



QIP and Grey Bruce Experience

Danielle Watson, MLT

GHEST Sept 2018

Objectives

- Quality Improvement Committee
- Challenges
- Utilization of Resources
- Ongoing Challenges
- Improvements/Success

- Questions ?????



Grey Bruce Health Services

Lion's Head
Meaford
Warton
Southampton
Markdale
Owen Sound

Affiliations

Kincardine
Walkerton
Chesley
Durham



ORBCoN

Quality Improvement Committee



Transfusion Order set



GREY BRUCE HEALTH NETWORK

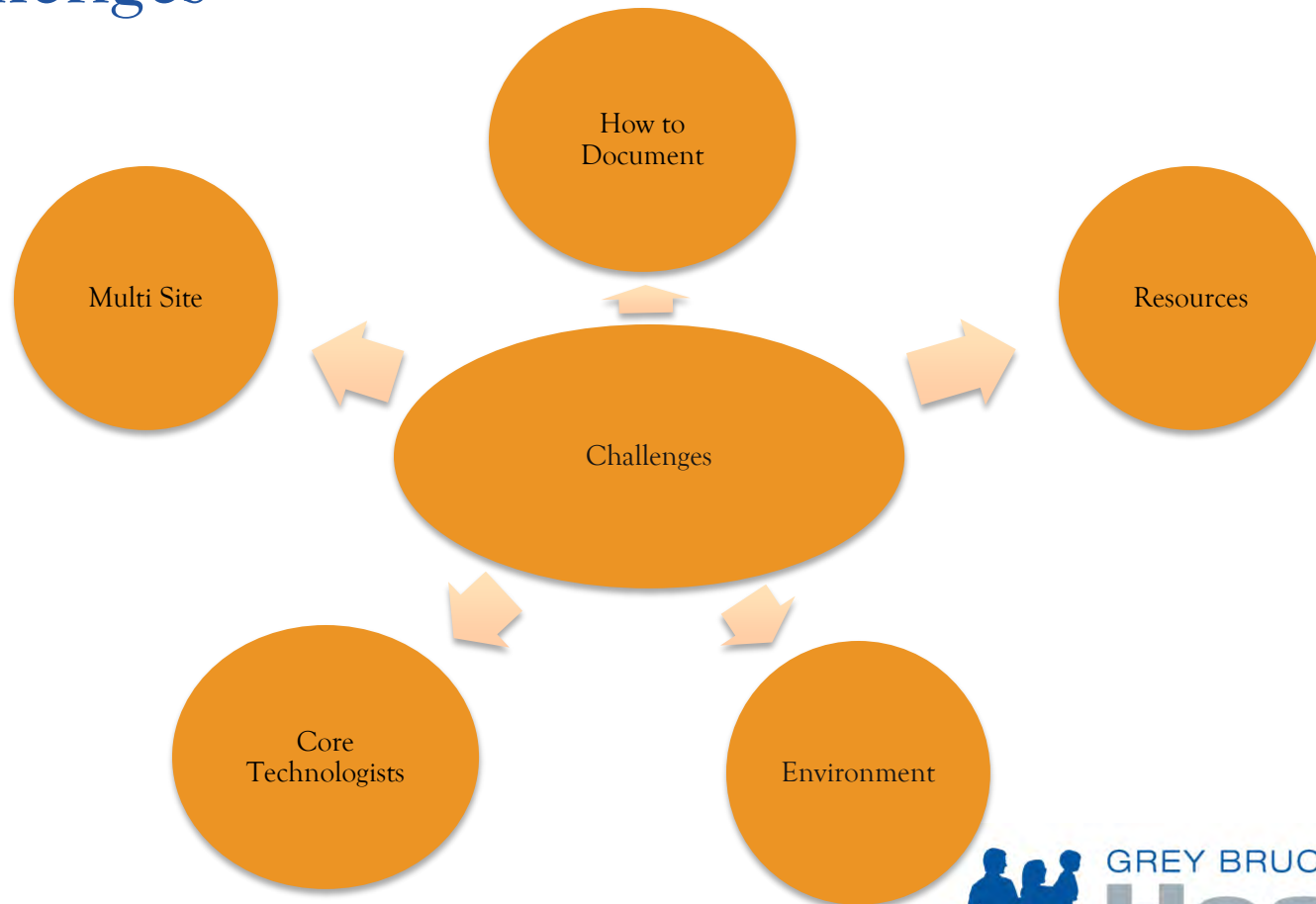
ADDRESSOGRAPH

Allergies: NKA or: _____
 Weight (kg) _____ Height (cm) _____

Packed Red Blood Cell (PRBC) Transfusion Order Set	
Note: Department of Transfusion Medicine available for consultation on appropriate blood product use.	
Patient or substitute decision maker indicates consent <input type="checkbox"/> Name and relationship: _____	
Date of transfusion: _____ Location: _____	
Transfusion of Packed Red Blood Cell Indication:	
<input type="checkbox"/> Hemoglobin less than 70 g/L <input type="checkbox"/> Hemoglobin 70 - 90 g/L with signs and symptoms of impaired oxygen delivery <input type="checkbox"/> To maintain Hgb greater than _____ g/L (Oncology ONLY)	
Vital Signs	
<input checked="" type="checkbox"/> VS + O ₂ sats as per Corporate Policy	
Laboratory	
<input checked="" type="checkbox"/> Transfusion Reaction Protocol when indicated. Notify lab and authorized provider immediately.	
