

#### Panel – Patient safety beyond borders

Chairperson: Prof Dr. Terence Stephenson, Chair, General Medical Council, U.K.

Dr. Anne Snowdon, World Health Innovation Network, Scientific Director & CEO, SCAN Health, Canada Mr. David Berridge, Deputy Medical Director, Leeds Teaching Hospitals NHS Trust, UK Ms. Dr. Juliette Hommes, MD, University Medical Center of Maastricht (MUMC), The Netherlands



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# Passionate about patient safety

Professor Terence Stephenson DM, FRCPCH, FRCP, FRACP, FRCPI, FRCS, FHKAP, FRCGP, FRCA, FCAI, FRCSEd, FRCOG Chair, General Medical Council

Working with doctors Working for patients

## General Medical Council





### Is the NHS safe?

- Of the top 20 risk factors for all deaths, adverse in-hospital healthcare events come eleventh – above alcohol, drugs, violence and road traffic accidents.
- In the NHS each year there are: 624 million prescriptions, 300 million GP visits, 13 million OPD visits, 5.3 million admissions, 2.9 million emergency ambulance calls, and an estimated 900,000 adverse events.
- Every week two wrong site surgeries and two operations with kit wrongly left inside. NEVER EVENTS 2016/17= 400
- Wrong site/retained foreign body/wrong implant = 79%; Medication error causing harm = 12%
- Adverse events (unintended injury caused by medical management rather than disease) lead to an additional three million NHS bed days. Costing at least £1 billion a year.









## **Baby Abbie Humphries abducted 1997**

Legislation standardising the use of patient wristbands, and the information they contain, came into force in July 2008.

Known as the NPSA Safer Practice Notice No.24, all NHS organisations in England and Wales that use patient wristbands adhere to this new legislation and the standards that it sets.



## Advisor to the National Patient Safety Agency, 2003-2006: barcoding allows tracking of patient, product and place





# Problems with identification of intravenous injections at an emergency







## Death of Wayne Jowett (2000)







Leukaemia patient in remission
Queens Medical Centre Nottingham
Cytotoxic IV vincristine given IT
Immediate efforts to flush out drug
Paralysis and respiratory failure
Died 1 month later

## POKA-YOKE OR MISTAKE PROOFING



## 2010 MHRA safety alert: metal-on-metal hip replacements

## 2010 MHRA safety alert: PIP silicone implants





Review of Medical Devices for the Medicines & Healthcare products Regulatory Authority (MHRA), Jan 2014

# Expert Clinical Advice – MHRA Medical Devices

Report of the independent review on MHRA access to clinical advice and engagement with the clinical community in relation to medical devices.

Professor Terence Stephenson









#### PERSONAL VIEW

### To boldly go from "computer says no" to an iNHS

It's IT, Jim, but not as we know it, reports Terence Stephenson

#### Captain's log. Stardate May 2013

0830-0930: Consultant led handover as per Francis.1 The cases are projected by the trainee, Dr McCoy, on to the screen of the NHS Enterprise. Mr Chekov says, "Let's just take a quick look at the chest x ray." Bones has to come out of the current program, decline several on-screen queries, open a new program, and re-enter his username and password-only to be told that the x ray software won't open unless he begins again and closes the word processing program. Three minutes have elapsed, and we have 60 minutes to discuss 20 cases. We give up. noting the excellent radiologist's report but missing a valuable teaching opportunity. Thank goodness we didn't have to access anything as complicated as the tricorder or switch the phasers to stun.

