The UK NHS National Reporting and Learning System: the state of play overseas

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We need to share the learning from our mistakes to try and stop them happening again …..

National Reporting & Learning System

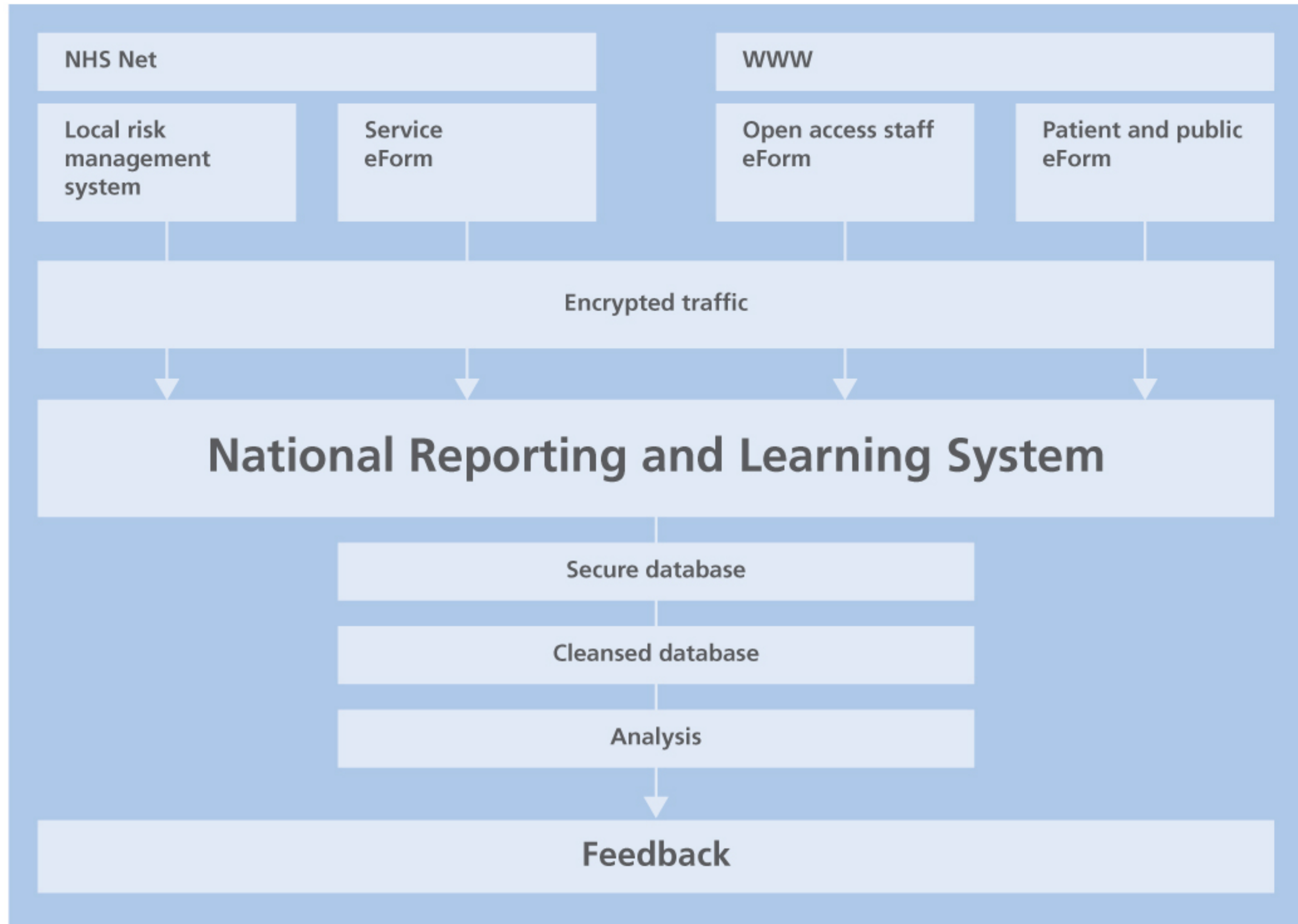
Statutory function of NPSA

- implement a national reporting system for patient safety incidents
  - "any unintended or unexpected incident that *could have* or did lead to harm for one or more patients receiving NHS-funded healthcare"
- collect and appraise information to promote patient safety

Key points

- all specialties and care settings (initially 607 health care organisations in England and Wales)
- all levels of severity including "no harm" – actual harm
- capacity to analyse very large dataset (data mining)
- for national and local learning, including feedback

Figure 1: The National Reporting and Learning System



Reporting in Numbers

1,691,158
Total number of incidents reported to the NRLS since November 2003

21,985
The number of incidents which are likely to be categorised by reporters as severe or death (based on 1.3%)

