

Standardising wristbands improves patient safety: guidance on implementing the Safer Practice Notice

General queries

1. Why is it important to standardise wristbands?

Between February 2006 and January 2007, the NPSA received 24,382 reports of patients being mismatched with their care. More than 2,900 of these related to wristbands and their use. Standardising the design of patient wristbands, the information on them, and the processes used to produce and check them will improve patient safety. There is increasing evidence to show that standardising elements of patient care, such as these, contributes positively to patient safety.ⁱ Also, wherever staff work in the NHS in England and Wales, they will know what to expect on wristbands as patient identifiers.

2. Why do we need a second NPSA Safer Practice Notice on wristbands?

This notice builds on the NPSA's Safer Practice Notice, *Wristbands for hospital inpatients improves safety* (November 2005), which was about ensuring that inpatients wear wristbands and that they are accurate. The current Notice recommends action aimed at standardising wristbands. This will help to further improve patient identification and ensure patients are matched with the care intended for them. Both notices are part of a wider programme of NPSA work on safer patient identification and matching patients correctly to samples, specimens, records and treatment. Related work can be found at www.npsa.nhs.uk/alerts

3. Have staff and patients been consulted about standardising wristbands and the NPSA's recommendations?

The views of patients have been obtained through special workshops. Staff and their professional organisations have been consulted through workshops and a survey. They were also asked to comment on the original proposal for the work and the draft Safer Practice Notice. A full report of the consultations is on the NPSA website at www.npsa.nhs.uk/alertsⁱⁱ

4. Does the NPSA recommend the use of technologies such as barcoding and radio frequency identification (RFID) on wristbands?

Ensuring all patients have wristbands in a standard format means they can be used, to carry a barcode, for example, of the patient's NHS Number and to verify the patient's identity at any stage of their care or treatment, even if they are transferred to another hospital. The development of technologies including barcoding, radio frequency identification (RFID) and biometrics (for example, fingerprints and iris scanning) is improving patient identification and the matching of patients to their care. The Department of Health has issued a guidance paper on the use of simple technology for safer patient care, with examples of the use of barcoding and RFID to promote safer patient identificationⁱⁱⁱ.

5. Are patients allowed to wear their own wristbands, for example to denote 'no blood products'?

Patients who wish to wear their own wristbands in hospital should be permitted to do so, but advised of the dangers of confusion for staff.

Queries about design guidance

6. Where do I get a wristband that meets the NPSA design guidance?

Ask your current supplier to explain how their products meet the design requirements. The NHS Supply Chain will be including these requirements in their contract. The design guidance is at www.npsa.nhs.uk/alerts

7. Why is it recommended that wristbands are white with black text – we've always used yellow bands because they show up well?

Black text on a white background is recommended as this provides the best contrast, which is a vital factor in legibility (recommended by both the Royal National Institute for the Blind and EuroBlind's guidance on accessible information). The NHS Toolkit for Producing Patient Information recommends 'dark print on light background'.

Queries about patient identifiers

8. Are the core patient identifiers for wristbands mandatory?

The NPSA recommends that trusts should use the specified core patient identifiers on wristbands. (If any additional identifiers are thought to be necessary, these should be formally risk assessed.) In a separate initiative, the NPSA is working with the Information Standards Board to agree an ISB standard for patient identifiers on wristbands. This would make their use mandatory for the NHS in England (ISB standards apply in England only)^{iv}. Each patient identifier complies with the Common User Interface (CUI) Design Guide as will be required by NHS Connecting for Health through their Common User Interface (CUI) work which is part of the introduction of the National Programme for IT in the NHS^v. In addition the ordering of the fields is consistent with the current CUI screen design.

9. Do the patient identifiers also apply to newborns?

For newborns, in addition to the NHS number, the identifiers should include 'Baby of (mothers name)' to ensure that the baby can be matched to the mother when in hospital, and date and time of birth. For further information about the process to be used for identifying newborns, see the algorithm on www.npsa.nhs.uk/alerts which also includes the requirement for babies to wear two patient identification bands.

