

Sharing Data as a Means to Improving Practice

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UK NEQAS

SERIOUS HAZARDS OF TRANSFUSION

SHOT



*blood stocks
management scheme*



Distributes blood group serology exercises with the aim of assessing laboratory performance and highlighting errors. Provides advice and education with the aim of improving practice

Countries covered - UK and Eire



Collects data on serious adverse events associated with the transfusion of blood components with the aim of:

- *improving the safety of the transfusion process*
- *informing policy within the Transfusion Services*
- *improving standards of hospital transfusion practice*
- *aiding production of clinical guidelines for the use of blood components*

Countries covered include - UK



The Blood Stocks Management Scheme monitors the red cell and platelet inventory and wastage in hospitals and Blood Services in the United Kingdom with the aim of maximising the use of donated blood by increasing understanding of blood supply management

Countries covered include *England and North Wales, South Wales, Northern Ireland.*

Scotland and Eire will join in 2006

Commonalties

- BSMS, UK NEQAS, SHOT
 - Participant base, data collection and reporting requirements, role in stimulating improvement in laboratory practice
- UK NEQAS and SHOT
 - highlight laboratory errors, make recommendations on and inform UK guidelines
- BSMS and SHOT
 - BSMS provides the SHOT denominator data

Denominator data

- 27 million blood components issued by UK blood services 1996 - 2004
- Hospital wastage of red cells is $< 5\%$

Blood Stocks Management Scheme 

for VANESA

- Your VANESA
- About The Scheme
- Data Collection
- Communications
- Resources
- Events
- How To Join
- Contact Details
- Search Site



BSMS WHAT'S NEW	QUICK LINKS
<p>BSMS Spotlight 2 online 26 September 2005</p> <p>The latest 'BSMS Spotlight on ... Blood Storage' is now available to download.</p> <p>This informative publication is packed with facts about blood fridges and recent evidence collected by the BSMS on fridge failures. You will also find case studies from a variety of sources suggesting how to reduce the potential for a fridge failure happening where you are.</p> <p>Click here to download a copy now.</p>	<ul style="list-style-type: none">• Spotlight microsite• Spotlight on ... Electronic Issue• VAD microsite• VAD registration form
<p>Website update 26 September 2005</p> <p>The BSMS Team have recently updated this website to make navigation easier. All pages that were previously called body.asp have been renamed to default.asp</p> <p>Why have we done this? Simple - it means that you don't need to type the name of the page in your address bar because it will 'default' to default.asp - so you can type a shorter URL.</p>	

Hospitals and UK Blood Services working together to promote better blood supply management

ESTIMATED RISKS OF TRANSFUSION

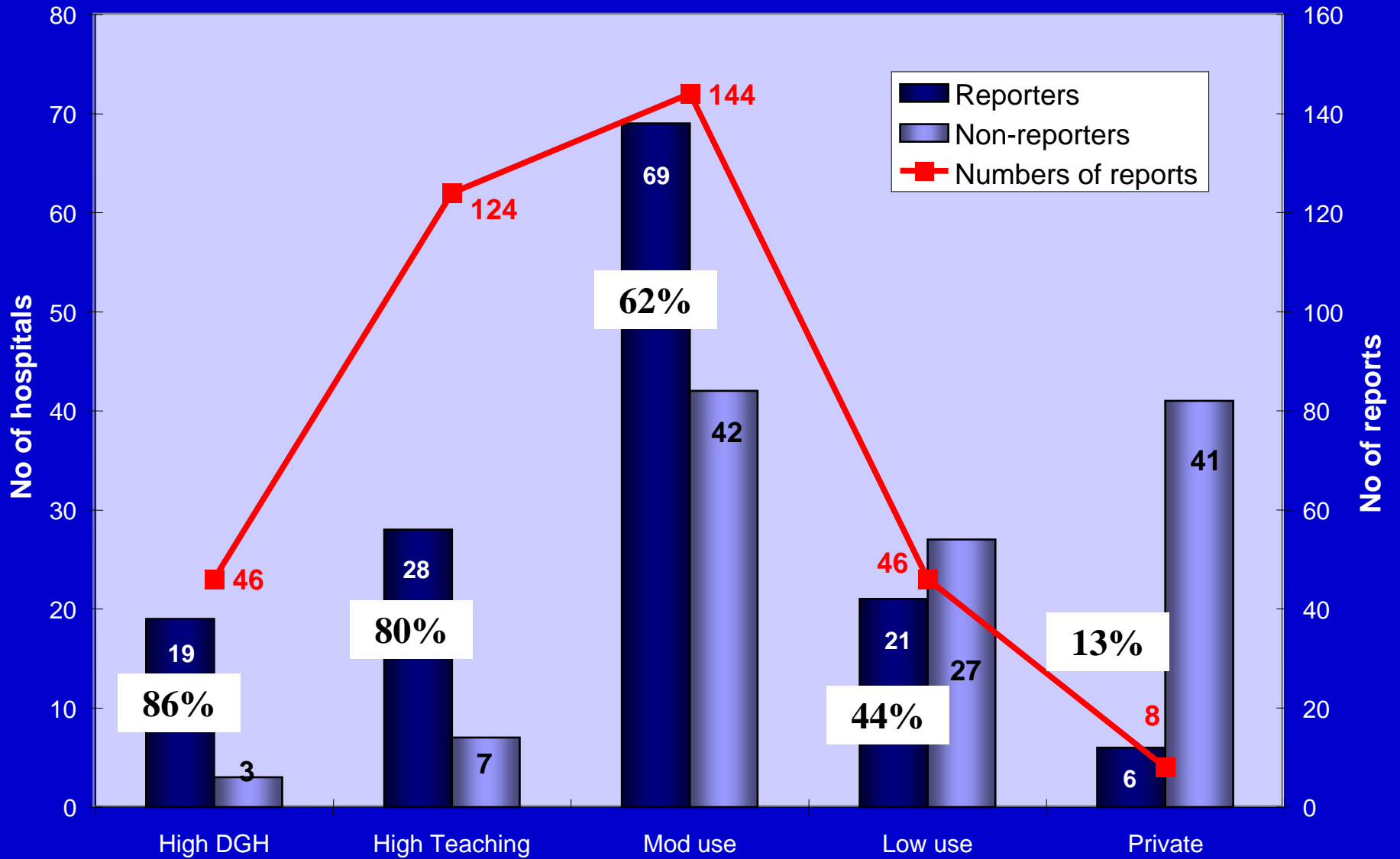
Adverse event	Incidence per 100,000 blood components issued
All events	9
Transfusion related death	0.4
Receiving 'wrong blood'	6
ABO incompatible tx	1
TRALI	0.6
Bacterial contamination	0.1

