



# Patient Identification Workshop

Healthcare Conference Sydney  
March 2012





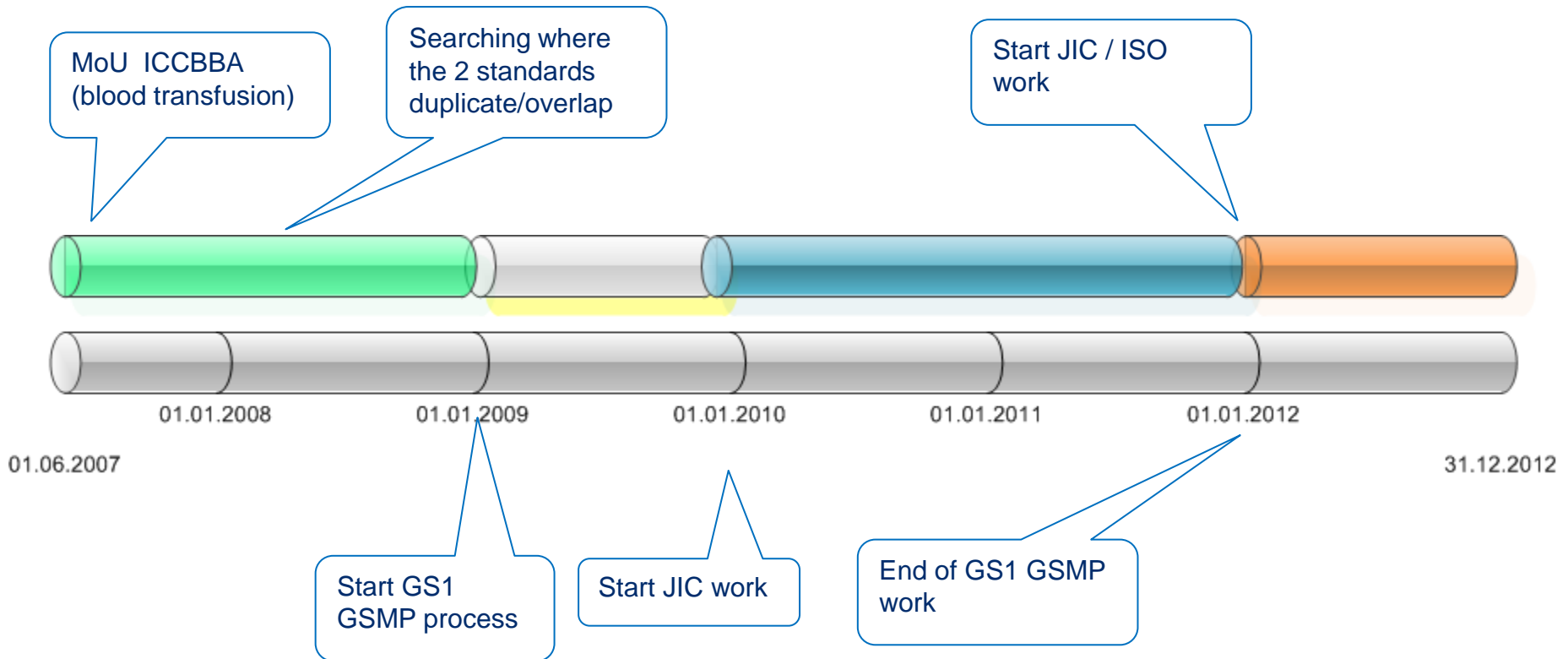
# Who am I ?

