Evaluation of the Uptake of Advice, Directives and Guidelines to the NHS Concerning Patient Safety by the Safety Alert Broadcast System

commissioned by
Patient Safety Research Programme

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Safety Alert Broadcast System

- **Electronic distribution system in England for all alerts issued by:**
  - **National Patient Safety Agency**
  - **Medicines and Healthcare Regulatory Agency**
  - **DH Estates and Facilities**
- **Managed by Patient Safety Team at the Department of Health**
- **One named recipient in each NHS organisation called the SABS Liaison Officer (SLO)**
- **SLOs acknowledge online:**
  - **Receipt of alert, whether relevant, action commenced and action complete**
- **DH can compile statistics of compliance based on action complete statistics**

Purpose of the Research

- To determine how directives are disseminated and acted upon in trusts, and whether there are differences between Trusts
- To assess the reaction of key stakeholders in Trusts to the SABS system, and to identify the ways in which they think that the alerts could be improved
- To determine whether, and how quickly, a range of alerts were implemented
- To identify, in cases of non-compliance, the factors impeding implementation of the requirements of the alert

Categories of Alerts Chosen For Study

	NPSA	MHRA	DH	DHF&E
Immediate action	**Naso-gastric tubes**	**ICDs**		
Action	**Latex allergy** **Oral methotrexate**	**Needle-free intra-vascular connectors** **ICDs** **Electrically operated beds (PCTs only)** **Guedal airways (ambulance trusts only)**	**Radiotherapy**	**Mobile food trolley** **alcohol based hand rub** **Shower heads as ligature points (Mental Health only)**
Update		**ICDs**		
Info request				

Methods

- Interview issuing agencies
- Interview/send questionnaires to SHA and Trust SABS liaison officers (SLOs)
- Explore SABS data
- Make site visits to:
  - 20 acute trusts
  - 15 PCTs
  - 2 mental health trusts
  - 4 ambulance trusts
- Trusts selected via stratified sample based on:
  - Size (acute and PCTs)
  - Geography (north and south)

Survey

- Survey sent to every Trust SLO (n=561) using the DH Patient Safety Team database in June 2006
- 343 completed questionnaires were electronically returned, a response rate of 62%

Findings of Survey – who are the SLOs?

- 216 different job titles:
  - Risk Management (59.5%)
  - Clinical Governance (28%)
  - Health and Safety (25%)
- 35% had a clinical background
- Varied seniority:
  - 52% were neither on Trust Board nor had a manager on Trust Board
- 61% indicated that they spent between 2 and 10% of their time on SABS:
  - (221 alerts have been issued by the MHRA, 26 by the NPSA and 39 by Estates and Facilities)

Interviews

- SLO
- Clinical Governance Lead
- Medical Director
- Director of Nursing (Chief Nurse)
- Chief Pharmacist
- Director of Facilities
- Superintendent Radiotherapist or Radiotherapy Services Manager
- Rheumatologist or Rheumatology Specialist Nurse
- Cardiologist for ICDs or Senior Medical Physiologist or Senior Cardiac Technician for ICDs
- Purchasing Manager
- Senior Electrician
- Nurses
- Porters

Wards and Clinics

- Visits to 10 wards or 3 community clinics
- Interview nurse in charge or District nurses
- undertake audit of
  - Naso-gastric tubes
  - Latex allergies
  - Needle free intravascular connectors
  - Alcohol based hand rub – positioning of containers and total stocks

Latex Allergy

Do you have immediate ready access to non latex versions of the following equipment? Interviews and audits:

- **Respiratory Equipment:**
  - Airways
  - O2 masks
- **IV and Feeding Tubes:**
  - Naso-gastric tubes
  - IV lines
  - Dextrose 5% IV fluid
- **Monitoring and Observation Equipment:**
  - Gloves
  - BP cuffs
  - Resuscitation equipment
- **Other Equipment:**
  - Adhesives
  - Mattresses

Latex Allergy - Findings

- All aware of gloves
- Even when prompted many could not think of equipment containing latex
- Higher degree of awareness in Theatres, A&E, and Paediatric Wards
- Latex and non latex mattresses identical – no markings
- Acute Trust Managers claimed boxes of latex free equipment available but in some cases staff were not aware or boxes could not be traced
- Comments:
  - “Well how many people have a really serious allergy?”
  - Blind faith “they wouldn’t provide this stuff if it wasn’t safe….”

