

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

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## 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**

## METHODOLOGY

### - Inclusion Criteria:

Age >18yrs  
In-patient (Internal Medicine patients)

### - Exclusion Criteria:

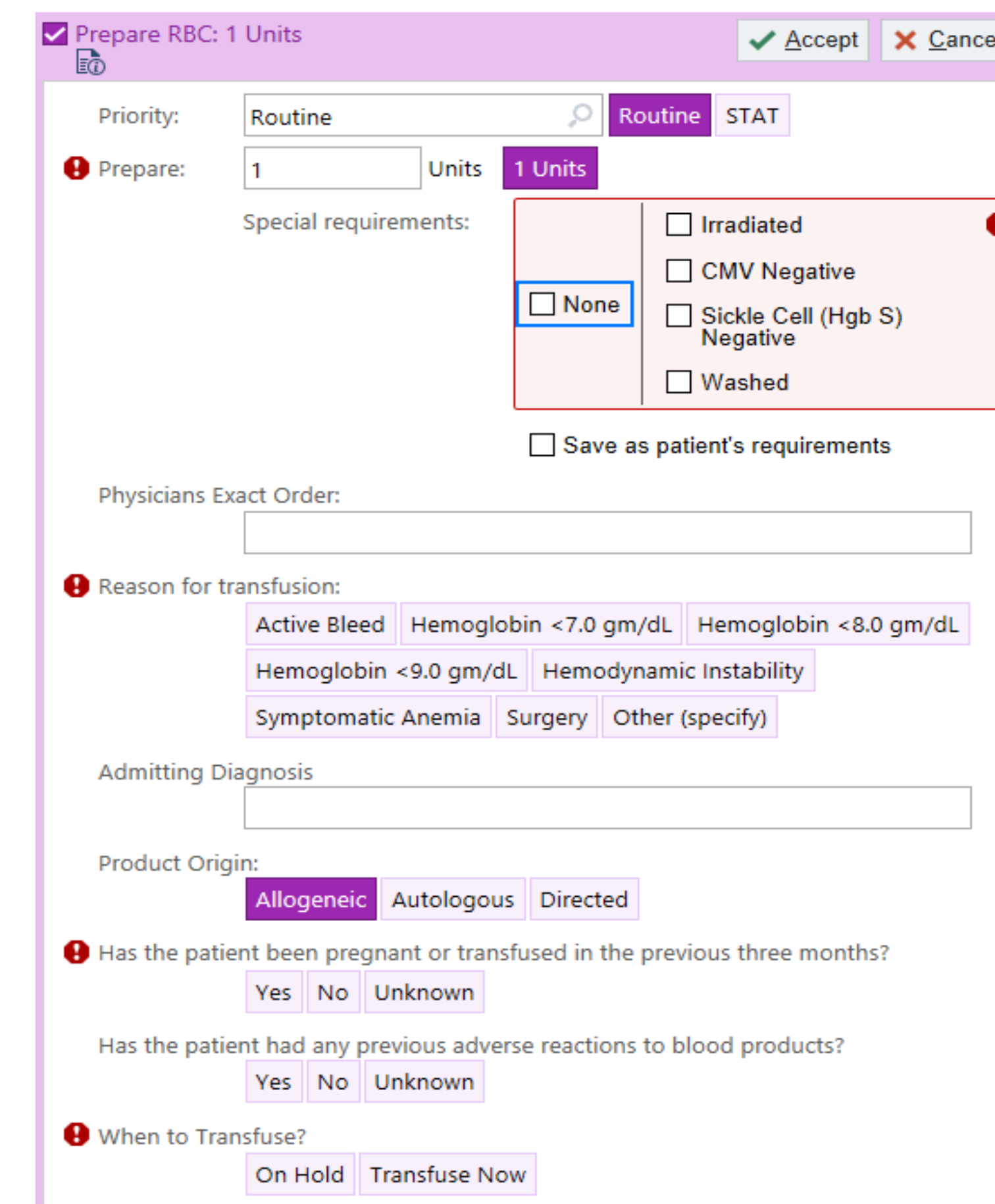
Pregnant individuals  
Age <18yrs  
Patients requiring massive transfusions (>10U PRBC in 24h)

**DATA COLLECTION:** from Acumen (healthcare solutions company assisting Conemaugh hospital in efficient patient blood management).