- Master in Laws,  
University of Geneva
- Married, 2 children
- Board Swiss Medical  
Informatics Association
- Chair IHE Suisse
- With GS1 since 1991





# Our timelines





# Major requirements for patient id & HCP id





# Patient = Subject of Care (SoC)





## A Subject of Care is....

- Receiving care in a hospital or other institution
- Suffering of chronic disease, cared at home
- Healthy, but being administered a vaccine
- Healthy and pregnant
- Healthy and involved in a prevention program

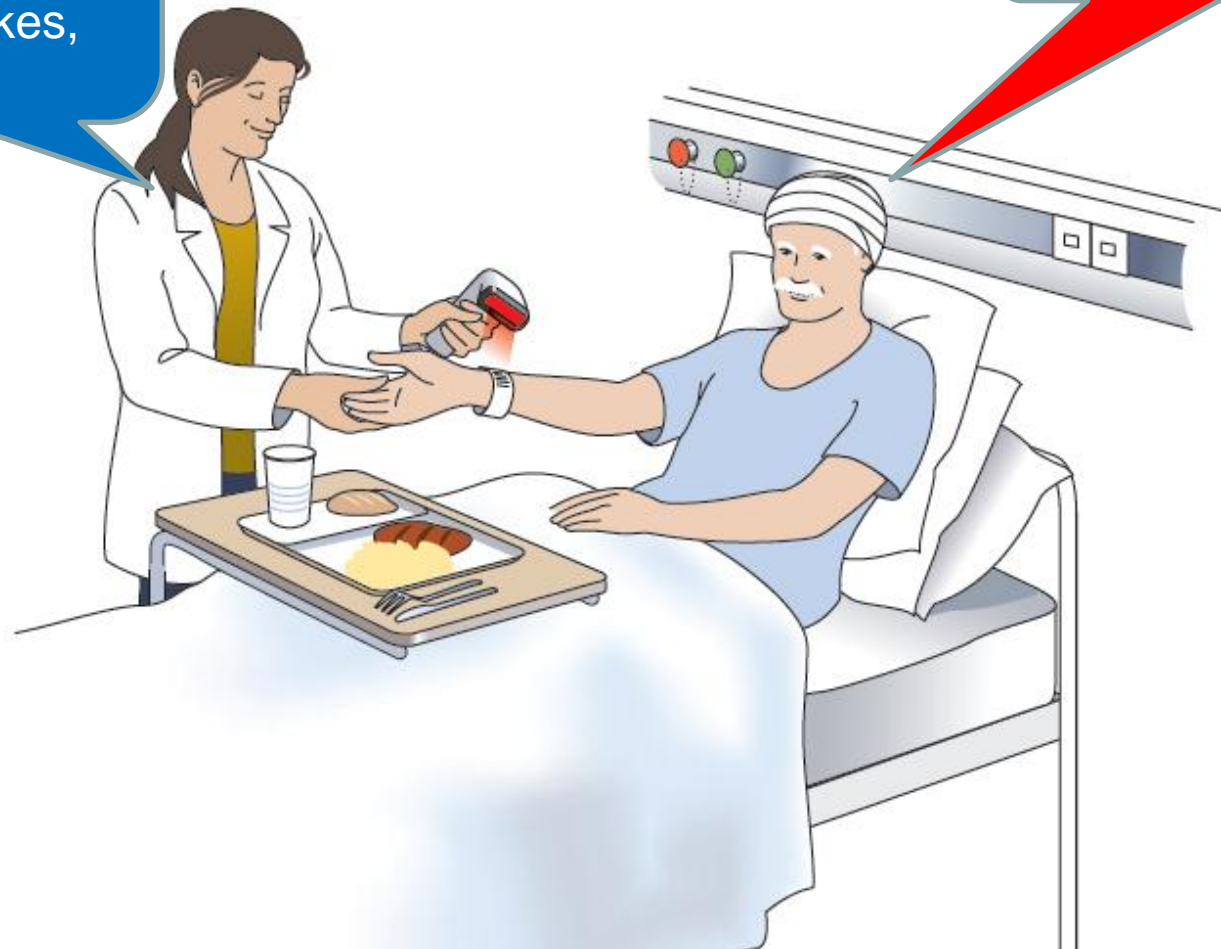




## How to identify...

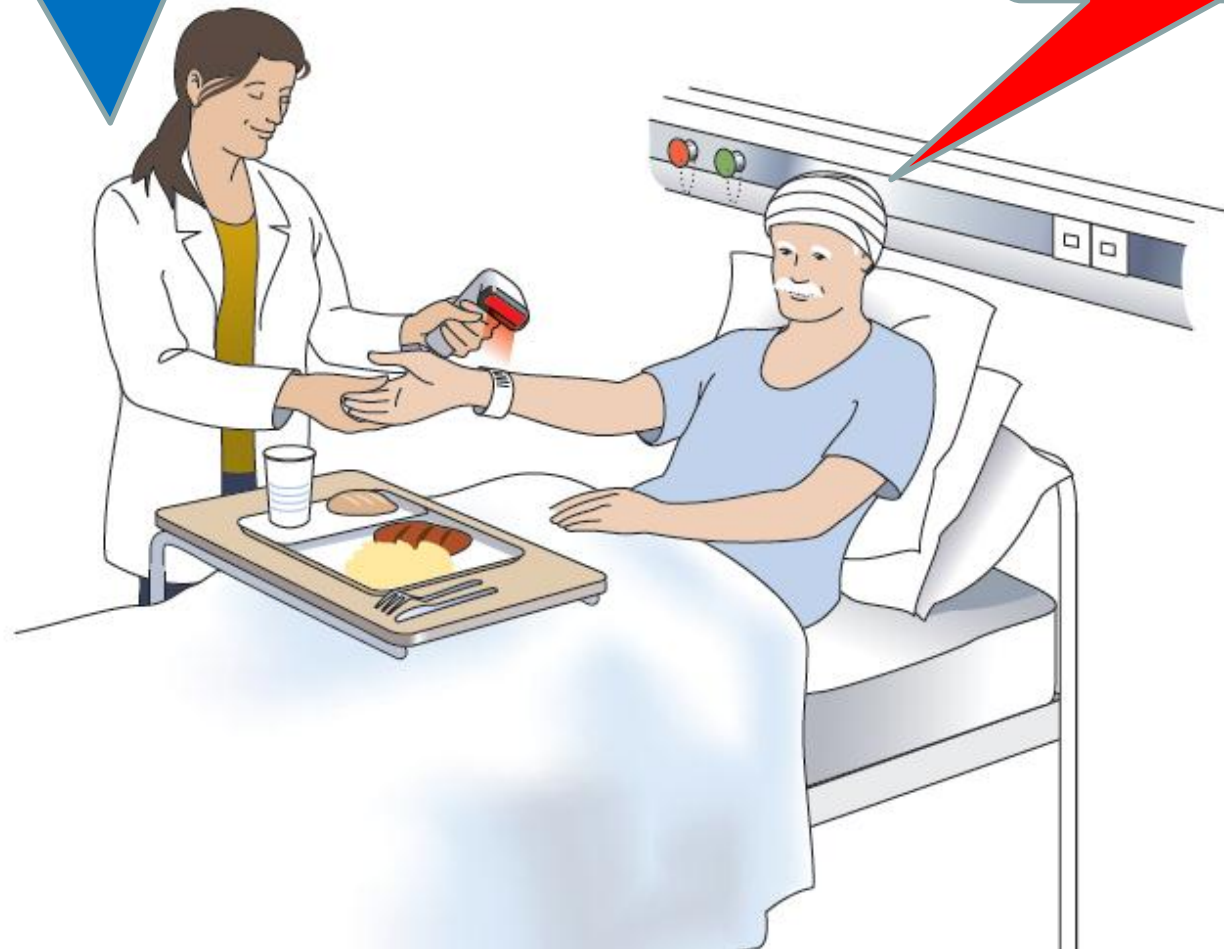
You'll be happy to know we have new procedures that'll prevent mistakes, Mr **Brown**

My name's **Smith** !