Availability of Equipment

- 45% of respondents thought that they had access to latex free Oxygen masks and IV lines
- Audit showed over 70% of wards actually had access to latex free versions of this equipment
- On the other hand the audit demonstrated that only 48% of ward areas had access to an ambu-bag that was marked latex free

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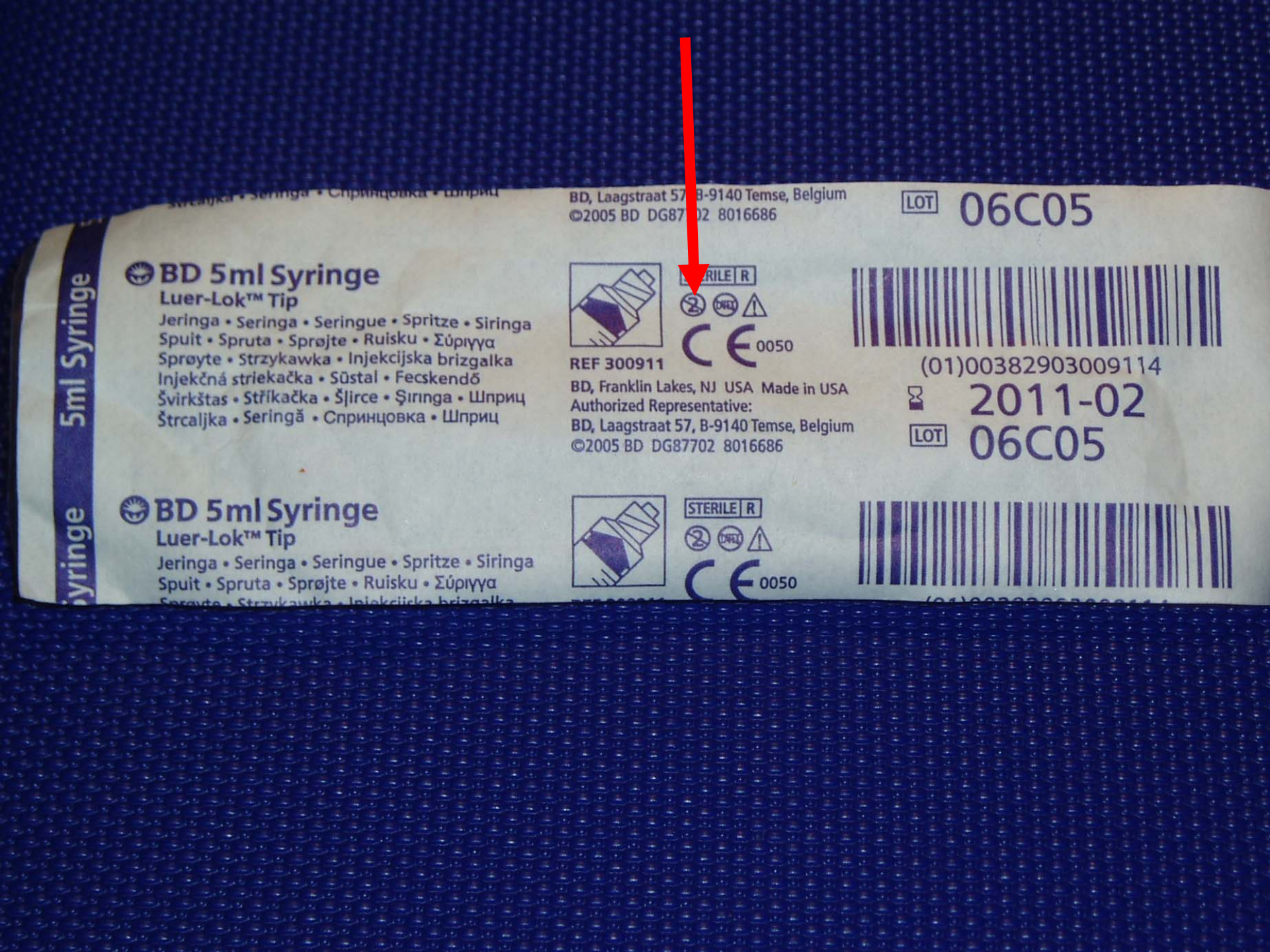
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Implantable Cardiac Defibrillators (ICDs)

- Not all Trusts
- 10 alerts in 2005 affecting:
  - Ela Medical
  - Guidant
  - St Jude Medical
  - Medtronic
- Variety of problems:
  - Batteries losing charge, arcing causing damage to components, memory failure
- For immediate action, action or information/update – recall of patients, sort problem, withdraw stocks and consider explanation

Implantable Cardiac Defibrillators - Findings

- Some Trusts use paper records
- Electronic system - you can search model and make but serial numbers have to be individually checked – for hundreds of affected serial numbers
- Many trusts not implanting centres but do follow up - negotiation with implanting centre as to who chases patient up
- Patients move

