Why give TWO, when ONE will do? Guideline directed packed red blood cell transfusion - An Interim analysis


INTERNAL MEDICINE DEPARTMENT, CONEMAUGH MEMORIAL HOSPITAL.

INTRODUCTION

Patient blood management emphasizes evidence-based, holistic care to optimize treatment for transfusion-needing patients, including minimizing transfusions.

• PRIMARY ENDPOINT: Improve single unit blood transfusions
• SECONDARY ENDPOINT: Improve restrictive transfusion

STUDY DESIGN: Three phases

1. PHASE 1: July 2022.
   • Data collection from Acumen
   • Modification of blood order set.

2. PHASE 2 & 3 (October 2022 - February 2023):
   • Improvement in single unit and restrictive transfusion by Internal Medicine residents.

RESULTS

• PHASE 1: DATA COLLECTION (PRE-INTERVENTION)
  - Single Unit blood transfusion 64%
  - Restrictive transfusion (<7g/dL) 57%

• PHASE 2: (POST INTERVENTION)
  - Single Unit blood transfusion improved to 80%
  - Restrictive transfusion improved to 70%

• PHASE 3:
  - Single Unit blood transfusion improved to 82%
  - Restrictive transfusion improved to 78%

CONCLUSIONS

1. Single Unit blood transfusions improved from 64% to 82%, an absolute improvement of 18% (95% CI 65 to 66, p<0.05).
2. Restrictive transfusion (<7g/dL) improved from 57% to 78%, an absolute improvement of 21% (95% CI 61.6 to 62.4, p<0.05).

REFERENCES