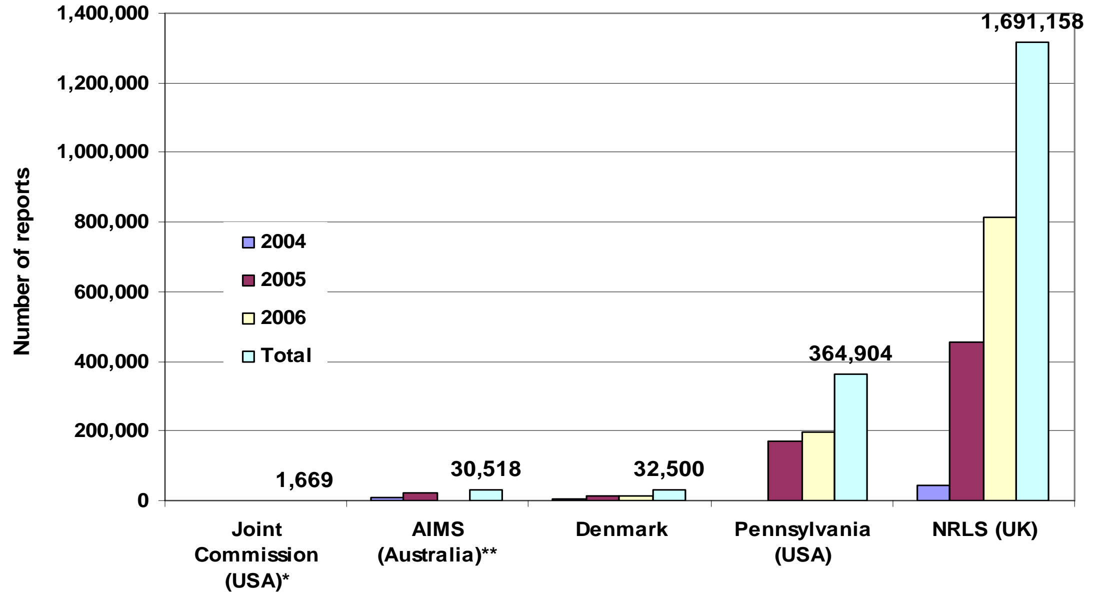
12,360
Highest number of reports from one Acute Trust (Oct 06-March 07)

1,773
Average number of reports from Acute Trusts (Oct 06-March 2007)

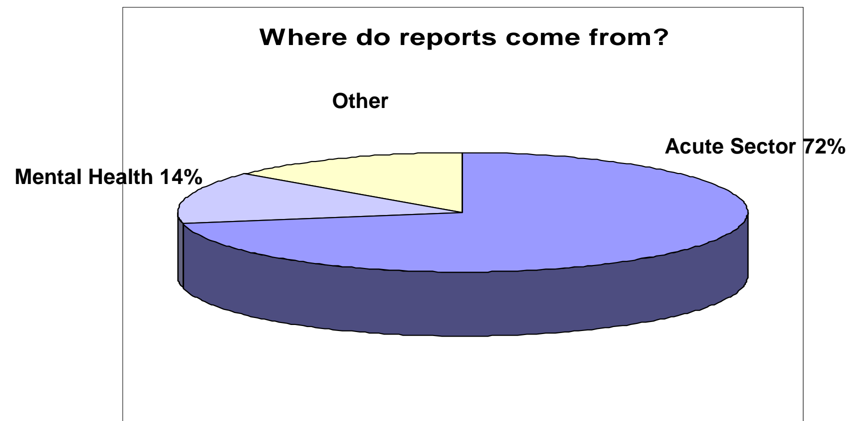
430
Number of Trusts connected to the NRLS (100%)

274
Average number of reports from PCOs (Oct 06-March 2007)

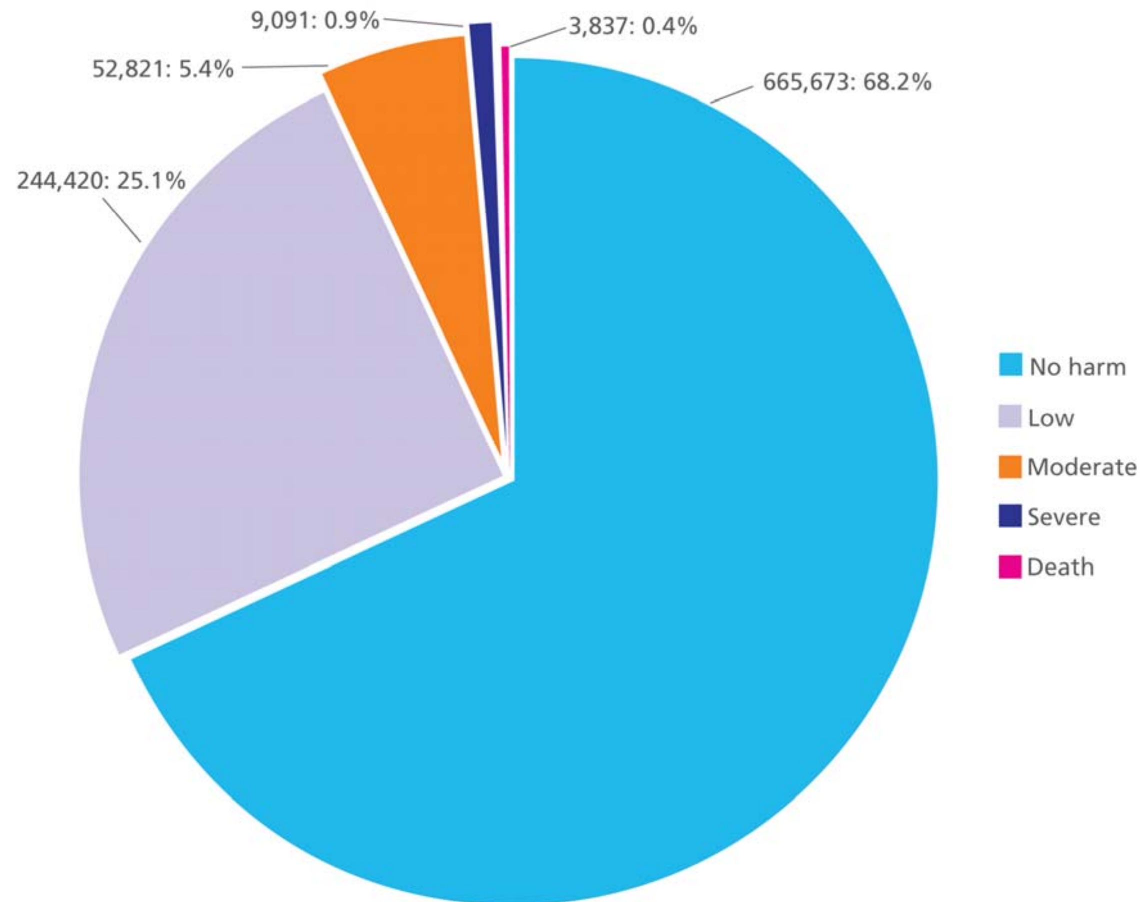
104
The average number of days for a serious incident to be reported through to the NRLS