0930: Consultant led ward round<sup>2</sup> starts on ward A. The first patient has sickle cell disease and a fever and has been seen by another NHS hospital more than a year ago. 0945: The general practitioner and St



Thank goodness we didn't have to access anything as complicated as the tricorder or switch the phasers to stun

Safery-General practices have been using e-prescribing and e-records for 30 years. Why are systems which avoid errors of calculation, drug interactions, and illegible prescribing not routine in hospitals? Drug errors are a common cause of negligence claims; as many as a quarter of all settled negligence claims are because of drug prescribing errors.<sup>1</sup>

"Outside-in" design-We need an end to 10 minute computer start-ups, clunking

passwords that have to be char We need user friendly interface with jobbing doctors in mind. I functionality that is rarely requ enemy of rapid, intuitive use, S there seems to be no one who c zoom button on the x ray view! but everyone can find it on Goo Efficient-There is a problem in someone, but, because you hav PERSONAL VIEW in the meantime, the phone is a

through multiple screens, and | BMJ 2013;346:14028 doi: 10.1136/bmj.14028 (Published 24 June 2013)

#### **VIEWS & REVIEWS**

Page 1 of 2

#### when the person you've paged. To boldly go from "computer says no" to an iNHS

It's IT, Jim, but not as we know it, says Terence Stephenson, with some suggestions for improvements

Terence Stephenson professor and chair, Academy of Medical Royal Colleges, London EC1V 0DB, UK

#### Captain's log. Stardate May 2013

0830-0930: Consultant led handover as per Francis.1 The cases are projected by the trainee, Dr McCoy, on to the

1030: The nurse gives the antibiotics intravenously as prescribed but, through an easily avoidable decimal point error, the dose is only a tenth of the therapeutic dose and so is inadequate against the patient's septicaemia. Unfortunately,

Chair of the Strategic Clinical **Reference Group of the National Information Board** 

## Reducing the % – worthwhile?

If 99.9% were good enough...

- Major plane crash every 3 days
- 12 babies given to wrong parents every day
- 37,000 ATM errors every hour

Institute for Healthcare Improvement (data relate to US population)







## Thank you



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### Exploring the Journey of Supply Chain Transformation in Three Global Health Systems

Dr. Anne Snowdon, BScN, MSc, PhD, FAAN, World Health Innovation Network, Scientific Director & CEO, SCAN Health, Canada

17 October 2017



## Framing the Research





- Medical Error is now the third leading cause of death in USA, Canada, and the UK.
- System Level Measurement of patient outcomes linked to product use and care procedures does not exist; system infrastructure to support safety is under developed in the health sector.
- Empirical Evidence of the Impact of Supply Chain Implementation in Health Systems is very limited.
- **Goal**: To Create Empirical Evidence of the Health System Level Impact of Implementing GS1 Global Standards.







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## Alberta Health System Supply Chain Strategy



Alberta Health Services (AHS) is Canada's first fully integrated health system with a current budget of approximately \$21 billion, serving 4.2 million people. Health receives 39% of provincial budget - \$15 billion.

- 1) Implementation of Enterprise Resource Management Program (ERP);
- Price harmonization, clinical engagement, and new procurement strategy;
- 3) The creation of a province-wide product item master and adverse event reporting system;
- 4) Integration of supply chain into programs and teams
- Key Driver: Never Events that resulted in patient deaths in Dialysis



## Price Harmonization and New (Centralized) Procurement



- Consolidation of 10 regions followed by implementation of a province-wide ERP system
- All contracts across the province consolidated, pricing standardized to lowest priced contract \$80,000,000 savings (one time)
- Province-wide, online adverse event reporting system





## Province-wide Item Master and Data Infrastructure



- Consolidated every product inventory list across the province from over 30 different inventories = 300,000 items in the item master initially, when "cleaned" now includes 100,000 product items with UDI, organized into functional categories.
- GS1 Standards were adopted province wide and built into all RFP's.
- To validate the data, the team worked with vendors to meet integrity standards, product data was then uploaded into a UDI portal.