Pre-Transfusion: (if not previously completed)	
<input checked="" type="checkbox"/> Group and Screen	
<input checked="" type="checkbox"/> Type and Cross _____ units	
Give _____ units. Each unit over _____ (time, 4 hour maximum per unit) (Note: CMV Negative – no longer indicated. See attached literature) <input type="checkbox"/> Irradiated for specified groups only	



Challenges



History of Trying to Change Paradigm

2014- First Rounds Dr. Collins

Indications for transfusion of:

- red cells, plasma, prothrombin complex concentrate, platelets

Adverse events

- with an emphasis on TACO and TRALI

Transfusion orders

- and results of recent audits of Ontario practice



In the End

Consider a Lower Hgb
Threshold for
transfusion(treat the patient
not the number)
Specify the infusion rate
Transfuse 1 unit at a time
and reassess(hgb and clinical
status)
Avoid non-urgent
transfusions in off-hours
Watch for TACO

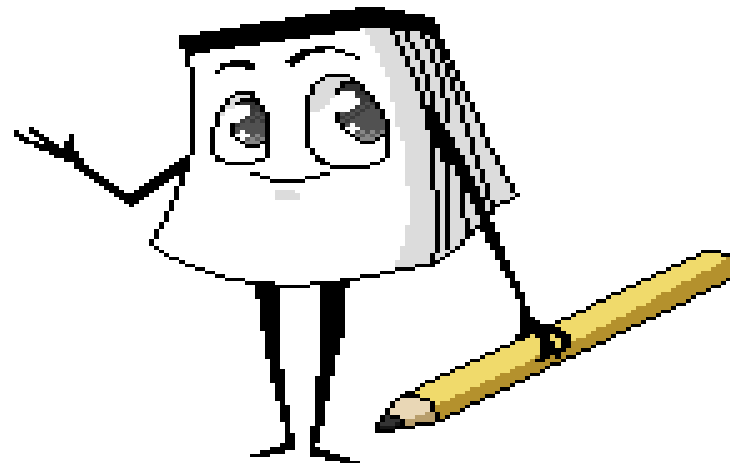


Choosing and Transfusing Wisely 2015 A Quality Improvement Program

- Metrics hospitals are encouraged to capture:
 - % transfusions with pre-transfusion Hb < 80 g/L. Eventual goal 80%.
 - % orders for single units. Eventual goal 80%.
- Stable, non-bleeding inpatients
- How are you doing? **WE DIDN'T KNOW**