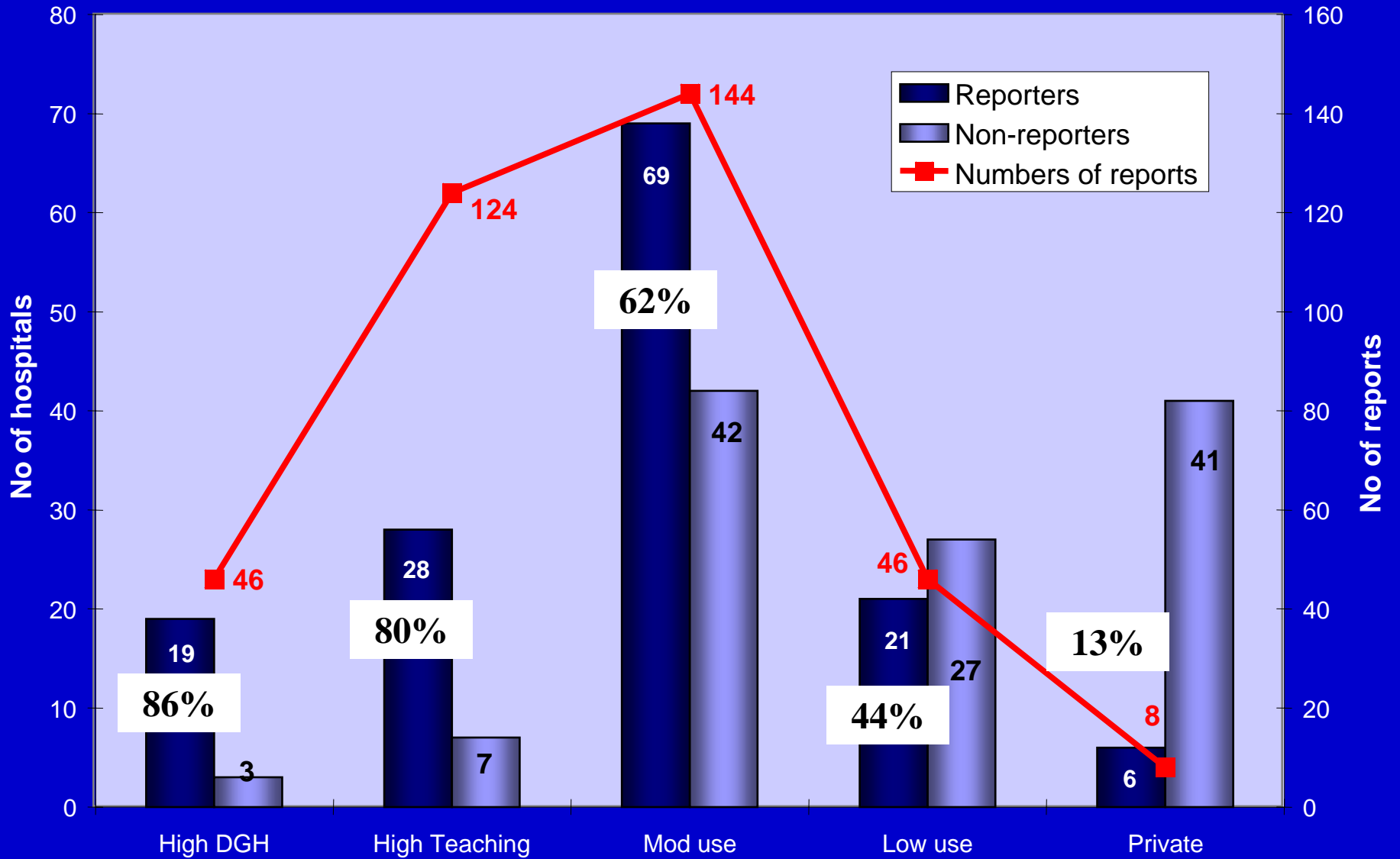
Profile of SHOT reporting/non-reporting hospitals