Number of Reports in Reporting Systems Internationally



Degree of harm to patients (up to the end of September 2006)



‘It is of the highest importance in the art of detection to be able to recognise out of a number of facts, which are incidental and which are vital’

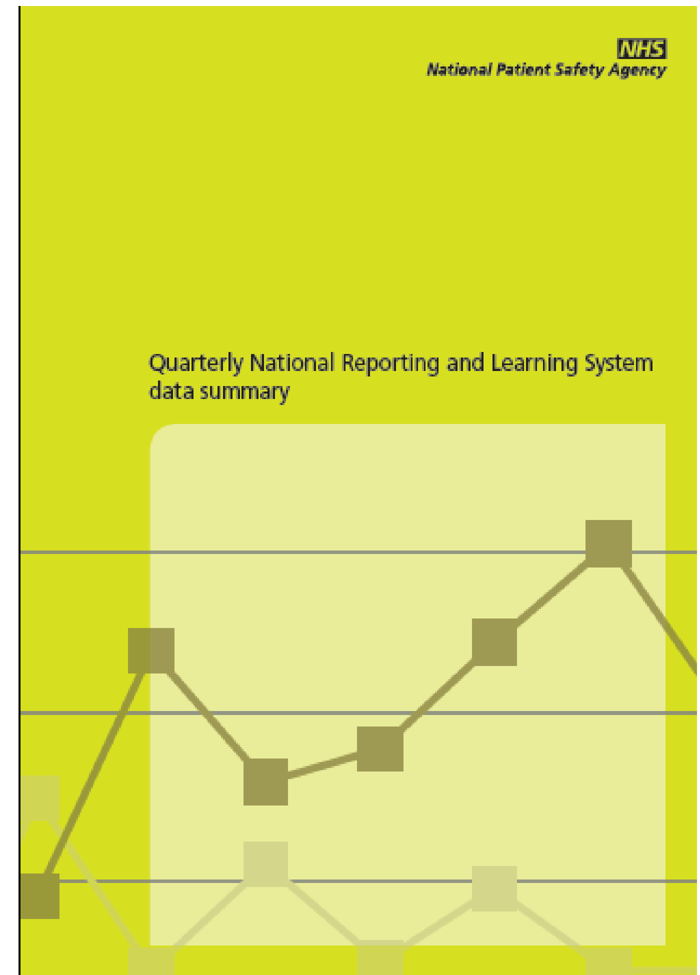
Arthur Conan Doyle (1859 - 1930)

Approaches to analysis of NRLS data

- Routine monitoring reports
- Ad hoc analysis
- Thematic analyses
- Exploratory
  - Reviews of selected incidents
  - Data mining

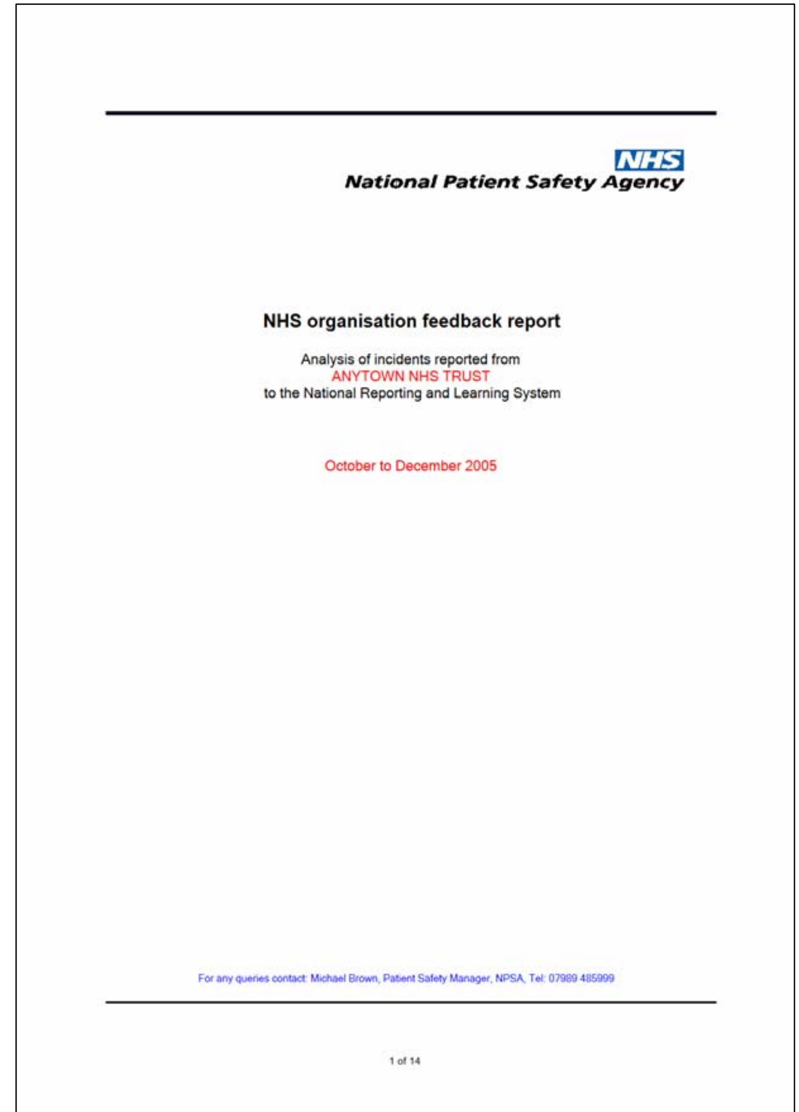
Routine reports

- Regular quarterly analysis which will form basis for
  - Management Team report
  - Quarterly PSO report on web
  - Slide set
  - Tie into trust reporting cycle