10. Why isn't gender one of the core patient identifiers for wristbands?

We know that gender is not widely used in the NHS as an identifier and that it is not favoured by NHS staff for inclusion as much as the identifiers we recommend. Also, there is no evidence that including gender is safer than not including it as a core identifier. Audits of blood sample labelling both internationally and in England showed that gender was a poorly used identifier^{vi}. Other evidence comes from a survey of NHS staff carried out by the NPSA in 2006 which found that gender was seventh in a list of most used identifiers (behind 'ward' and 'hospital consultant') and that NHS staff rated the usefulness of gender as an identifier as low (see reference ii below). The SPN says that if any additional identifiers are thought to be necessary, these should be formally risk assessed and a formal assessment within trusts could conclude that it is appropriate to use gender when other information is lacking, for example for unconscious and/or unidentified patients.

11. The NHS number isn't available on most of our patient records, how do we check notes against the wristband?

Nationally NHS Number availability varies between about 70% and 98%, so the NHS Number should be available for use for most patients. The availability of NHS Numbers will vary across the country, depending on the quality of

demographic data collection at trusts, which impacts on the ability to trace the Number, and the system of automatic matching and clearance of non matches. Initial primary care data collection is important as poor data collection can impact on match rates. Some areas of the country are taking the initiative to improve NHS number coverage and also their data collection processes through effective data quality improvement programmes within the NHS. Availability of the NHS Number is compounded by the catchment area of the trust, that is the percentage of patients who are overseas visitors, immigrants, asylum seekers and immigrants and less likely to have a NHS Number or for it to be easily available. If the NHS Number is not immediately available, a temporary number should be used until it is.

The work that the NPSA doing with ISB to agree the use of the NHS number as one of the core identifiers for patient wristbands (see answer to question 8), will mean that the NHS number should become more routinely available during the next twelve months.

Queries about processes for producing, applying and checking wristbands

12. Is there NPSA guidance on processes for issuing and checking wristbands?

The NPSA gives the following guidance:

Any member of staff who issues and checks wristbands should be trained and work to clear and consistent processes that are defined in trust protocols. These protocols should include processes for:

- applying wristbands where patients are unable to supply the necessary identification information;
- ensuring the legibility of handwritten wristbands (until all wristbands can be printed);
- the member of staff applying the wristband and the patient receiving it to sign the patient record (or a relative or carer where the patient is unable to do so) to verify that the details are correct;
- re-applying wristbands that have been removed for clinical procedures, taken off for some other purpose, or have fallen off;
- updating the information on wristbands and re-applying if there is a need to amend any of the identifiers, such as when a missing NHS Number becomes available;
- establishing correct patient identification regularly during a patient's stay in hospital, such as by asking the patient (where possible) to state their first name, last name and date of birth, and checking these details against the wristband and the clinical records.

13. Where should the patient and member of staff sign to say the information on the wristband is correct?

The NPSA recommends that casenotes are the most logical place for the member of staff and the patient to sign that the information on the wristband is correct. This is because casenotes (either temporary or permanent) are available at the point of admission to the hospital, and are usually kept with a patient as they move through different services.

Queries about the use of wristband colours

14. Why is the NPSA concerned about colour coding wristbands?

From the work that the NPSA has carried out on standardising wristbands it is clear that there is currently inconsistent use of wristband colours throughout the

NHS. This is confusing and a risk to patient safety. Evidence from literature suggests that there are a number of problems with colour-coded wristbands and little evidence to support the effectiveness of their use. In one study where red wristbands were used to indicate patients at risk of falls, this did not contribute to a reduction in falls, as anticipated. Other research has shown that there are problems about the accuracy of information provided by patients about allergies and other risks, which is the basis for giving a patient a colour coded wristband. Sometimes the information that is given by patients on admission is not reviewed or checked further by staff so that the appropriateness or otherwise of a coloured wristband can be reviewed. Also, even where patients do give accurate information about allergies and other risks, there is evidence that this does not always trigger the issue of a coloured wristband. See www.npsa.nhs.uk/alerts (reference ii below) for more information on this and related questions below.

