

# Appropriateness of Red Cell Transfusion for Patients with Gastro-intestinal Bleeding

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## Introduction

Patients with gastro-intestinal bleeding (GIB) may be transfused liberally due to the uncertain course of their bleeding episode. However, the risks, adverse outcomes and costs associated with transfusions require that blood given to GIB patients be scrutinized similarly to transfusions given to other patients. Unnecessary transfusion should be avoided when possible.

## Methods

We analyzed over three years of patient specific transfusion data from 29 US hospitals using the IMPACT® Online database (Haemonetics, Braintree, MA). 13,407 patients with upper GIB and 6,772 with lower GIB who had endoscopy as part of their hospital treatment were identified.

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## Transfused Patients

Last Recorded Hgb (g/dL)	n	%	Cumulative %
≥ 12.0	611	6.7	6.7
11.0 – 11.9	1550	17.0	23.7
10.0 -10.9	3023	33.2	56.9
9.0 – 9.9	2746	30.1	87.0
8.0 – 8.9	942	10.3	97.3
7.0 – 7.9	160	1.8	99.1
≤ 6.9	78	0.9	100

Age	Final Hgb (g/dL)
≥ 70	10.38
50-69	10.05
< 50	9.76

## Results

65.5% of patients with upper GIB and 49.0% of patients with lower GIB received red cell transfusions. Using the last recorded hemoglobin as an indicator of transfusion practice, we found that 56.9% of transfused patients were discharged with a hemoglobin ≥ 10 g/dL.

## Conclusions

- § It is difficult to assess blood loss in GIB.
- § Final hemoglobin values suggest that transfusion was given too liberally.
- § Although not supported by the literature, age appears to have been a factor in transfusion decisions.
- § Programs to improve transfusion practice should include patients with GIB.