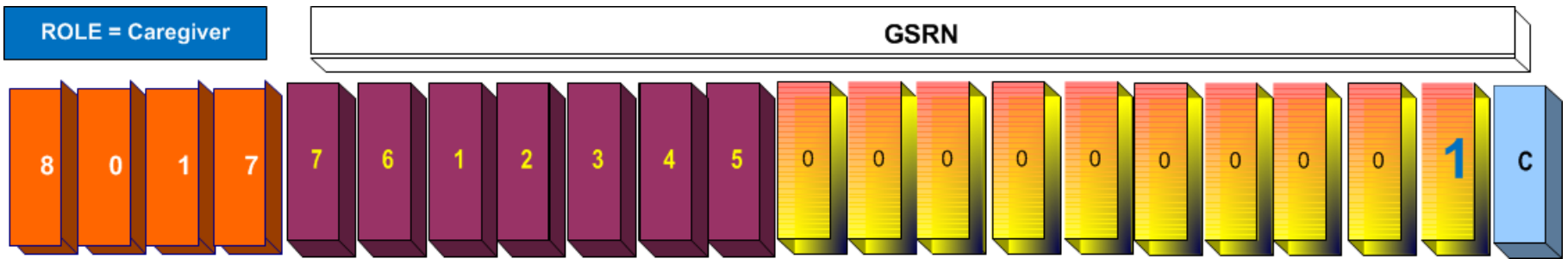
# How to identify...







# Caregiver Identification

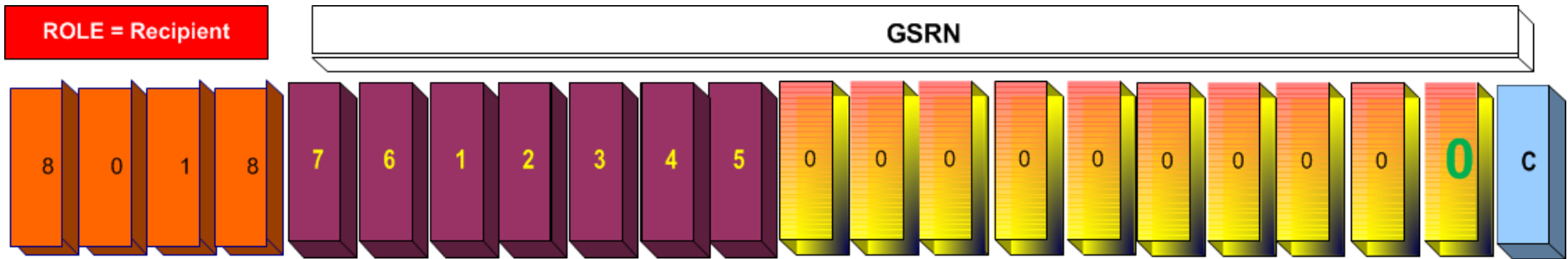


- ✓ New AI defining the ROLE (8017)
- ✓ Definition more precise
- ✓ Ability to embed existing numbers





# Subject of Care Identification

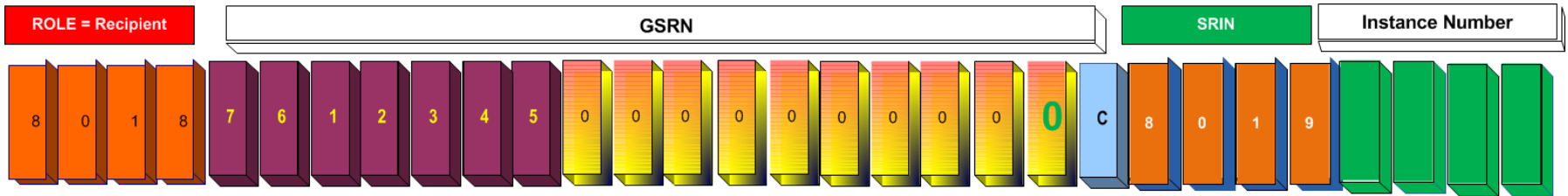


- ✓ Existing AI 8018
- ✓ Definition more precise
- ✓ Backward compatibility
- ✓ Ability to embed existing numbers such as NHS number