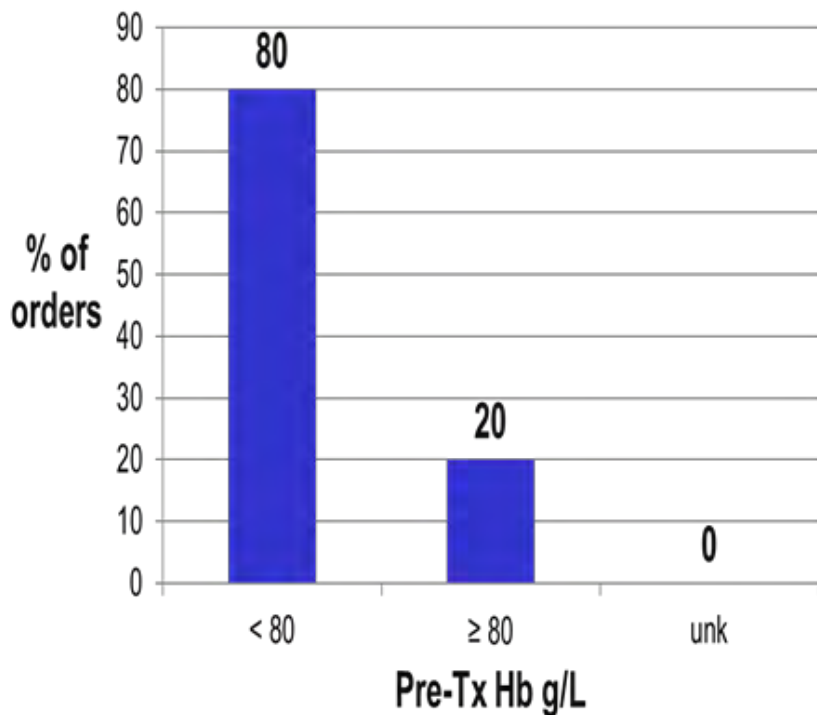


Collection of DATA

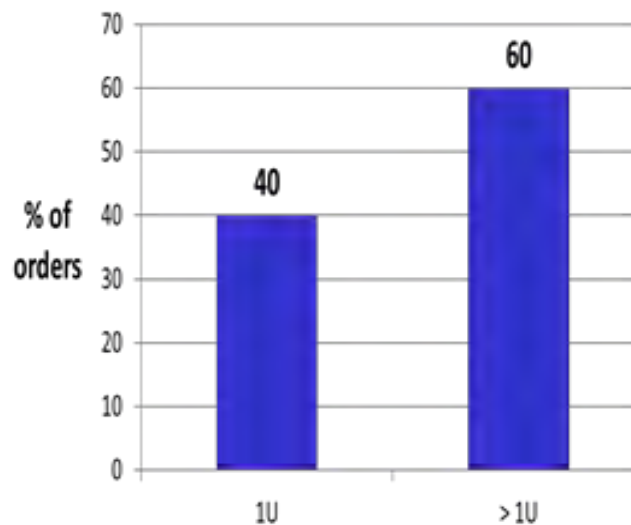


GBHS Owen Sound Feb-Mar 2016

Pre-Tx Hb (n=46)



% single unit orders (n=46)