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## Integration of the Supply Chain Strategy



### **Clinician Engagement:**

Supply chain staff are embedded in the Clinical program teams:

- Provide data on utilization, product cost, patient outcomes, and value to inform clinician team decisions
- Solicit feedback on new products, contracts, and implementation strategies
- Fully understand team needs and support team decisions



## Alberta Health System Supply Chain "by the Numbers"





- <u>CPSM Operating budget</u> (2016/17):
   \$78 million
- <u>Staff</u>: 881.5 FTE serving 354 sites across the province
- <u>Annual Budget for Transformation</u> <u>Work</u>: \$3 million
  - (includes Data Management & Reporting Team, System and Process Transformation Specialists for Continuous Improvement and Project Managers)



# Return on Investment: 7:1 (Inventory Savings Only, to Date)

Year	Costs (CPSM Team, IT Infrastructure)	Savings
2009/10	<pre>\$26,000,000.00 (Oracle install) (Note: this included accounts payable,     costing, and supply chain) \$3,000,000.00 (CPSM labour)</pre>	\$29,200,000.00 \$80,000,000.00 (pricing standardization)
2010/11	\$3,000,000.00 (CPSM labour)	\$79,500,000.00
2011/12	\$3,000,000.00 (CPSM labour)	\$50,000,000.00
2012/13 (Q3)	\$3,000,000.00 (CPSM labour)	\$22,800,000.00
Total	\$38,000,000.00	\$261,500,000.00





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"There's a denominator as well as a numerator. The numerator is the number of things that go wrong, the denominator is the phenomenal amount of work the NHS undertakes in a year." (Dept. of Health Leader)

#### Key Drivers:

- Safety: Adverse events in hospitals are more prevalent than other leading causes of death: traffic accidents, alcohol-related, and common types of death in the top 20 UK risk factors,
- Horsemeat scandal and breast implant recall
- Efficiency, and Transparency across the System to Support Learning



## Strategy: "Franchise Model for System Learning"



### <u>"Franchise Model" of Implementation:</u>

"So what we've developed is three enablers and three cases, and we've got a document for each of them describing what you d to do, your goals and your time. So a very basic model of franchise if y like, so we can learn, and we can deve then we can push th learning to the next ing to the next 25, so i should be repeatable. 25 Trusts, and push The next 25 (1 ut with 65% of the ore lean f we do ay get up to 90%. Department of Health Leader) learning now, we can



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## Patient Safety: "We've got the Whole Picture"

"What we do on the ward is we identify where the adverse event occurred, I've got the context of the patient, I know the staff, I'll scan that code and it prompts them to collect the information, every one of those transactions has a time stamp, so we've got the ability to start pulling out reports, so straight away we've got the whole picture." (NHS Team Leader)

#### Clinician Perspective:

"The real big plus for me as the clinician is I want to know where my patient is 24/7, 365, where they've been, what they've had done, all of that, by whom, I want all of that information to be automatically uploaded onto their electronic discharge note. And we should be able to do that and we can't." (NHS Clinician Leader)


# Inventory Optimization: "Knowing Exactly What We Are Buying and What We Paid For"



### Inventory Transparency to Support System Engagement:

- "We're going to know exactly what we're buying, and in what volumes, and what we're paying, and we'll benchmark it based on the others, and then we can start working collaboratively, we'll get better value." (NHS Trust Leader)
- "We figured that in the NHS hospital system, we think it's 1.5 billion Pounds worth of inventory savings." (Department of Health Leader)





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Integration of Supply Chain Processes into Clinical Programs: Transition from "Adversaries" to "Collaborators"



#### Culture of Teamwork:

"When I first came we'd sit in procurement and not go down, may occasionally speak on a phone or an **email was safer**... now clinicians come and sit next to us, they know who we are, we feel comfortable and we actually understand, and they do also, that we can make a difference." (NHS Procurement Leader)

#### **Creating Evidence:**

"The first thing when you show a group of clinicians what the results are, they will say, '**we don't believe you**, we don't believe the data', ...What the GS1 project does, is it starts to build the argument... it doesn't mean that all variation is wrong, it just starts to build the argument." (NHS Clinician)

# Speaking the Same Language:

# " This is equivalent to the cost of six nurses per

**year**... if you are happy with it please use it, if not, then tell us why... I had just two heated emails, that's how we changed 900 consultants... and we did it and I think it has been a very good." (NHS Procurement Leader)



Scan 4 Safety ROI: 4:1 (Inventory Savings Only, to Date)



