

Update On The 2001 National Health & Medical Research Council “Clinical Practice Guidelines for the use of Blood Components”

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The National Health and Medical Research Council (NHMRC), Australia New Zealand Society of Blood Transfusion (ANZSBT) and the National Blood Authority - Australia (NBA) are currently undertaking a comprehensive review and update of the 2001 Clinical Practice Guidelines for the use of Blood Components (<http://www.nhmrc.gov.au/publications/synopses/cp77syn.htm>). Six separate, more “user friendly” and inclusive guidelines will be published. The six guidelines composing of peri-operative (elective surgery), critical bleeding/massive transfusion, intensive care, medical, obstetric and paediatric/neonatal populations, will have a clinical as opposed to a product focus.

An Expert Working Group defined the scope of the new guidelines and constructed the six generic questions, listed below, to be applied to each population.

1. Is anaemia an independent risk factor for adverse outcomes?
2. What is the effect of red blood cell transfusion on patient outcomes?

3. What is the effect of interventions to increase haemoglobin concentration on morbidity, mortality and the need for red blood cell transfusion?
4. What is the effect of rFVIIa (prophylaxis or treatment) on morbidity, mortality and transfusion rate?
5. What is the effect of fresh frozen platelets, cryoprecipitate, fibrinogen concentrate, and/or platelet transfusion on patient outcome?
6. At what INR (or PT/APPT) for fresh frozen plasma, fibrinogen level for cryoprecipitate, and platelet count for platelet concentrates, should patients be transfused to avoid risks of significant adverse events?

Specific questions for each population are being addressed, along with a number of background topics. For example, for peri-operative - whether the choice of anaesthetic agent or technique reduces blood loss and need for transfusion.

To answer the six generic questions and additional specific questions, comprehensive systematic reviews of the relevant literature are being undertaken. The results, pertinent to each area, are being synthesised by contracted systematic reviewers and a Clinical Reference Group (CRG) in order to produce a series of Evidence Statements and Evidence-Based Recommendations to be included in the Guidelines. Practice Points are being developed in areas where good quality evidence is lacking. In addition, the CRG are developing Practice Tips based on non-systematic review (background research) and expert opinion. An NHMRC Guidelines Assessment Register expert ensures the systematic review and processes comply with NHMRC standards.

The Critical Bleeding/Massive Transfusion and Peri-operative guidelines will be presented. These guidelines are due to be published for public consultation in March 2010 and mid 2010 respectively and released prior to June 2010 and later in 2010 respectively.