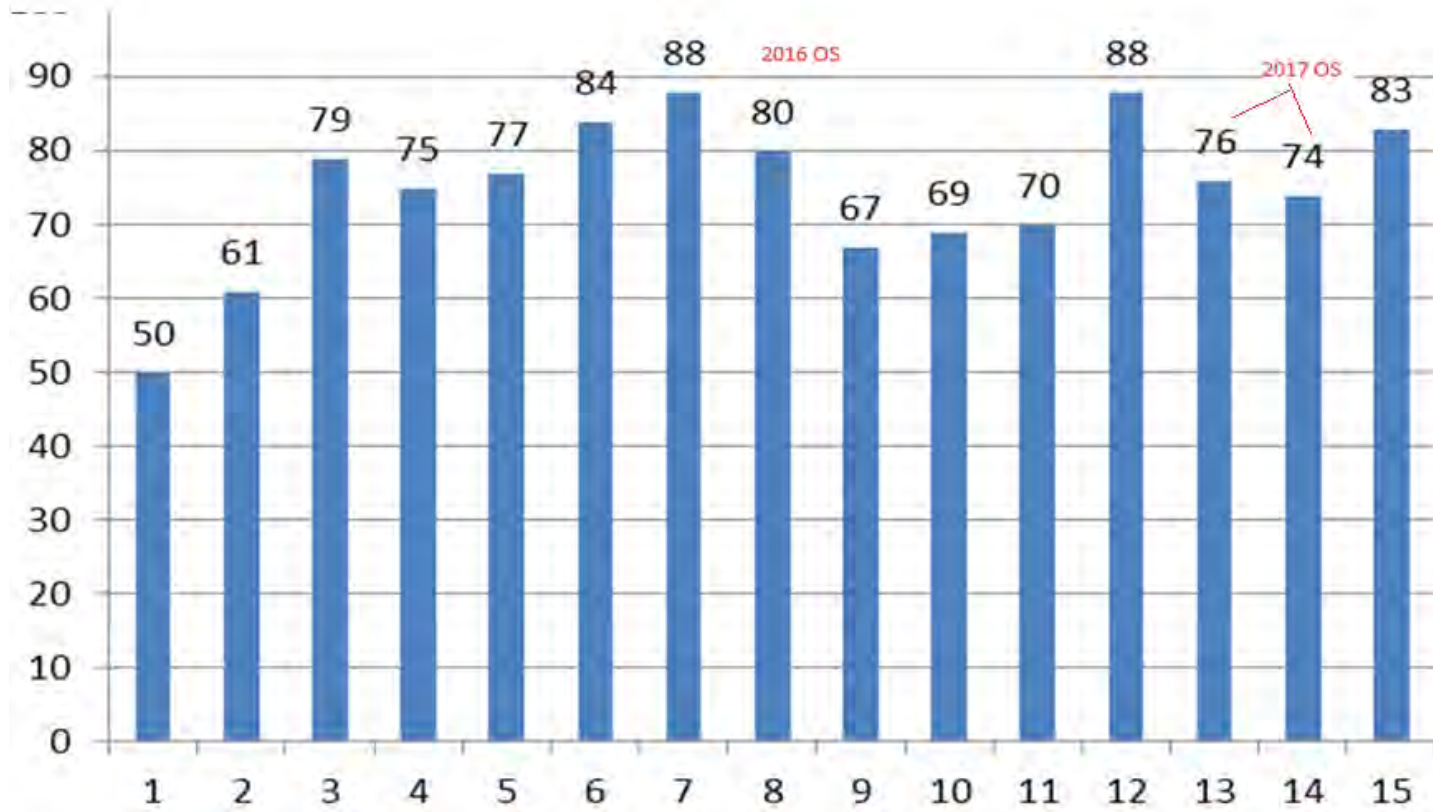


Technologist In-Service June 2016

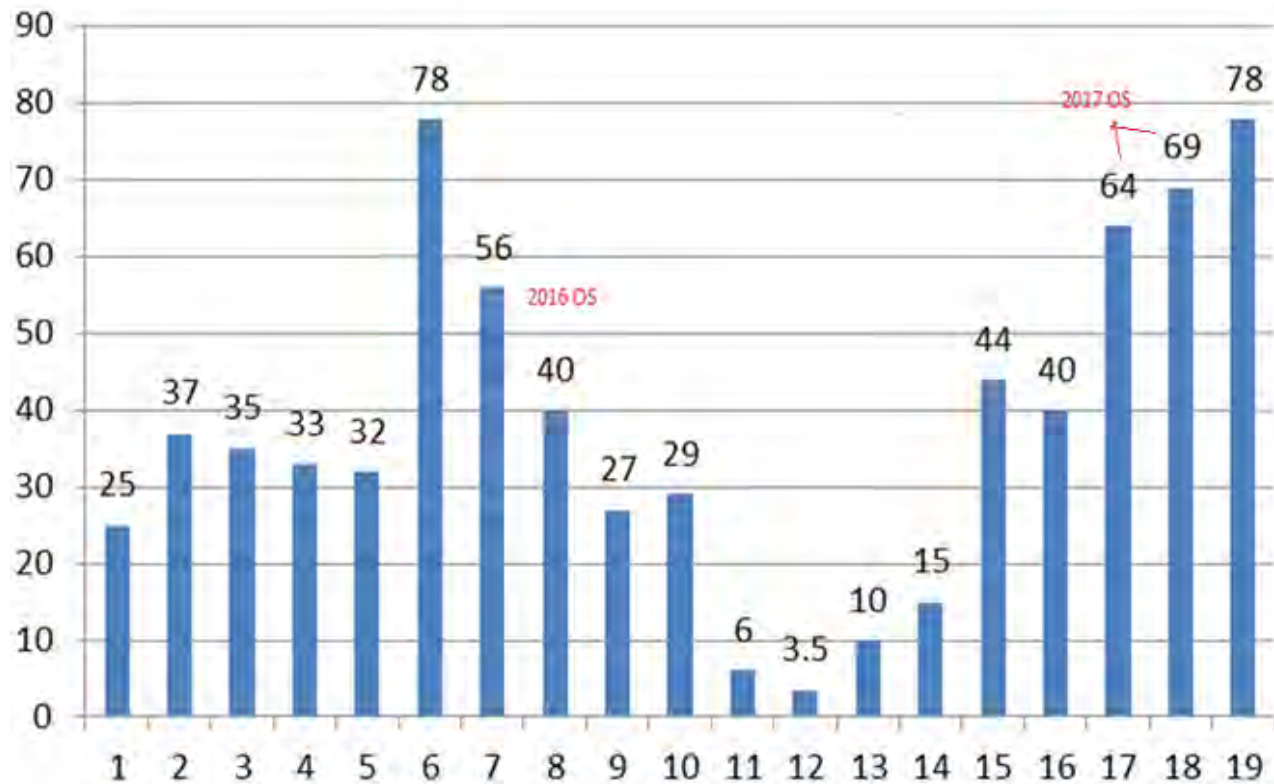
- Reviewing many initiatives including:
- Indications- CMLTO Technologist