15. Our trust currently uses red wristbands to identify if a patient has an allergy. The system has been in place for over 10 years and is recognised practiced, so why should we stop it?

The NPSA believes that it is safest only to use a white wristband with black text (and only one wristband per patient) so that there is no colour coding. However, the response to our consultation about the draft Safer Practice Notice showed that a significant proportion of respondents favoured the use of one colour to represent particular patient risks. In response to that, the Notice provides for those who want a colour coding system to identify a known risk to use a red wristband for patients, with a white panel which will display patient identifiers in black text (see also question 14).

16. How will staff who move jobs know if their new healthcare organisation is using a system of a red wristband for known risks?

New staff inductions should include providing information about whether patient wristbands should be white only, or whether the healthcare organisation is using a red wristband where there is a known risk. There should still be only one wristband per patient – i.e. the red wristband is not an additional band but includes the patient identifiers. Staff moving between organisations should always ensure they are aware of the organisation's policies on wristbands before they provide care to patients.

17. What patient risks should I use red wristbands for?

The NPSA believes that it is safest only to use a white wristband with black text (and only one wristband per patient) so that there is no colour coding. If a healthcare organisation wants to use colour coding, the NPSA recommends only one colour, which is red, to be used for identifying a known risk. The type of risk will need to be established from the patient record.

18. We currently use green wristbands for patients at risk of falls, how do we protect these patients now?

Please see the previous questions and answers about colour coding and why the NPSA believes it is safest only to use a white wristband with black text, but is providing for those who want a colour coding system to identify a known risk to use a red wristband for patients, with a white panel which will display patient identifiers in black text. For guidance on reducing falls by hospital patients, please see [Slips, trips and falls in hospital, February 2007](http://www.npsa.nhs.uk/alerts) (pdf) at www.npsa.nhs.uk/alerts

19. What about food and nut allergic patients?

The SPN recommends that any known risk, and that includes an allergy, is identified by the use of red on a wristband – so the advice is as above. The exact risk should then be identified in the patient notes.

Other queries

If you have queries about the Safer Practice Notice which are not answered in this guidance or in the separate Design Guidance (www.npsa.nhs.uk/alerts) please send them to spn@npsa.nhs.uk

References and notes

- ⁱ Rozich JD et al. Standardization as a mechanism to improve safety in health care. Mayo Health System, Eau Claire, Wisconsin, USA. 2006; Vincent CA. Patient Safety, 2006; Bates DW. Using information technology to reduce rates of medication errors in hospitals. BMJ, 320; 788-791; Berwick DM. Taking action to improve safety: how to increase the odds of success. Rancho Mirage, California 1998. National Patient Safety Agency. Design and specification of patient wristbands: Evidence from existing literature, NPSA-facilitated workshops, and a NHS Trusts survey. Available at: www.npsa.nhs.uk
- ⁱⁱ National Patient Safety Agency. Design and specification of patient wristbands: Evidence from existing literature, NPSA-facilitated workshops, and a NHS Trusts survey. Available at: www.npsa.nhs.uk
- ⁱⁱⁱ Department of Health. Coding for success: simple technology for safer patient care. February 2007.
- ^{iv} Information on the Information Standards Board is available at www.isb.nhs.uk
- ^v NHS Common User Interface (CUI) Design Guide Workstream; Design Guide Entry – Patient Name. 5 December 2006, Version 0.0.0.2
NHS CUI Design Guide and Toolkit Workstream – Date Display Date Display Prepared by Graeme Benson & Grant Venter, Version 1.0.0.0 Baseline QW Date Display 1000.doc Rev 5.
- ^{vi} Current performance of patient sample collection in the UK :Transfusion Medicine 2004 : M. Murphy et al.