Trust feedback reports

- > 400 individual reports
- 9 variations tailored to trust clusters
- Planned for quarterly production
- Evolving over time
- Medication specific reports in development



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NHS organisation feedback report

Analysis of incidents reported from
ANYTOWN NHS TRUST
to the National Reporting and Learning System

October to December 2005

For any queries contact: Michael Brown, Patient Safety Manager, NPSA, Tel: 07989 485999

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Figure 2: Rate of incident reports per hundred admissions

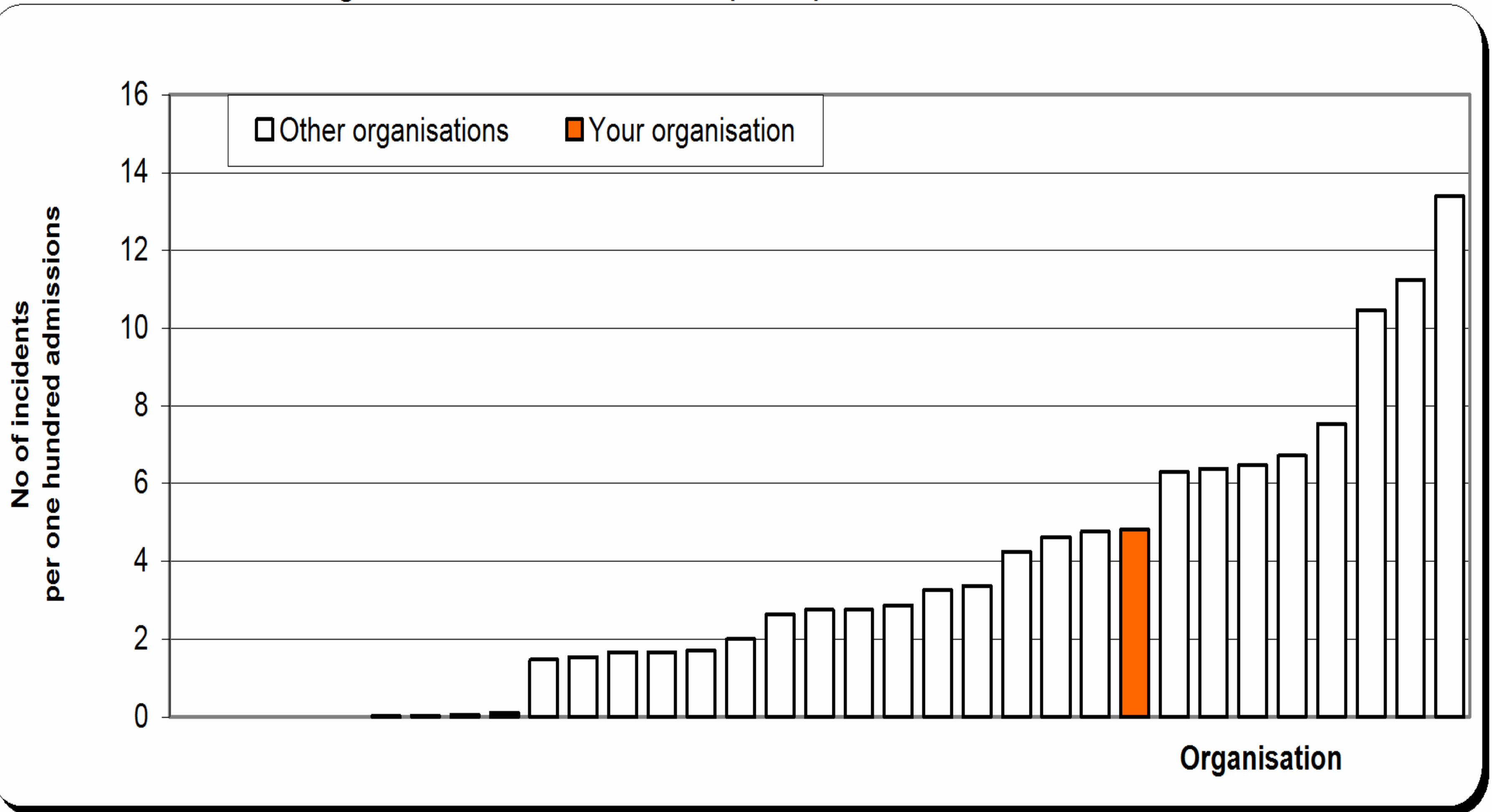
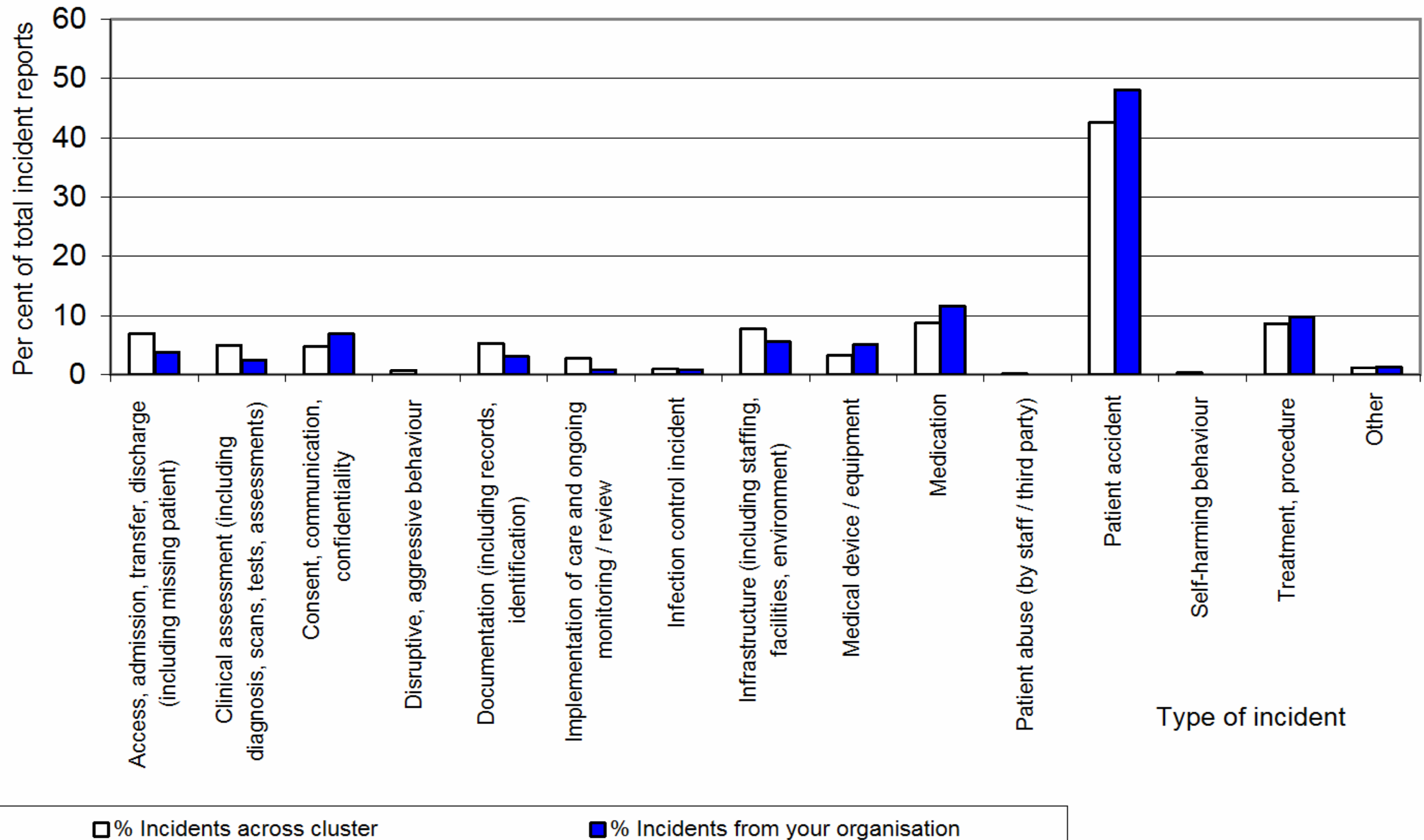