# Subject of Care Identification with SRIN



- ✓ Existing AI 8018
- ✓ Optional attribute to capture «instances» in the care processes
- ✓ SRIN= Service Relation Instance Number (AI 8019)





# Workarounds and GSRN + SRIN

- Individual Provider does not scan SoC identification band
- Individual Provider scans proxy barcode
- Individual Provider prints additional identification bands to act as proxy barcodes
- Individual Provider does not scan medication



Proposition does not impact



Proposition avoids workarounds



# Best solution for AIDC

Linear Symbol: not appropriate for GSRN

Global Uniqueness of the key in the AIDC process



Datamatrix



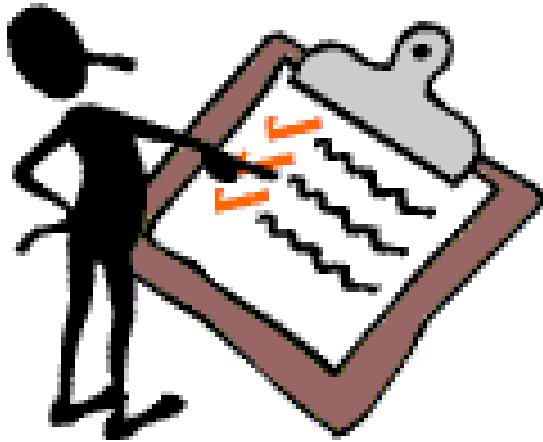
# The next step



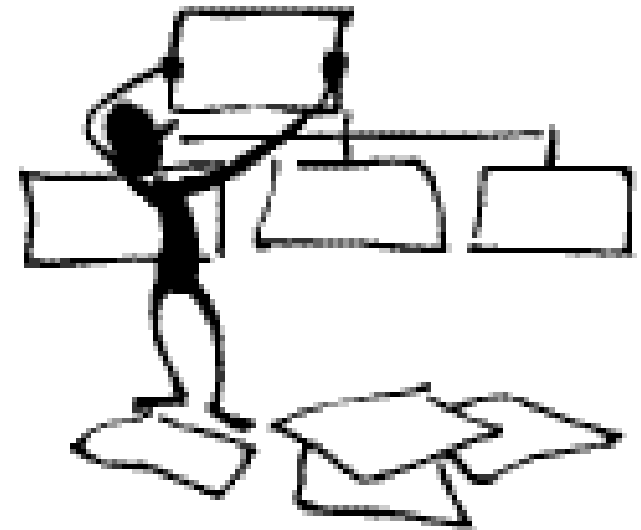


# Development of ISO Technical Specification

Explain the wider user community



Reference use cases to illustrate implementation





# Contact



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Kettering General Hospital



NHS Foundation Trust

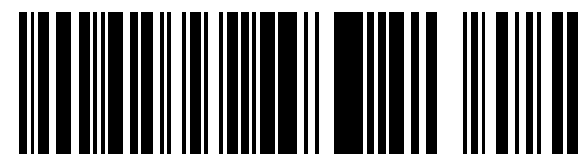


Bar coding baby wristbands and blood  
spot cards to improve patient safety

**Producing DH-compliant GS1 Bar Code labels from any NHS patient system**

# PROJECT OUTLINE

- March 2010 – successfully implemented GS1 linear & 2D Bar Codes on baby wristbands and blood spot screening labels to improve patient safety
- Today, Kettering's maternity ward uses an integrated and cost-effective system that complies with Department of Health (DH) and National Patient Safety Authority (NPSA) recommendations



# KEY OBJECTIVES

- To **improve patient safety and hospital efficiency**
- To **comply with** UK Newborn Screening Programme's mandate as well as NPSA & DH **recommendations**
  - Positive Patient ID holds the key (*NPSA SPN 24*)
  - One single electronic patient record using the verified NHS Number
  - Use of GS1 standards for patient wristbands (*DH Coding for Success policy & NHS ISB Advanced Notice*)
- To **implement a flexible and standardised bar coding system** that can be used throughout the trust for future projects
- To **reduce transcription errors** using Automatic Identification and Data Capture (AIDC) technology.