- 4:1 ROI expected by year 3, <u>annualized</u> savings which only includes inventory waste reduction, additional savings emerging in clinician time saved; patient safety outcomes not yet accounted for.
- Patient care and patient safety Improvement:
  - Surgical teams now alerted if expired or recalled stock
  - 93% of implantable devices accurately tracked to patient
  - Significant Clinician Time released back to patient care
  - Product recalls now performed in under an hour
  - Tracking Provider expertise relative to patient need and quality of care



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# USA: Mercy Health System





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# Mercy Demographics







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# REALITY: Mercy Expense Breakout (Top 15)





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# **REALITY: Waste Dominates Our Industry**





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# Goal: Achieve the Triple Aim by Leveraging UDI



- Patient safety
  Expiry & recall
- Reduce risk
- Comparative effectiveness



# Financial

Cost per caseCharge capture

- Minimize distractions
- Improve clinical workflow
- Improve clinical satisfaction
- Standardization



# HOW: A High-Level Vision





# CLINICAL ACCELERATION: Perioperative Results Total Knee Arthroplasty



e.g., Walmart contract for negotiated cost per case



## Defining Success Through Resource Management Savings to date \$55,048,737, only 3/35 hospitals





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# **Emerging Findings Across Three Countries**





**Patient Safety is a Key Driver of the Strategy**: recall and traceability are common areas of focus, <u>no</u> measures of patient safety outcomes to date, safety outcome cost savings not yet captured.

**Inventory Savings are substantial.** Ranges from **1:4 to 1:8 ROI** on inventory savings alone – system may be able to "self fund" the strategy as savings are recurrent. Savings due to Patient Safety are <u>not</u> yet accounted for and is anticipated to increase the ROI.

**Integration of Supply Chain Team** with Clinical Program teams engages clinicians in a key decision-making role, aligns procurement of products with clinical decisions for safety, cost, and standardization - emerging as a key condition for success.



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# **Emerging Findings Across Three Countries**





**"Rate Limiting Step:"** accuracy and integrity of product data is slow to emerge as supplier implementation of GS1 standards and "clean" product data continues to emerge.

- Global alignment of product information a "minimal required data set" - may accelerate industry progress.
- Multiple and different "registries" and data bases emerging, alignment globally could enable and hasten progress.

**System Transparency:** supply chain integration across systems is emerging as a **Strategic Operational Management Framework**.

- Creates needed transparency of the value that health systems are delivering; foundational to driving quality and safety across global systems.
- Emerging evidence as a platform for innovation.



"Change does not roll in on the wheels of inevitability, but comes through continuous struggle." Martin Luther King Jr.

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in

You Tube

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# **David Berridge**

Deputy Chief Medical Officer Medical Director – Operations Consultant Vascular Surgeon



October 2017



# The Leeds Teaching Hospitals

### **One Trust – Seven Hospitals**



## About Leeds Teaching Hospitals NHS Trust

Over 1,100,000 Outpatients

**Over 263,000 A&E Attendances** 

**Over 117,000 Inpatients** 

Over 108,000 Day Cases

#### 9,844 Babies borr



2,00	0 beds		
-			-
1 ×	-1 1-	- F	-
1 F	-1 1-	-	-
1-1 F	-11-		-
1-1 P	-1 1-	-	-



The Leeds Teaching Hospitals NHS Trust

## **About Leeds Teaching Hospitals NHS Trust**



SCAN SAFETY

Providing 120 specialist services 82 Adult Specialities 28 Paediatric Specialities 5 Pathology Services 5 Medicines Management and Pharmacy Services

99 **FO** 1

Bar coding

22,017



**G** 

### **Specialist Services**















### Patient identification



Once the printers have been delivered and installed all Patients attending through Accident and Emergency will have a GS1 Compliant wristband All inpatients and day case patients regardless of age have a GS1 compliant wristband **The Leeds** 

Teaching Hospitals NHS Trust



SCAN4 SAFETY

### **Global Location Numbers**



GLN duplicated on the door for Supplies and Security Purposes

Plaques issued for every room in use throughout the organisations (22,017 Rooms and Spaces)





