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 evidencebased, 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).

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STUDY DESIGN: Three phases

1.PHASE 1: July 2022.

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

Units				✓ A	ccept	× <u>c</u>	ance
Routine		,o	Routine	STAT			
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Special requi	rements:			MV Neg ickle Ce egative ′ashed	ative II (Hgb		
at Orden		Sav	e as patien	t's requi	rement	s	
ct Order:							
nsfusion:							
Active Bleed	d Hemogle	obin <7.0	gm/dL He	emoglob	oin <8.0) gm/d	IL .
Hemoglobir	n <9.0 gm/o	dL Hemo	dynamic In	stability			
Symptomat	ic Anemia	Surgery	Other (spe	cify)			
gnosis							
n: Allogeneic	Autologou	us Direct	ed				
it been pregr	nant or tran	sfused in t	the previou	s three i	months	?	
Yes No I	Unknown						
		erse reaction	ons to bloo	d produ	cts?		
	JIKHOWH						
ctuce7							
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- 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.

RESULT

• PHASE I: D (PRE-INTER)

- Single Unit
- Restrictive

• **PHASE 2:** (POST INTER

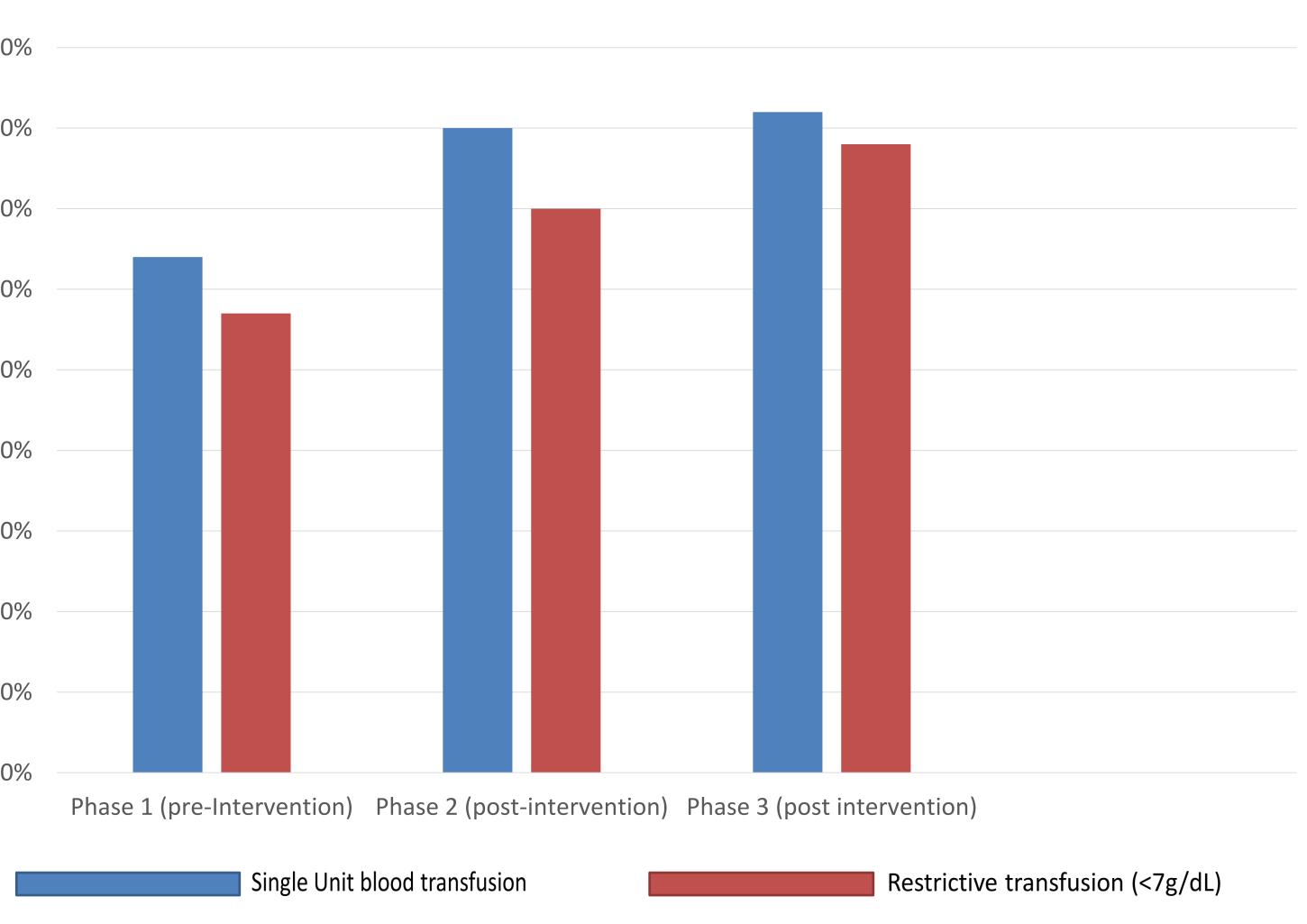
- Single Un
- Restrictiv
- **PHASE 3**:
- Single Unit
- Restrictive



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).

ΓS	
	90%
DATA COLLECTION VENTION)	80%
t blood transfusion 64%	70%
e transfusion (<7g/dL) 57%	60%
	50%
: RVENTION)	40%
nit blood transfusion improved to 80%	30%
ve transfusion improved to 70%	20%
	10%
t blood transfusion improved to 82% e transfusion improved to 78%	0%



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