# OUR APPROACH

- Guthrie Heelprick Labels produced out of National Number for Babies (NN4B) needed to have GS1 Bar Codes
- Patient wristbands needed to be GS1 Bar Coded
- Decided to combine wristbands and heelprick labels into one process using existing printers
- Used the National Health Service (NHS) Re: Source Hub to identify wristband and solution provider - 'Laserband' and FDI integration software.



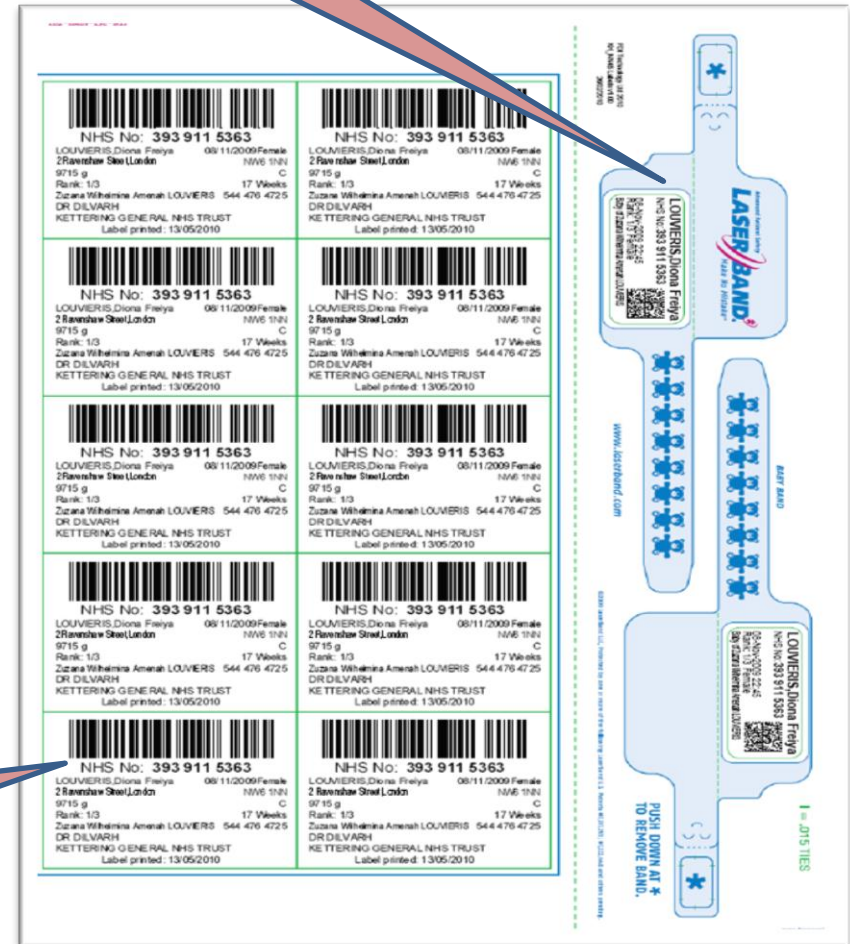


- Two ID bands (ankle/wrist)
- GS1 DataMatrix with a Global Service Relation Number (GSRN)

# PROCEDURE WITH NN4B

- Combining projects and technology
- Results
  - Solution to a number of different issues
  - Uses GS1 standards
- Delivers
  - Labels for patient management
  - Patient identification

- Labels for patient management
- Contain GSRN and GS1 Bar Code (GS1-128)





# New Blood Spot Screening Card

Front of card

  
 NHS No: 547 953 3118  
 JOHNSON Laura 01/03/2009 Female  
 19 Scapegoat Road Salisbury SP14 1GN  
 3600 (g) A  
 Rank 1/1 40+2 weeks  
 Christina JOHNSON 25/03/1967  
 Dr. AS Smith J12345  
 Trowbridge Birthing Centre Printed 23/11/2009

**'Each one is Unique'**

ALL fields on the card must be complete. From **1st April 2010** if the baby's NHS number is not on the card the laboratories will request a repeat sample.

