



## **Rapid Response Report**

### **Subject:**

The Transfusion Of Blood And Blood Components In An Emergency

### **For action by:**

Chief Executive, HSC Board for cascade to :

*Director of Integrated Care, HSCB*

*Assistant Director, Primary Care, HSCB*

Chief Executives, HSC Trusts for cascade to:

*Medical Directors*

*Consultant Haematologists*

*Directors of Laboratory Services*

*Directors of Nursing*

*CSCG leads*

*Chairs of Trust Transfusion Committees*

Chief Executive RQIA for cascade to:

*Independent hospitals and clinics*

Chief Executive, NI Blood Transfusion Service

### **For information to:**

Chief Executive, Public Health Agency

Director of Public Health/Medical Director, PHA

Director of Nursing, PHA

Dir. of Performance Mgmt & Service Improvement, HSCB

Assistant Director of Performance Management, HSC Board

Prof. David Woolfson, Head of School of Pharmacy, QUB

Prof. Linda Johnston, Head of Nursing & Midwifery, QUB

Prof. Hugh McKenna, Head of Life & Health Sciences, UU

Dr Owen Barr, Head of School of Nursing, UU

Prof. Paul McCarron, Head of School of Pharmacy, UU

Post Graduate Dean, NIMDTA

Staff Tutor of Nursing, Open University

Director, Safety Forum

Lead, NI Medicines Governance Team

NI Medicines Information Service

NI Centre for Pharmacy Learning and Development

Dr Susan Atkinson, Chair NI Regional Transfusion

Committee

### **Summary of Contents:**

The purpose of this circular is to highlight the importance of early recognition of major blood loss and immediate effective interventions to avoid hypovolaemic shock and its consequences

### **Enquiries:**

Any enquiries about the content of this circular should be addressed to:

Safety & Quality Unit

DHSSPS

Room D2.4

Castle Buildings

Stormont

BELFAST BT4 3SQ

Tel: 028 9052 2239

[qualityandsafety@dhsspsni.gov.uk](mailto:qualityandsafety@dhsspsni.gov.uk)

### **Related documents**

<http://www.bcsguidelines.com>

<http://www.cmace.org.uk/Publications-Press-Releases/Report-Publications/Maternal-Mortality.aspx>

<http://www.rcog.org.uk/files/rcog-corp/uploaded-files/GT47BloodTransfusions1207amended.pdf>

[http://www.rqia.org.uk/publications/rqia\\_review\\_reports.cfm](http://www.rqia.org.uk/publications/rqia_review_reports.cfm)

[http://www.dhsspsni.gov.uk/hsc\\_sqsd\\_28-08.pdf](http://www.dhsspsni.gov.uk/hsc_sqsd_28-08.pdf)

### **Superseded documents**

N/A

### **Status of Contents:**

For completion of actions and assurance templates by 18 May 2011

### **Implementation:**

Immediate

SQSD material can be accessed on:

<http://www.dhsspsni.gov.uk/index/phealth/sqs.htm>

Dear colleagues

## **The Transfusion Of Blood And Blood Components In An Emergency**

The urgent provision of blood for life threatening haemorrhages requires a rapid, focused approach as excessive blood loss can jeopardise the survival of patients. Early recognition of major blood loss and immediate effective interventions are vital to avoid hypovolaemic shock and its consequences.

Excessive blood loss potentially jeopardises the survival of patients in many clinical settings including acute medical settings as well as trauma, surgical and obstetrics. This is a challenge for front line clinicians as well as for those providing haematology and transfusion support within the hospital. In order to prevent hypovolaemic shock and its consequences, recognising major blood loss very early and taking effective action promptly is vital. Efficient communication is paramount for effective management and good outcomes.

The content of the attached circular at Annex A has been reviewed by relevant professional colleagues in the Department and approved for regional dissemination.

I would ask you to bring this to the attention of relevant practitioners and key health and social care staff within your organisation. They should consider the best practice for their setting and take appropriate steps to minimise the risks to patients.

I would also draw your attention to the attached 'assurance template' which is a means of recording the response from the Trusts and Board in circumstances where SQS Circulars require action to be taken by a given date.

Yours sincerely



**Dr J F Livingstone**  
Director, Safety, Quality & Standards

## **The Transfusion Of Blood And Blood Components In An Emergency**

### **Issue**

1. The urgent provision of blood for life threatening haemorrhages requires a rapid, focused approach as excessive blood loss can jeopardise the survival of patients. Early recognition of major blood loss and immediate effective interventions are vital to avoid hypovolaemic shock and its consequences. One such action is the rapid provision of blood and blood components, for which effective communication between all personnel involved in the provision and transportation of blood is key.
2. Excessive blood loss potentially jeopardises the survival of patients in many clinical settings including acute medical settings as well as trauma, surgical and obstetrics. This is a challenge for front line clinicians as well as for those providing haematology and transfusion support within the hospital. In order to prevent hypovolaemic shock and its consequences, recognising major blood loss very early and taking effective action promptly is vital. The critical nature of the situation may lead to tension between those treating the patient and those supplying blood and providing laboratory services (British Committee for Standards in Haematology 2006). Efficient communication is paramount for effective management and good outcomes.