Figure 3: Incident type for cluster



Ad hoc analysis

- Wide range of requests
- More than half external, mostly from NHS, but also Parliamentary Questions, Freedom of Information requests
- Internal requests relating to current projects and prioritisation process
- Use of Autonomy for free text searches

NRLS: examples of analysis

- patient ID problems in lab tests – lab results or samples being mis-identified
- non-medical devices/IT equipment – errors or failure of computing and other non-medical equipment leading to incidents
- missed/delayed diagnosis – incidents relating to this, particular in emergency care
- infusion pumps – inappropriately attaching an infusion pump line to an intravenous line
- pre-filled syringes – supply problems of emergency pre-filled syringes
- oxygen cylinders – people smoking near use of oxygen, cylinders falling on people
- bleeps not working, leading to failure to respond to urgent calls
- Fire and burn risk from skin preparations and diathermy
- Swabs missing from surgery

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Building a memory: preventing harm, reducing risks and improving patient safety

The first report of the National Reporting and Learning System and the Patient Safety Observatory

July 2005

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With safety in mind:
mental health services and patient safety

Patient Safety Observatory Report 2 | May 2006

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The third report from the Patient Safety Observatory

Slips, trips and falls in hospital

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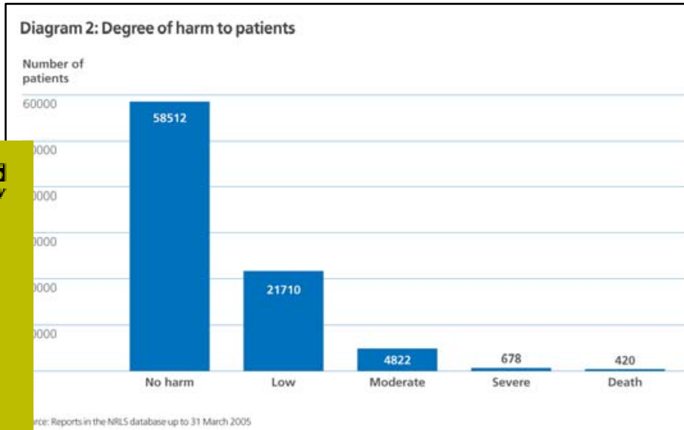
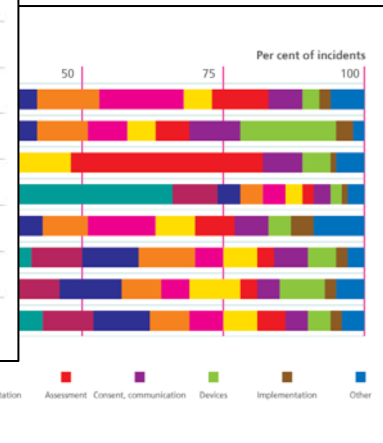
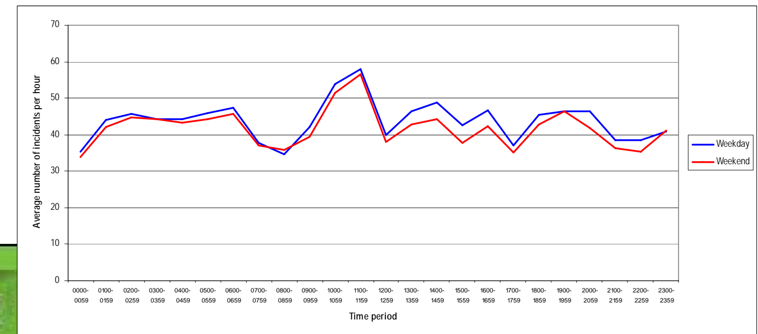
The fourth report from the Patient Safety Observatory