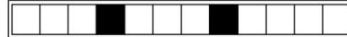
A bar-coded NHS number label should be applied to all sheets of the card.

Ethnicity, Gestation and Sex are all included in the label

Please include family history information in the comments field e.g. mother's carrier status (Antenatal HBO code, HBO Outcome code)

GP practice code and PCT are vital information to link results to babies

**NEWBORN SCREENING BLOOD SPOT TEST**

Baby's NHS No. 

**NHS**

DATE OF SPECIMEN 06 03 09

Is this a repeat (✓) YES NO ✓

Has baby had a blood transfusion (✓) YES NO ✓

If yes, date of last transfusion D D M M Y Y

Is the baby in hospital (✓) YES ✓ NO

If yes, current hospital and ward: Berwick Hospital, Ward 09

POSTCODE SEX (J) M F

G.P. PRACTICE NAME UKNSPC Clinic MOTHER'S FULL NAME Christina Johnson BIRTH WEIGHT (g)

G.P. ADDRESS 130 Solders Road Beaconsfield MOTHER'S DOB 25/03/67 COMMENTS (Family history e.g. Mother's carrier status (Antenatal HBO code, HBO Outcome code); temporary address)

G.P. PRACTICE CODE 1 A A 2 2 2 MOTHER'S NHS NUMBER 1 2 3 4 5 6 7 8 9 10 PARENT TELEPHONE NUMBER 012 345 6789

PCT Salisbury PCT ALTERNATIVE SURNAME N/A Mother HbE

HOSPITAL OF BIRTH Borwick TEL. NO. OF PERSON TAKING SAMPLE 987 654 3230 NAME OF PERSON TAKING SAMPLE (PRINT) Sir Lancet

SN 0900394801 SN 0900394801

Expiry Date: 12-2012

Johnson  
Surname

# IMPLEMENTATION PROCESS

- **New wristbands were tested** on babies and mothers for comfort, durability, allergy
- **Middleware/Software requirements gathered** from different NHS agencies to ensure all the NHS systems were taken into account
- Once system was implemented, **nurses were trained** and a **checklist for staff was produced**
- **IT support and service staff were fully trained**

# BENEFITS FOR BABIES



- Full, eye readable demographics
- Time savings for ward based and community midwives
- Time savings for the National Newborn Screening Laboratories
  - Newborn Testing – right first time
  - More professional keepsakes loved by Mums



# PEOPLE ARE WHAT MAKES I.T. WORK

**Thank you to:**

**Alison Campbell** – KGH Foetal Health Co-Ordinator

and

**William Wiseman** - FDI Technical Director

Without whom, none of this would have got off the drawing board.

**Yvonne Pywell** - KGH Clinical Audit Facilitator

and

**Susan Plaistere** - KGH Patient Systems

For working to make the Trust-wide rollout a success.

**And to:**

**KGH Labour Ward**

**Laserband**

**GS1 UK**

**NHS Re:Source hub**

Paula Lilburn

Chartered Scientist



# DOMINIQUE AT WORK





## Case study

### Sherwood Forest Hospitals NHS Foundation Trust

Sherwood Forest NHS Foundation Trust improves patient safety by implementing a positive patient identification system across all wards meeting current NHS guidelines and GS1 standards.

Sherwood Forest Hospitals NHS Foundation Trust worked with GS1 UK accredited Solution Partner, Herbert Healthcare, to roll out a positive patient identification solution across 100% of the Trust's wards to improve patient safety and provide a foundation for future hospital efficiency. The solution was implemented with very little disruption to the daily operations of the Trust and at no cost to patients using its services.