### **Global Location Numbers**



First of the demonstrator sites to label down to bed space level and start unlocking the potential



Action	Ward	Bed	Patient 🔶	Age	Scanned Location	Time Since Arrival	Consultant	Specialty	los 🔶	EDD	MFFD	Planning	EDID	Needed For Discharge / Transfer	Clinical Summary	eDAN 🔶	eMeda
	91 (SJUH)	1	RASPBERRY Robert	32y	Bed Area, J91 05-Oct-2017 06:53	19d 22h 18m	AA	General Medicine	19d	0		On Ward			This is some text to test carriage	Pharmacy 📿	
	91 (SJUH)	2	PLUM Henry	47y	Bed Area, J91 04-Oct-2017 02:32	4d 18h 27m	ADJ	Urology	5d	0		On Ward				0	
	91 (SJUH)	3	PEAR Pamela	37y	Bed Area, J91 06-Oct-2017 	8d 8h 15m	MRM	Anaesthetics	4d	0		On Ward				Pharmacy 📿	
	91 (SJUH)	4	GRAPE Bella	57y	Xray, 06-Oct- 2017 14:53	2d 3h 5m	ADJ	Urology	3d	0		On Ward				0	
	91 (SJUH)	5	BLUEBERRY George	32y	Bed Area, J91 06-Oct-2017	30d 5h 22m	AA	General Medicine	31d	0		On Ward				0	
•	91 (SJUH)	6	PINEAPPLE Peter	45y	Examination Room, Outpatients 06-Oct-2017 15:10	12d 8h 27m	MRM	Anaesthetics	13d	0		On Ward				0	
•	91 (SJUH)	7	OLIVE Adrianne	37y	Bed Area, J91 06-Oct-2017	18d 22h 18m	ADJ	Urology	19d	0		On Ward				0	
•	91 (SJUH)	8	PEACH James	57y	Room 3, Endoscopy 06-Oct-2017 14:12	8d 23h 19m	JHB	General Medicine	9d	0		On Ward				0	
•	91 (SJUH)	9	ORANGE David	32y	Bed Area, J91 06-Oct-2017	3d Bh	JHB	General Medicine	4d	0		On Ward				0	





### **Theatre Tray Rationalisation**



Savings	FYE 16/17	PYE 17/18	Total		
Recurrent	£87,037.95	£7,026.54	£94,064.49		
One off	£0	£39,500	£39,500		

Theatre Tray Rationalisation Programme removed

**£94,064.49** (\$126,046.40)

per annum of sterilisation costs.

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### **Cardiology - PLICS**

- Activity takes place predominantly in the Cath Labs
- Approx £14m (\$18.8) annual expenditure
- Approx £13m (\$17.4) is on consumables that range from a few pounds to £16.5k (\$22.1) each (TAVI's)
- Main cost drivers are consumables and Cath Lab minutes/procedure

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### Initial Analysis – Cost vs Tariff

High volume non complex HRG (EA54Z Percutaneous Standard Ablation)

- Assumed mean procedure time of 79 mins for costings
- Cost £1,821 (\$2,440)
- Income £1,820 (\$2,438)
- Loss 0.84p per patient

Actual Procedure Time (mean):133 minutes Actual loss £808 (\$1082) per patient FYE: circa £153,300 (\$205,020) SCAN SAFETY

### **Cardinal CIMS Inventory Management**

	Mark Songhurst - St James University Hospital, Pain Management		♤	Switch -	Support -	Profile 🗸	🕞 Logout
CardinalHealth	Alerts	To Do List					
	Clinical Alerts	Orders					
Home	📀 You have no clinical alerts	📀 Done					
Scan Scan							
	Products At Risk	Find Items					
Grder →	📀 0 Missing more than 1 day	2 Received but not read into inventory					>
Reports 🗸	✔ 0 Items expiring in 7 days						
Analytics	<b>0</b> Significantly above Par	My Catalog Setup					
දිරිූදි Setup	Product Unavailability						
Search	♥ Orders older than 3 Days						
$\sim$	Orders without PO						
	Out of stock products					Cai	r <b>dinal</b> Health