Safety in doses: medication safety incidents in the NHS

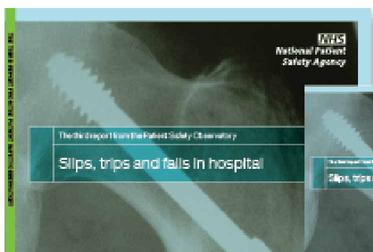






Systematic review of incidents

- Richness of NRLS data in free text descriptions
- Review from clinical perspective adds value
- Huge volumes of data – sampling
  - Multiple (overlapping) cuts e.g. by specialty (maternity), setting (primary care), severity (deaths), incident type (wrong site surgery, crash call), source (open access eForm),
- Robust and consistent review of data supported by guidance and tools
- Involving risk management and clinical expertise



National colour coding scheme for hospital cleaning materials and equipment

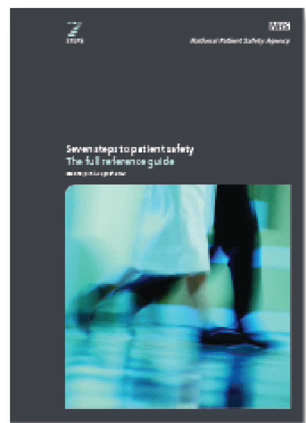
Red
Bathrooms, washrooms, showers, toilets, basins and bathroom floors

Blue
General areas including wards, departments, offices and basins in public areas

Green
Catering departments, ward kitchen areas and patient food service at ward level

Yellow
Isolation areas

Oral Anticoagulant Therapy
Important information for patients



The fourth report from the Patient Safety Observatory
Safety in doses: medication safety incidents in the NHS
PSO/4

Blood safety and you
A co-ordinated response

Only use oral & enteral syringes
to measure and administer oral and enteral liquid medicines

Standardising wristbands improves patient safety

Patient safety alert

Patient Safety Bulletin
Feeding back on reports

Patient Safety Bulletin
Slips, trips and falls in hospital

Learning from incident reporting: ….what's the up to date picture?

Mental health inpatient suicides

- National programme to remove high ligature points

NRLS indicates

- low ligature points/suffocation instead
- High ligature points in gardens/grounds utilised
- Collapsible curtain rails getting stuck on batons

Learning from incident reporting: ...but isn't it terribly rare?

- Mental health services
- Data to end September 2005, along with other data sources (eg litigation)
- Well-known issues in mental health services and also highlighted sexual safety
- Published July 2006

£30m to curb sex attacks on wards for mentally ill

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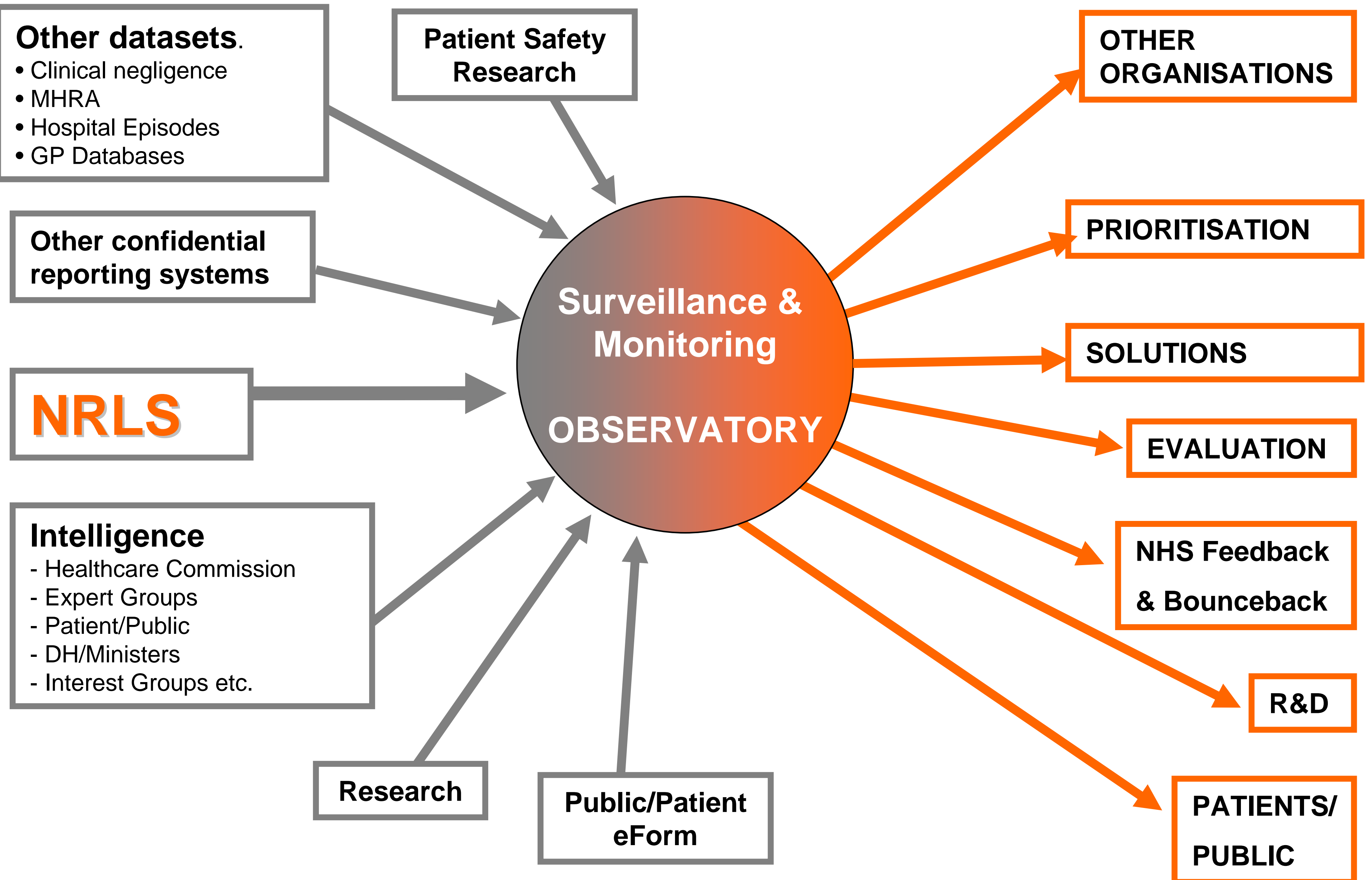
With safety in mind:
mental health services and patient safety

