

Clinical judgement should be central to any decision to transfuse. The decision should be supported by the need to relieve clinical signs and symptoms and prevent significant morbidity and mortality. It is the responsibility of all doctors to ensure that transfusions are given only when clearly indicated¹

In deciding whether to transfuse red blood cells, the patient's haemoglobin level, although important, should not be the sole deciding factor. The various factors that should be used in deciding whether use of red blood cells is appropriate include patient factors, signs and symptoms of hypoxia, ongoing blood loss, the risk to the patient of anaemia in the setting of coexisting conditions and the risk of the transfusion.²

GP referral of community based patients & Aged Care Facility Residents who require blood transfusion.

To facilitate referral, timely admission and transfusion where clinically indicated for community based patients and Residents in Aged Care Facilities, Western Health have developed Guidelines for Transfusion for General Practitioners. The aim of these Guidelines is to provide General Practitioners with an evidence-based tool when assessing the clinical urgency of a transfusion for community-based patients or Aged Care Facility Residents.

Unless assessed as Urgent, community based patients and Aged Care Facility Residents should not be referred to the Emergency Department for the purpose of transfusion.

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| URGENT | <ul style="list-style-type: none"> Any patient who is haemodynamically compromised or has active uncontrolled bleeding should be referred to the Emergency Department for assessment and Resuscitation +/- transfusion. |
| SEMI-URGENT | <ul style="list-style-type: none"> For a patient who has an established diagnosis/cause of anaemia requiring intermittent transfusions (e.g. Myelodysplastic Syndromes), RBC transfusion may be required. It is important to make a decision about the need for red cell transfusion based on the clinical picture, rather than a Hb result alone. In iron deficiency anaemia, it is also important to be mindful that red cell transfusion will not address underlying iron deficiency, and iron replacement is the most important factor. |
| The following parameters may be a useful guide: | |
| Hb < 70 g/L | <ul style="list-style-type: none"> Transfusion is likely to be appropriate. If there has been a recent rapid decline in haemoglobin, it is also important to consider blood loss as an exacerbating factor for anaemia. |
| Hb 70-100 g/L | <ul style="list-style-type: none"> The decision to transfuse these patients will depend on the clinical scenario. If there are symptoms (e.g. dizziness, palpitations, dyspnoea etc.) or significant consequences (e.g. angina, claudication) of the anaemia, then transfusion is likely to be appropriate. A single unit of red cells, followed by re-assessment is generally recommended, but will depend on the clinical picture. In the asymptomatic patient with mild-moderate anaemia, transfusion is generally not appropriate. All patients on a regular transfusion program (e.g. Myelodysplastic Syndromes) should be medically reviewed periodically to re-assess the appropriateness of the transfusion program. |
| Hb > 100g/L | <ul style="list-style-type: none"> Transfusion is unlikely to be appropriate, and could potentially pose a risk to the patient, depending on clinical scenario. |
| NON-URGENT (NOT CURRENTLY REQUIRING TRANSFUSION) | <ul style="list-style-type: none"> Longstanding mild anaemia (Hb > 100 g/L) generally does not require transfusion, rather requires diagnostic work-up. If the patient has iron deficiency or symptoms of gastrointestinal blood loss (or FOB positive with iron deficiency), they should be commenced on oral iron replacement and referred for endoscopy. If the patient is iron replete, they should be referred to haematology or general medicine outpatient clinic with the appropriate investigations enclosed (e.g. FBE & Blood film report, Haematinic Studies (B12/Folate/Fe Studies), others as clinically appropriate). |

1. McGrath KM, Hancock L, and Foster KM (2001) Compliance with clinical guidelines for blood transfusion practice: how can changes be maintained? *Medical Journal of Australia* 174: 435.

2. National Health and Medical Research Council and Australasian Society of Blood Transfusion (2002) *Clinical practice guidelines on the use of blood components (red blood cells, platelets, fresh frozen plasma, cryoprecipitate)*. Canberra: NHMRC and ASBT,