

## Patient Blood Management – Single Unit Transfusion Guide

### 'Don't use two until review'

#### Introduction

The Patient Blood Management recommendations published in 2014 and endorsed by NHS England state:

*'Transfuse one dose of blood component at a time e.g. one unit of red cells or platelets in non-bleeding patients and reassess the patient clinically and with a further blood count to determine if further transfusion is needed.'*<sup>1</sup>

The British Committee for standards in Haematology (BCSH) have released an addendum to the Blood component Administration Guidelines which supports a single unit transfusion policy.<sup>2</sup>

Single unit transfusion applies to stable, normovolaemic adult in-patients who **do not have** evidence of clinically significant bleeding.

#### Background

Historically, two unit blood transfusions were common practice and a single unit was not deemed sufficient to correct anaemia. The decision to transfuse was based on haemoglobin results only. There is now an increasing evidence base that shows that transfusion is associated with increased morbidity, mortality and length of hospital stay.<sup>3</sup>

A single unit transfusion policy supports the change to a restrictive blood transfusion. Randomised control trials have shown that restrictive transfusion policies do not result in a worse outcome than a more liberal strategy.<sup>4,5,6,7</sup>

#### Recommendation

In order to ensure red cell are used appropriately, a single unit transfusion policy will be endorsed for non-bleeding patients.<sup>8,9</sup>

Obtain informed consent from the patient or responsible person/guardian prior to authorising a red cell transfusion. This must be documented in the patient's notes and any alternative available explained.<sup>10</sup>

A clinical and haemoglobin review should be performed after each unit to establish the requirement for further transfusion. Every unit transfusion should be considered an independent clinical decision where expected benefit outweighs the risks and all alternatives have been considered. It is recommended that the patients with anaemia of unknown cause be tested for haematic deficiencies (B12, folate, Iron) and treated accordingly before commencing with a red cell transfusion.

Transfusion of a second unit should only be given if the symptoms of anaemia have not resolved. This strategy ensures the patient receives the correct response and reduces the risk associated with repeat transfusions.

If one unit of blood adequately improves the symptoms of anaemia, then no further transfusion should occur.

## References

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