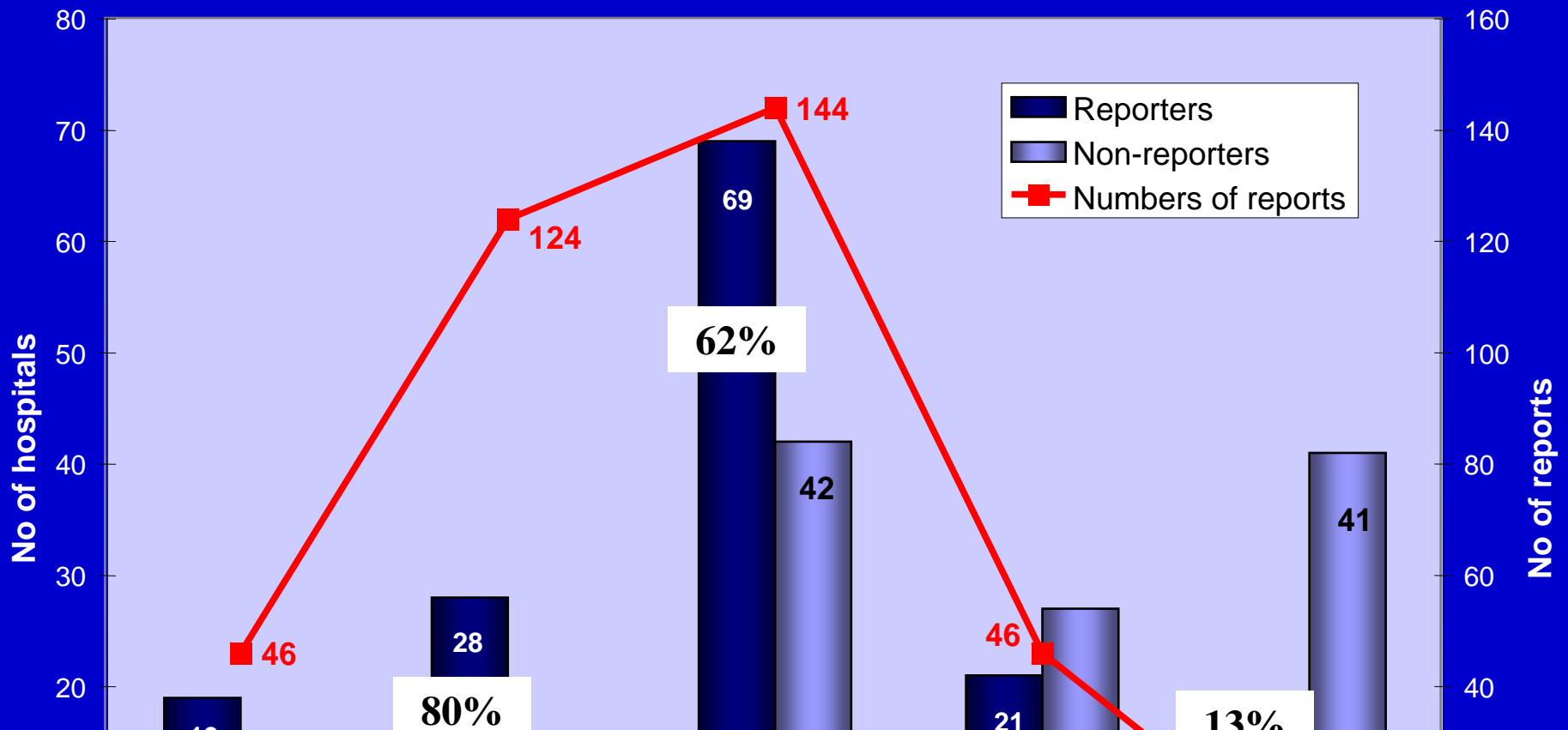
- Large or small?
- How much blood do they use?
- What proportion of national blood use is represented in SHOT?