Patient Safety Observatory Report 2 | May 2006

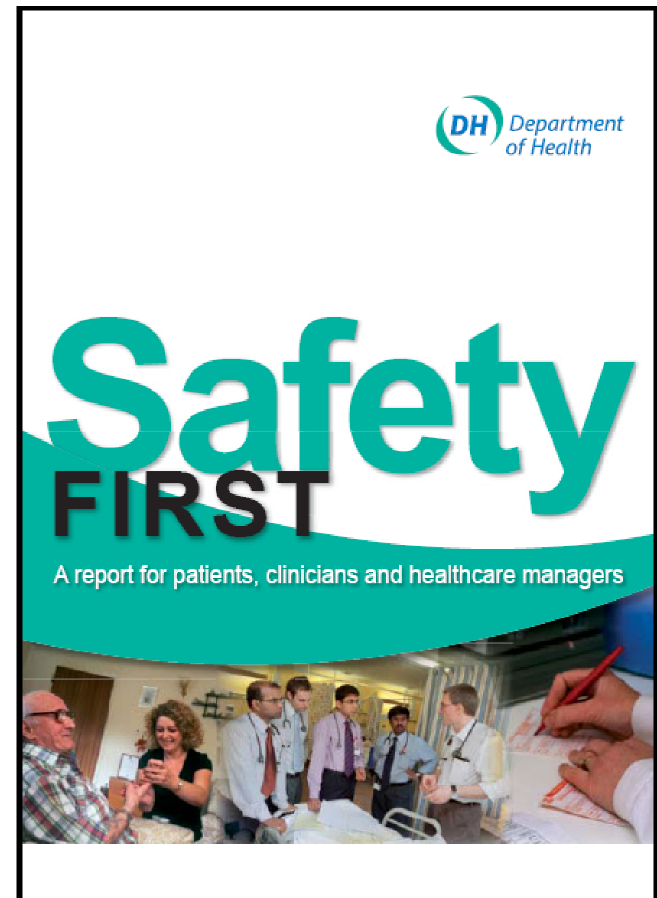

Other datasets.
• Clinical negligence
• MHRA
• Hospital Episodes
• GP Databases
Patient Safety Research
Other confidential reporting systems
NRLS
Intelligence
- Healthcare Commission
- Expert Groups
- Patient/Public
- DH/Ministers
- Interest Groups etc.
Research
Public/Patient eForm
Surveillance & Monitoring
OBSERVATORY
OTHER ORGANISATIONS
PRIORITISATION
SOLUTIONS
EVALUATION
NHS Feedback & Bounceback
R&D
PATIENTS/ PUBLIC

Safety First

Safety First

Safety First highlights key areas for improvement in current safety reporting systems in the NHS. These include:

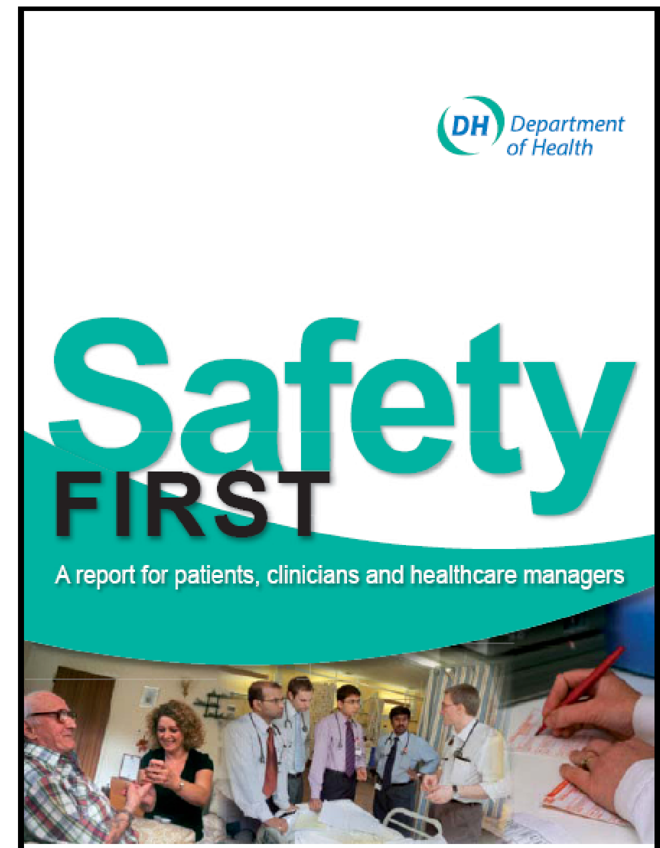
- Simplifying and encouraging reporting of safety incidents
- More rapid reporting and notification of serious incidents to the NPSA within 36 hours leading to more rapid learning
- Capturing risky situations
- Using patient safety data to inform learning and action locally – analysis, learning and feedback.