#### Background

Sherwood Forest Hospitals is the main NHS trust providing healthcare services for people in and around Mansfield, Ashfield, Newark, Sherwood and parts of Derbyshire and Lincolnshire. The Trust looks after 75,000 inpatients as well as 30,000 day case patients. Sherwood Forest Hospitals has recently opened a flagship £320m redevelopment scheme at King's Mill Hospital, which has state-of-the-art facilities. The Trust already had a limited bar coded patient identification system in place before the implementation, but there were a number of limitations that the new solution was designed to address.

#### Meeting NHS guidelines and GS1 standards

Sherwood aimed to comply with the National Patient Safety Agency's (NPSA) Safer Practice Notice 24, the Department of Health's 'Coding for Success' policy recommending the use of

GS1 standards and the Information Standards Board's Advanced Notification calling for the use of GS1 bar coded wristbands by July 2011. Its compliance with these requirements meant that the trust could further improve patient care.

However, with the existing system, the Trust couldn't produce patient wristbands that met all of the criteria. For instance, the guidelines stipulate that a 2D bar code should be printed on each wristband, which wasn't possible with the existing solution. Due to the limitations of the technology, some of the wards and departments, couldn't make use of bar coded wristbands at all.

#### Issues on the paediatric and maternity units

The paediatric unit couldn't use the existing bar coded wristbands because it wasn't possible to print all the required information (including a 2D bar code) onto the smaller wristbands in the maternity and children wards. It meant that wristbands used in the ward were handwritten, which created a number of issues in the ward. It was difficult to read many of the wristbands because they were so small and the staff wrote large amounts of information on them. On the maternity unit, there is often a need to add more than the core information, for instance, where there are twins or triplets. There were also problems with the bands getting wet and peeling off or the text to run.



## Case study

### Airedale NHS Trust implements GS1 bar codes on patient wristbands to deliver the right treatment to the right patient

Airedale NHS Trust has followed national guidelines for patient wristbands from the National Patient Safety Agency's Safer Practice Notice (SPN) by implementing a system that not only identifies patients at their bedside but will in the future ensure accurate labeling of blood samples and also medication prescribing.

#### Background

Airedale NHS Trust provides acute, elective and specialist care to a population of over 200,000 people from a widespread area covering 500 square miles within Yorkshire and Lancashire. The trust treats 25,000 inpatients, 22,000 day cases and 104,000 out patients every year. Its A&E department treats over 47,000 patients and 2,300 babies are born in the hospital each year. For the second time in three years, it has been named 'Small Trust of the Year' in the Dr Foster Hospital Guide which identifies and analyses performance across the English NHS against selected indicators.

#### Standardising wristbands to improve patient safety

Between February 2006 and January 2007, the NPSA received 24,382 reports of patients being mismatched to their care. It is estimated that more than 2,900 - or 12% - of these are related to wristbands and their use.

NPSA's SPN No.24 provides guidance for a standardised patient wristband throughout the NHS in England and Wales. The notice calls for all NHS organisations to use standardised wristbands to only use what is necessary to meet the requirements.

Identifiers: last name, first name, date of birth and NHS number by 18 July 2008.

The guidance states that wristbands should allow the incorporation of new technologies that may be used to assist patient identification e.g. RFID tags or bar code technologies, whilst still fulfilling NPSA's requirements. In addition, by 18 July 2009, all NHS organisations that use patient wristbands should generate and print their wristbands from hospital demographic systems, such as a Patient Administration System (PAS). Printing should wherever possible be at the patient's bedside or next to the patient (i.e. not done in advance of the patient's arrival).

The Department of Health also recommends that a coding system should be adopted that is consistent with the coding system in England. Both the NHS and the Department of Health are currently reviewing the coding system in England. Both the NHS and the Department of Health are currently reviewing the coding system in England.