Naso-Gastric Tube Feeds

- **Risk:**
  - **insertion into oesophagus, lungs, pleural space, brain**
  - **Migration into mouth, lungs (especially neonates where tube length is very short)**

- **Alert recommended / required (*inter alia*)**
  - **Cessation of 'whoosh' test (Auscultation of air insufflated through the feeding tube)**
  - **pH paper to replace litmus**
  - **X ray**

Naso-Gastric Tube Feeds

- Many RNs unaware of alert
- Alert not circulated to DNs in many PCTs
- 56% said they used pH paper although some called it litmus
- 6% would still use auscultation method
- Variable awareness of correct range, with 11% stating 1-3, 21% saying 4-6; 2.5% saying 7-9 and the rest either didn't use NG tubes or didn't know

Methotrexate

- Confusion between 2.5 and 10 mg tablets
- Some patients taking daily
- Need good patient information and records
- Rheumatologists objected to patient info recommendations so an amendment was issued in 2006 after agreement with British Society of Rheumatologists

Methotrexate Findings

- Led by Pharmacists
- Good implementation – best of all our tracker alerts
- Withdrawal of 10mg tablets with few exceptions
- GPs less compliant
- Patient information reconsidered

Needle Free Intravascular Connectors (MDA 2006/030)

- Some concern re infection so manufacturers have reduced the total use life expressed either in usages or in days or both (often 7 days and 100 usages) and give advice about disinfectant contact and drying time

Needle Free Intravascular Connectors – Findings II

- Few nurses aware of this alert
- Few recognised the device as a needle free intravascular connector – called “Bionectors” or “bungs”
- Alert said read the instructions – but these are never circulated with equipment because of topping up system (one set of instructions in boxes of 50)

Needle Free Intravascular Connectors

- **52.9% used needle free intra vascular connectors on their wards**
- **10% would change them every 24 hours or less, 23% every 24 – 72 hours, 9% between 3-7 days and 2% said no there was no prescribed time period**
- **53% always used an alcohol wipe and 30% said they just wiped the connector. Contact time unknown**
- **8% of wards said there was a policy on the management of intra vascular connectors which was later observed during the ward audit, 14% said yes they did have a policy or guidance but could not show a copy to the researcher at the time of audit and 39% said no**
- **18% of patient records viewed stated date and time of insertion and number of uses for intra vascular connectors**

Message for SABS

- **Glitches in system:**
  - Acknowledging receipt
  - Signing off – delay between signing off and this appearing on the SHA level website
  - Late sign-offs – alert removed
  - Search facility
- **Put message in strapline (for GPs)**
- **Timing:**
  - Do not send out on Friday afternoons –

    (may get missed because of handovers – also lose three days in implementation)
- **Little evidence of interest among doctors**
- **Wide variation in internal systems – why not extend the DH system**
- **Action complete does not mean action complete - it may mean alert disseminated or intention to act recorded**

Messages for Issuing Agencies

- **MHRA Alerts in the main are thought to be clear, concise and easy to implement**
- **In many Trusts the MHRA alerts are managed as before – only electronically and with a tracking system.**
- **NPSA alerts very informative but complex**
- **Ensure action is clear – not vague warnings about things that may go wrong**
- **Badly targeted – especially to MH trusts and PCTs**
- **Circulation lists on alerts too long and largely ignored**
- **ALL SLOs select for relevance to their trust and managers then filter out alerts they deem to be irrelevant**
- **Know your audience:**
  - **SLOs come from a wide range of backgrounds**
  - **Explain something about the devices to assist the SLOs In dissemination**

Messages for Trusts

- **Workload of SLOs has increased, yet it is only seen to be a small part of their job (2-10%)**
- **Dissemination systems work well to lower management level – good records**
- **Are the right people doing this?**
- **Overconfidence of senior managers in system – too many hands-off**
- **Some SLOs have developed sophisticated systems of distribution**
- **Limited evidence of implementation**
- **Paper copies at ward/clinic level – 47% stated that they still received alerts in paper form**
- **Alerts are not self executive**
- **Little evidence of audit**
- **Little evidence of any interest or awareness among doctors**

Healthcare commission improvement notice issued to one NHS Trust, June 2007

- The Commission believes that while the Trust does have some of the necessary frameworks in place, fundamental problems exist in how it prevents and manages infection. Policies and procedures are not being put into practice, the Trust has not allocated sufficient resources and infection control is not embedded into the day-to-day practices of all staff, from the “board to the ward”.

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Scoring System for Alerts?

Alerts vary in relation to:

- **Urgency**
- **Importance**
- **Complexity**
- **Focus**
- **Implementability**
- **Strategic significance**
- **Organisational impact**
- **Sustainability requirement**