SCAN4 SAFETY

#### **Cardinal CIMS Inventory Management**

Mark Songhurst - St James University Hospital, Pain Management



#### To Do List

Orders

20 Suggested items from 6 suppliers

Find Items

9 Missing today

2 Received but not read into inventory

2 Unregistered

My Catalog Setup

7 Products in My Catalog without a Cost



SCAN4 SAFETY

### **Spend on Single Patient Use Tourniquets**

#### Cost £0.39 (\$0.53)



SCAN4 SAFETY

**Recurrent** Saving £90,000 (\$120,600) FYE

#### Cost £0.08 (\$0.11)





### **Out of Date Stock from initial visit**







### **Ophthalmology Product Recall Test**







Nursing Time (Old System) Minimum of £173 (\$232) and **8.33 hours** 



Inventory Time (New System) Maximum of £9 (\$12) and **35 minutes** 



## **Benefits realised PCI Procedures**

Leeds Carried out 4,180 PCI Procedures

September 2016 – August 2017

Process	Mean Time Taken	lean Time Mean Time Taken Released			
Computer Scanning of Products	6 min 23 sec				
Scan4Safety Handheld	1 min 53 sec	4 min 30 sec	42 Days		

Monetary Equivalent at midpoint of Band 5 = **£4,095** (\$5,487)

## SCAN4 SAFETY



## Perfect Week – identifying potential

- Portering Service spent 12.82 man days on wasted tasks with an annual value of £39,698.41 (\$53,195) over the 07:00 23:00 on seven days
- Implementing Scan4Safety could return 3.14 man days of the above time over a year this would return £9,723 (\$13,029)





## SCAN4 SAFETY



## **Benefits realised**

Area	Benefit
Product Recall Staff Time	<b>£84,411</b> (\$113,111)
Inventory Reduction	£812,000 (\$1,088,080)
Returned Stock	£141,536 (\$189,658)
Reduced Waste and Obsolescence	£357,356 (\$478,857)
Tray Rationalisation	£133,564 (\$178,976)
TOTAL	£1,489,397 (\$1,995,792)
COANI CAFETY	

SCAN SAFETY



#### **Right Patient**

Setting standards to make sure we always have the right patient and know what product was used with which patient, when.



#### **Right Product**

Setting standards to make sure our staff have what they need, when they need it.

+	

#### **Right Place**

Setting standards to make sure that patients and products are in the right place.



#### **Right Process**

Setting standards and implementing common ways of working to deliver better and more easily repeatable patient care.

# **Every time!**



@LTHScan4Safety (#BetterCareAsStandard)

() Ith.scan4safety@nhs.net



## Thank-you for your attention





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## How GS1 meets breast implants

Ms. Dr. Juliette Hommes, MD, University Medical Centre of Maastricht (MUMC), The Netherlands

Pauline Spronk, Danny Young Afat, Manuel Harmsen, Marije Hoornweg, Xavier Keuter, Marc Mureau, Hinne Rakhorst

17 October 2017




# How many persons do you know who carry breast implants?



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Device

**Patients** 

Surgeons

Hospitals

might directly influence complication rates.





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#### Quality of evidence is weak





# Problems?



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Will your implants give you cancer?

Have you been hearing about Breast Implant Associated Anaplastic Large Cell Lymhoma (BIA-ALCL) on the news?



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#### Lessons?