### **National Context**

3. During the period October 2006 to September 2010, the National Reporting and Learning System (NRLS) reviewed 94 reported incidents in which a patient was harmed as a result of delays in the provision of blood in an acute situation. It is very difficult to estimate the impact of the delay in blood or blood components on the eventual outcome for the patient (given that they were all suffering life threatening haemorrhage in order to need urgent access to blood/blood components). Of the incidents reviewed:
  - 11 patients died;
  - 83 patients suffered, sometimes major, morbidity with, for example, some requiring ITU admission or return to theatre.
4. NPSA has produced Rapid Response Report NPSA/2010/RRR017: The Transfusion Of Blood And Blood Components In An Emergency which is available on:  
<http://www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=83659>

5. Other relevant guidance includes:

- guidance issued by the British Committee for Standards in Haematology (2006);
- the recommendations of the Confidential Enquiries into Maternal and Child Health (CEMACH) (2007) for a protocol for the management of massive obstetric haemorrhage;
- the Royal College of Obstetricians and Gynaecologists guidance *Blood transfusion in obstetrics* (2008).
- HSC (SQSD) 28/08 Emergency support in surgical units: dealing with haemorrhage
- Regulation and Quality Improvement Authority (RQIA) Report of Blood Safety Review (2010)
- The NI Regional Transfusion Committee (NIRTC) is currently working on the final stages of Better Blood Transfusion 3 (NI) document which will cover the management of sudden or major blood loss. The document should be ready for circulation to all HSC Trusts in January 2011

### **Local Context**

6. All HSC and independent sector organisations should ensure that:

- i. The hospital transfusion committee reviews the local protocols and practices for requesting and obtaining blood in an emergency (including out of hours), ensuring that they include all the actions required by clinical teams, laboratories and support services, e.g. portering and transport staff/drivers and any specific actions pertinent to sites without an on-site transfusion laboratory.
- ii. Local protocols enable the release of blood and blood components without the initial approval of a haematologist although they should be advised of the situation at the earliest opportunity.
- iii. Staff (clinical, laboratory and support staff) know where to find the massive blood loss protocol in all relevant clinical and laboratory areas and are familiar with it, supported by training and regular drills.
- iv. The blood transfusion laboratory staff are informed of patients with a massive haemorrhage at the earliest opportunity.

- v. Clinical teams dealing with patients with massive haemorrhage nominate a specific member of the team to co-ordinate communication with the laboratory staff and support services for the duration of the incident.
- vi. There is a clear and well understood trigger phrase to activate the massive blood loss protocol, for example *"I want to trigger the massive blood loss protocol [and state location e.g. delivery suite]"* and all subsequent communications between clinical areas and laboratory staff should be preceded by the use of a locally agreed trigger phrase such as *"This call relates to the massive blood loss protocol [and location]"*.
- vii. All incidents where there are delays or problems in the provision of blood in an emergency are reported and investigated locally, and reported to the NPSA and the Serious Hazards of Transfusion (SHOT) scheme ([www.shotuk.org](http://www.shotuk.org)).
- viii. Each event triggering the massive blood loss protocol is recorded and reviewed by the hospital transfusion committee to ensure local protocols are applied appropriately and effectively.

### **Action Required**

7. You will wish to bring the contents of this document to the attention of staff, particularly those involved in governance and risk management within your organisation. Organisations need to be aware of this best practice circular in order to assist in complying with the Quality Standards for Health and Social Care –
  - Criteria 4.3(i) (the appropriate management of risk);
  - Criterion 5.3.1(f)(ix) (promotion of safe practice in the use of products in areas of high risk such as blood and blood products);
  - Criterion 5.3.3(f) (implementation of evidence-based practice through guidance, for example, NPSA guidance);and
8. HSC Trusts should take immediate action to implement this Rapid Response Report as outlined in paragraph 6 above by 18 May 2011 following which they should provide assurance on this action to the HSC Board by completing Section 1 of the attached template.
9. The HSC Board should complete Section 2 of the attached assurance template and forward to the Department by 15 June 2011.

## **SQS CIRCULARS: ASSURANCE TEMPLATE FOR HSC BOARD AND TRUSTS**

### **Circular number: HSC (SQSD) 16/10 The Transfusion Of Blood And Blood Components In An Emergency**

**For Implementation by: 18 May 2011**

(Section 1 is to be completed by HSCT and forwarded to HSCB for consideration. Section 2 should then be completed by HSCB and forwarded to DHSSPS)

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#### **SECTION 1:**

To: Chief Executive, HSC Board

I can confirm that the required actions set out in the above circular have been implemented in full by the due date.

I can confirm that the actions in the above correspondence have been partially implemented by the due date. The issues impacting on full implementation along with the timescales for resolving these issues are set out in the box below:

I can confirm that the organisation has been unable to implement any actions of the above circular for the reasons set out in the box below. (The actions being taken/required to resolve or clarify the issues preventing implementation and the timescales for this should be outlined):

I confirm that the HSC Trust's Chief Executive and designated senior manager have been advised of this response and are content that it should be submitted to the HSC Board.

Response submitted by: \_\_\_\_\_ (Name & contact details of person submitting response) on behalf of \_\_\_\_\_ HSC Trust. Date: \_\_\_\_\_

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#### **SECTION 2:**

To: Director, Safety, Quality & Standards Directorate, DHSSPS

I note the response from the Trust and –

I can confirm that the HSC Board is content the action(s) taken, referred to in Section 1, complies with the requirements of the above circular.

I can confirm that further action, as outlined in the box below, is needed to ensure compliance with the requirements of the above circular

I confirm that the HSC Board's Chief Executive and designated senior manager have been advised of this response and are content that it should be submitted to the Department.

Response submitted by: \_\_\_\_\_ (Name & contact details of person submitting response) on behalf of HSC Board. Date: \_\_\_\_\_