The need for change

National analysis not enabling local learning and action:

- Hard to report locally
- Uneven profile of staff reporting
- Huge volume of reports
- National response too slow
- Inadequate feedback to NHS



Present imperfect

- >99% of our data from local risk management systems – problems in data quality
- …. and delay

Rapid reporting

- Range of options to report – further pilot
  - Short e-form, phone, email.
  - Initial limited data set
  - Guidance on what to report
- Incident management process
  - Response team
  - Rapid review and prioritisation: size, impact, potential to effect change and add national value
  - Response to reporter: acknowledge, seek further info, feedback on resources
  - Graded scoping: NRLS and other data search, rapid lit review/Google search, clinical/domain expertise
  - Iterative review
  - Ongoing liaison with reporter: e.g. RCA findings

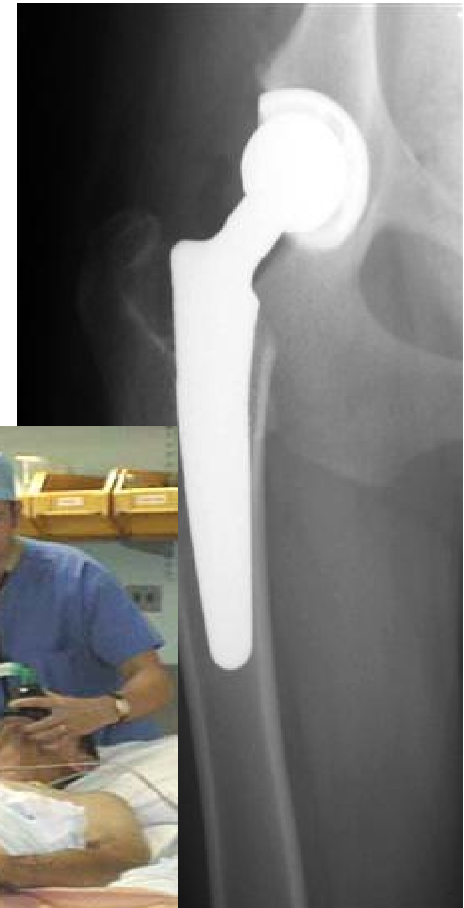
NRLS
Direct

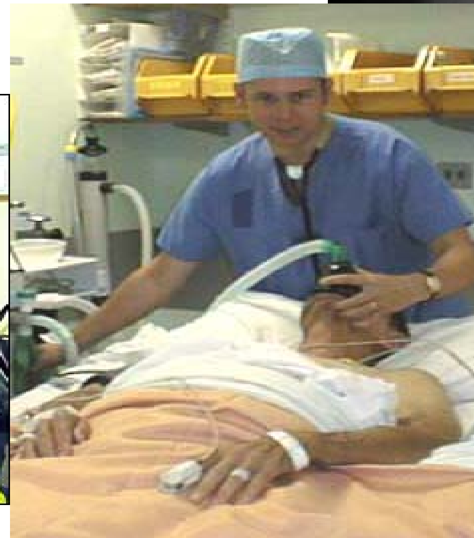
***RE**sponse and **A**ctionable **L**earning making safety **REAL** at the front line*

- Rapid reporting
  - deaths and severe
  - scanning of other regular reviews
- Weekly review of incidents after alerts
- Testing risk prone situation gathering
- Scanning SUIs and other
- Direct from DH
- International alerts/horizon scanning
- Other data sources – litigation, coroners, patient complaints, research
- Systematic analysis

Specialty engagement

- Aim – enhanced engagement in reporting, analysis, response and dissemination
- Risk prone situations – learning about *real* concerns from *real* clinicians
- NPSA working in new ways with clinicians - anaesthesia, neonatal, radiology, intra-partum care





The answer

Learning

Local Learning investigations and risk assessments

Deaths and serious injuries

Themed reports

Incidents related to past alerts

Specialty based reporting

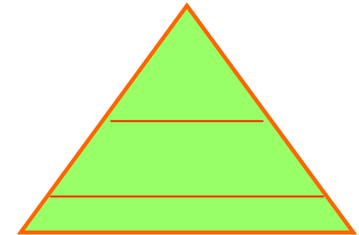
Anything else Trusts want to tell us

Quality assured categorical data

Data mining and regular trend reporting

Reporting

Next Steps



- Standardise and simplify the dataset:
  - Define a core minimum dataset
  - Work with Trusts to define standards to improve and assure data quality locally
- Define and set the requirements for incident reporting in the following high priority areas:
  - Deaths and serious injury
  - Themed categories (prioritised annually)
  - Speciality-based learning and analysis by collaboration with clinical networks and Royal Colleges (anaesthesia pilot)
  - Monitoring national patient safety initiatives (e.g. correct site surgery)
- Develop processes to respond in a timely and appropriate fashion to provide targeted response and learning for the service – “response/call centre”
- Developing a national facility to capture local incident investigations
  - National learning and sharing
  - Effective feedback mechanisms

Thank you

Any Questions?