A and Open Discussion





Open Q&A, Discussion

Examples...

- Questions for our presenters
- Implementation Pain Points
- Call to Action > Position Papers
- ...

 **Position Paper (I)**
Healthcare Provider Advisory Council
Interoperability of Information Technology Systems

I. Introduction

Towards the end of 2011, GS1 Healthcare established the Healthcare Provider Advisory Council (HPAC) to be the forum for sharing and discussing the practical realities of implementation of GS1 Standards in the care giving environment in regards to the impact on clinical care and patient interaction. The membership of HPAC consists of thought leaders and early adopters (clinical and non-clinical) of GS1 Healthcare Standards from the global clinical provider environment (e.g. hospitals, retail and hospital pharmacies, clinics, care homes etc.) and from GS1 Member Organisations (MOs). Through regular, monthly conference calls and occasional face-to-face meetings (e.g. at GS1 Healthcare Global Conferences) HPAC members have been exploring the opportunities and challenges of implementing GS1 standards to improve various care-giving processes and, ultimately, patient safety.

Issues with information technology/information system (IT/IS systems) interoperability emerged as a broad, recurring and major challenge or 'pain point', for providers during standards implementation projects. The issues include:

- Lack of fields in systems for bar code attribute data (e.g. lot/batch number, serial number and/or additional (medical) content related to the product)
- Field length in systems.

A key reason these issues occur is because the systems are not GS1 standards compliant therefore they present various challenges and could pose a barrier to widespread adoption/implementation in the provider environment. Thus, the proven benefits to patient safety could severely be limited or, at worse, not be realised.

Lack of fields

During an implementation project in a Canadian hospital they experienced the issue where a scanner could read the GS1 bar codes on pharmaceutical packaging, which contained GI Trade Item Number (GTIN) and additional attributes: Lot/batch number, serial number and E date, but their pharmacy inventory management system only had a field to hold the GTIN. The software ignored the attribute information and only read the GTIN, but ideally they would need their pharmaceutical system to include the fields for the additional attributes. Having additional attribute data in their system would enable more efficient inventory management processes, e.g. visibility of expiring product or more efficient recalls using, for example, lot/batch number or serial number.

Providers request all the systems developed and sold by IT/IS system solution providers to be GS1 Standards compliant, e.g. in this example to have the necessary fields in their system capture GTIN and other attributes (e.g. Lot/batch number, serial number, Expiry date), and compliant data flows seamlessly between the disparate systems used in and between provider organisations. In addition, in the future, systems should be designed with a degree of flexibility to allow for continuous compliance to evolving GS1 standards.

Implementation of GS1 standards based processes in hospitals is hindered by lack of interoperability of information technology systems - October 2012

 **Position Paper (I)**
Healthcare Provider Advisory Council
IMPLEMENTATION IN HOSPITALS HINDERED BY BAR CODE SYMBOL ISSUES

I. Introduction

Towards the end of 2011, GS1 Healthcare established the Healthcare Provider Advisory Council (HPAC) to be the forum for sharing and discussing the practical realities of implementation of GS1 Standards in the care giving environment in regards to the impact on clinical care and patient interaction. The membership of HPAC consists of thought leaders and early adopters (clinical and non-clinical) of GS1 Healthcare Standards from the global clinical provider environment (e.g. hospitals, retail and hospital pharmacies, clinics, care homes etc.) and staff from GS1 Member Organisations (MOs). Through regular, monthly conference calls and occasional face-to-face meetings (e.g. at GS1 Healthcare Global Conferences) HPAC members have been exploring the opportunities and challenges of implementing GS1 standards to improve various care-giving processes and, ultimately, patient safety.

Issues with bar code symbols have emerged as a broad, recurring and major challenge or 'pain point', during implementation projects. On both pharmaceuticals and medical device products (products), the issues include:

- no bar code symbol present
- poor quality bar code symbols
- placement of the bar code symbol
- more than one bar code symbol
- non-standardised bar code symbols.

Bar code symbology

All of the above present various challenges and definitely pose a barrier to widespread adoption and implementation in the provider environment. Thus, the proven benefits – enhancement of patient safety and support of clinical processes – could be severely limited or, at worse, not be realised.

No bar code symbol present

Lack of a bar code symbol (Figure 1) on products means that the provider has to have a minimum of two separate processes: one manual, for the products without a bar code symbol, and one automatic, for those products with a bar code symbol. This scenario is counterproductive, particularly as it is likely, for example, that it is the manual process, with its inherent errors, that they are aiming to replace by implementation of GS1 standards. Indeed, it adds unnecessary complexity. Alternatively, whilst the situation persists, providers who want to progress the implementation of GS1 standards may, and are, employing the necessary resources and equipment and implementing new processes to generate and place bar codes on products. In the view of most, however, this is not a viable alternative, due to the complexity and cost of the task and the risk of errors that might endanger patients.

Implementation of GS1 standards based processes in hospitals is hindered by lack of interoperability of information technology systems - October 2012



Coffee Break – 30 Minutes

Return to Plenary
“New York”





Contact Details

GS1 Global Office

Avenue Louise 326, bte 10

B-1050 Brussels, Belgium

T + 32 2 788 78 00

W www.gs1.org