- Possible implant recall structure is mandatory
- Quality of care registry
- Implant quality registry



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## DBIR: Dutch Breast Implant Registry

- 1. Recall
- 1. Quality assessment



# Example

Verbonden met server	$\sim$	Verbonden met server	
Patiënt		Patiënt	
Registered surgeries		Registered surgeries	
03-10-2017	/ /( <b>R</b> ,)	* 03-10-2017	$\langle \langle (\mathbf{R}_{1}, \cdot) \rangle \rangle$
Side of operation		Side of operation	
Hospital/patient characteristics	Texture*	Hospital/patient characteristics	Reference No*
* Right-Reconstruction post profyl	Micro textured     Micro textured	* Bight-Reconstruction post profyl	TMM3 290cc
Intervention	O Smooth		
Operation techniques		intervention	Lot Number*
Antiseptic precautions/drains	Coating*	Operation techniques	157041
Devices	Silicone     Polyurethane	Antiseptic precautions/drains	
Inserted-Permanent implant	O Other	Devices	Serial Number*
Device type		Inserted-Permanent implant	X166F003
Device specific information	FID*	Device type	
Device Manufacturer and barcode	Silicone     Saline	Device specific information	Volgende sectie 0
Device indentification information	O Hydrogel	Device Manufacturer and barcode	( Devoegen device Q )
Status	O Other	Device indentification information	
* Left-Reconstruction post profyla		Status	
	O Round	* Left-Reconstruction post profyla	
DBIR	Shaped / Anatomical		
OUTCH BREAST IMPLANT RECISTRY		DBIR	
General information: • Registration of a patient is	Weight/Volume of implant (cc or gr)*	DUTCH BREAST IMPLANT REGISTRY	
Arished when all errors (()) have disappeared.	290	General information:	
<ul> <li>Please visit the DKGA writisite for instruction videos (section DBIR - Documenten)</li> </ul>	Volgende sectie 0	fraished when all errors (()) have disappeared.	
		Please visit the DXA website for instruction videos (sector)	
	Constant or the O.Y.	DBIR - Documenten).	
	Torvegen device Ø	<ul> <li>Please visit the DIGA wetsite for instruction videos (section OBIH - Documenten)</li> </ul>	

#### **DBIR** current status

Number of patients, interventions and implant entries



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#### Crisis



#### • In case of a crisis most patients have no problem

Selecteer hier de fabrikant van uw implantaat.	
Voer hier het serienummer van uw implantaat in.	
Controleer!	

#### How is GS1 related?



Registry fails if information is incomplete or wrong





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### Problem: Product codes manually inserted



(01)05060191606769(17)210100(21)20987081	
Image: SN 20987081         STERILE       2016-01-30         Image: Sterile       2016-01-30         Image: Sterile       Contraction         Image: Sterile       Contraction	
(17) 2021-01-30 (21) 20987081 (21) 20987081 (21) 20987081 (21) 20987081	
	REF       81       SIZE       375cc       OTY       1         LOT       167028       SN       Y166H194       2021-06         (01)03700469701100(10)167028(17)210630(21)Y166H194       (11.7 cm)       (4.9 cm)



What do we need?

Better insights into the quality of care for patients with breast implants.

The quality of the data depend on you (industry & GS1).



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Reduction of typo's Reduction of time Improvement reliability Happier industry Happier surgeons Happier Hospitals

Happier and healthier patients



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#### What do we need?

GS 1 coding system Scanning system (SN, LOT, expiry date)

Product data exchange through GS1 (GDSN) UDI linked to dimension, weight, silicone type, texture, fill

Globally aligned data to compare between countries

World wide one coding system



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## Why special?

- 1994 **UK -** NBIR / UKBIR
  - 1999 **DENMARK -** DRPSB
    - 2000; NL: DRIPS; ended prematurely due to withdrawal funding government
    - 2002 **USA -** TOPS
    - 2002 **USA -** NSQIP
    - 2002 INTERNATIONAL IBIR
      - 2004 AUSTRIA ABIR
        - 2011 AUSTRALIA ABDR
          - 2012 SWEDEN BRIMP
            - 2015 NETHERLANDS DBIR
              - 2016 **UK** BCIR



#### The future



#### Share implant data world wide







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## Questions



#### In case of questions, please mail me at <u>Juliette.hommes@mumc.nl</u>



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### Patient Safety beyond borders

#### Panel discussion





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In the past we have seen several initiatives for breast implant registries. Why do you think this registry will succeed in more understanding of breast implant quality? What is the difference with past and other current registries?





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#### Thank you very much for your attention





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