**STUDY DESIGN:** Three phases

### 1. PHASE 1: July 2022.

- Data collection from Acumen
- Modification of blood order set.



- Internal Medicine Resident education (didactics, pre & post quiz, lectures, posters).

### 2. PHASE 2 & 3 (October 2022- February 2023):

- Improvement in **single unit and restrictive transfusion** by Internal Medicine residents.

## RESULTS

### • PHASE I: 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%**

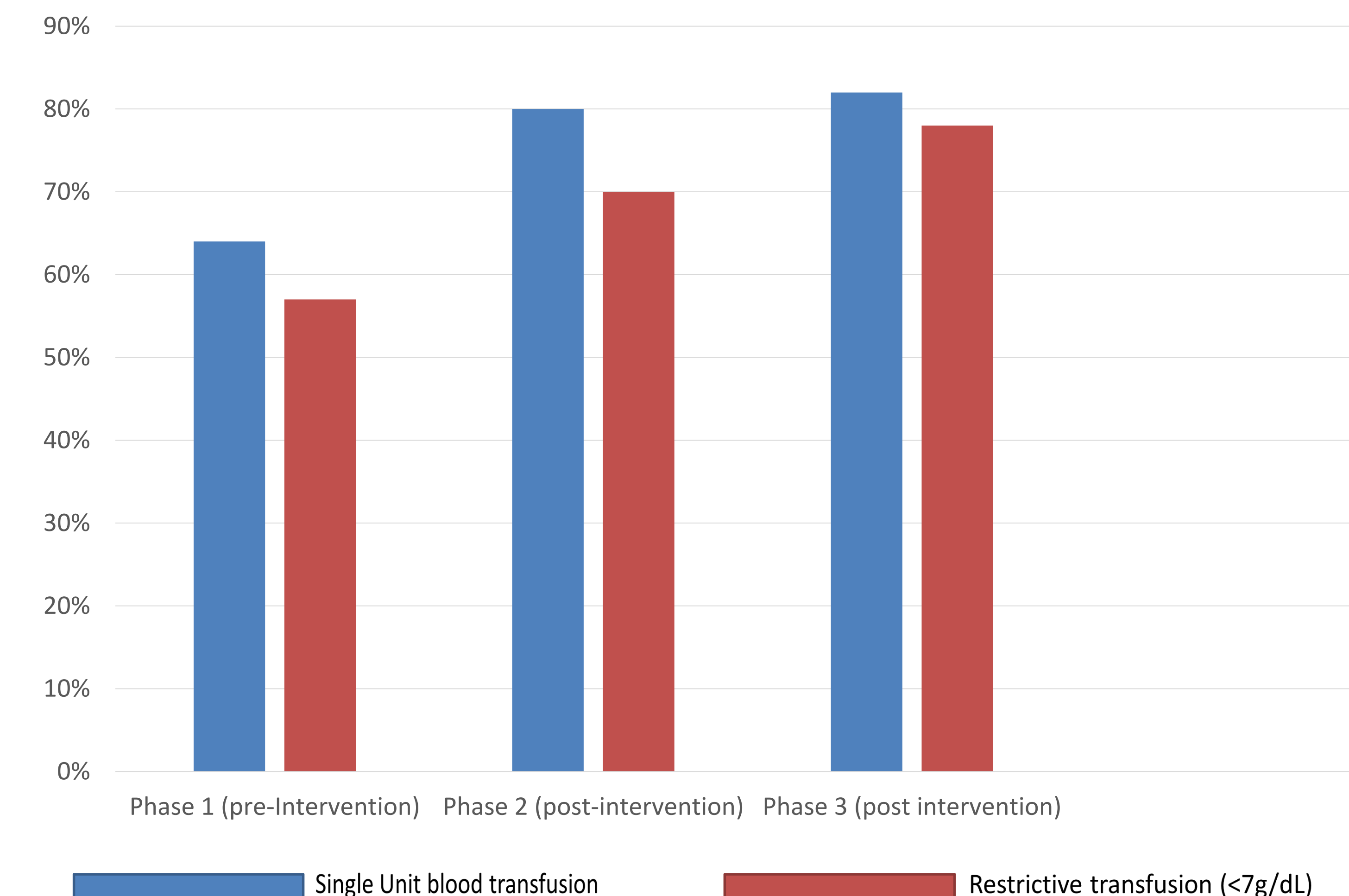
### • PHASE 3:

- 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

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