BSMS hospital 'clusters'

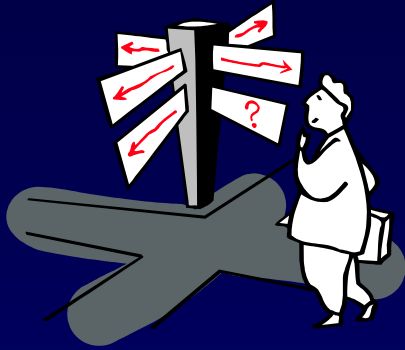
- Hospital types
 - teaching, DGH, private
- Usage
 - < 6000 red cells pa
 - 6000 - 11000
 - >11000
- 5 'clusters'
 - high use teaching
 - high use DGH
 - moderate use
 - low use
 - private







–67% of hospitals in England reported an incident or 'near-miss' in 2004
 –those hospitals received 74% of the blood supply



Serum/plasma questionnaire
Transfusion of patients with SCD

ABO/D questionnaire

Use of practice questionnaire
Clinical D negative 'flying squad' blood

We're all asking you the same questions

Antibody questionnaire

We're often using the data in isolation

Phenotyped blood questionnaire

Collection of denominator data 2003

Electronic issue questionnaire



ATLAS

Assembly of Transfusion Laboratory Assessment Schemes

Purpose:

To establish a data catalogue which would enable the group to easily identify and access information from questionnaires held by each scheme, thus avoiding duplication wherever possible

UK NEQAS knows who's using
electronic issue

If it wants to know how many and what % units are
issued by EI it has to ask both questions each time

BSMS knows how many units are transfused
but also has to ask if they're issued by EI

Serological techniques and procedures

- Are these linked to laboratory errors?
- We know when they're linked to EQA errors
- Is this the same thing?
- SHOT data has the potential to answer these questions but can't do it in isolation

An Example

- Typing of r'r red cells
- Problems with using anti-CDE for routine D typing of patient samples.

Past exercises

- 01R2
 - r'r cell mis-interpreted as D positive (1) or weak/partial D (2)
- 02R2
 - r'r cell mis-interpreted by 4 participants

Past exercises

- 01R2

9% ERROR RATE!!!!

- 02R2

– 1

The 2004 compatibility guidelines recommend that anti-CDE is not used to routinely type patients' samples

Recent exercise

- 05R5
 - No D typing errors of r'r due to use of anti-CDE reagents
- 05R8Q (data not yet validated)
 - 7% use anti-CDE for routine typing
 - 8% of CAT users
 - 10% in 2002
 - 28% of CAT users

Another Example - Typing of rr DAT positive red cells

Exercise	04R2	05R8
Interpreted as D pos/D var	17 labs (3.6%)	7 labs (1.5%)
Potentiated reagent	16	6
IAT	0	1

05R8 Q – 5% continue to use an IAT for
checking apparent D negatives

SHOT D typing errors

- Between 6 and 19 D typing errors reported every year
 - Mostly unknown or unrecorded causes
 - 1 reagent ‘splash’ in a microplate
 - 1 difficulty in interpreting a DAT +ve cord sample
 - 1 ‘reagent’ problem

Are any of these due to the same underlying causes?

SHOT knows who's reporting laboratory errors

UK NEQAS knows which laboratories are making EQA errors and often has an understanding of why

Would it be useful to know if these are the same or different laboratories?

Are the root causes the same? Could it lead to a better understanding for all concerned?

What are the confidentiality issues?

- Mutual trust
- No fear of unfair blame
- Freedom of Information Act?
- Blood Safety regulations?
- UK NEQAS has a signed 'contract' with participating laboratories
- SHOT and BSMS do not

CONDITIONS OF PARTICIPATION

Conditions of participation by UK Clinical Laboratories In External Quality Assessment Schemes (EQASs) which are under the professional jurisdiction of the **Joint Working Group on Quality Assurance (JWG on QA)**.

EFFECTIVE FROM 1ST MAY 1997

4. The EQAS code number of the laboratory and the assessment of individual performance is confidential to the participant and will not be released by Scheme Organisers to any third party, other than the Chairman and members of the appropriate NQAAP, and in specified circumstances (section 7) to the Chairman of the JWG on QA without the written permission of the Head of the laboratory. In the particular circumstances set out in Section 8, this information may be released as defined in that section.



In Summary



- Shared data between SHOT and BSMS has already been shown to be invaluable
- Is there any mileage in mapping the UK NEQAS PRN to the Pulse code and sharing information between BSMS and UK NEQAS?
- Is there any mileage in mapping the SHOT code and the UK NEQAS PRN?
 - For information
 - For error management



UK NEQAS



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