skills include “assessment of the suitability of the blood product request for the clinical indications provided”. (2008)



2017 % Pre Transfusion Hgb <80%

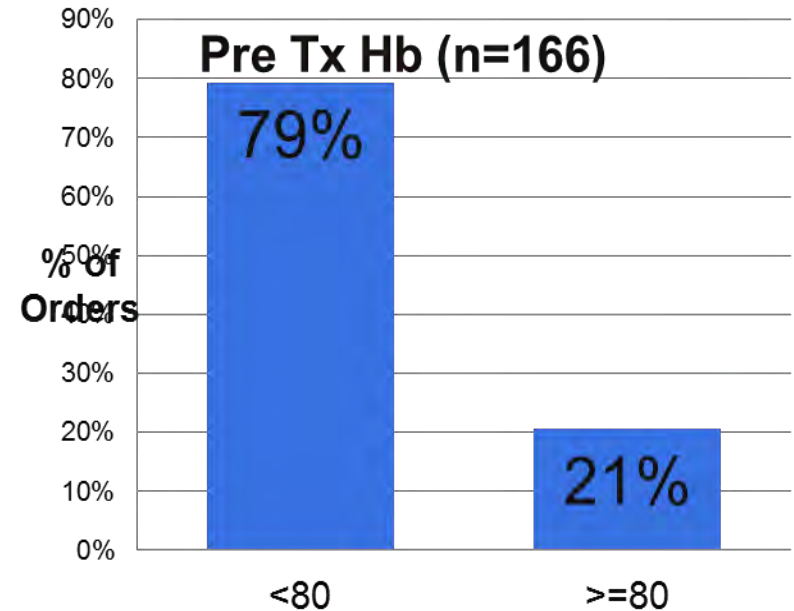
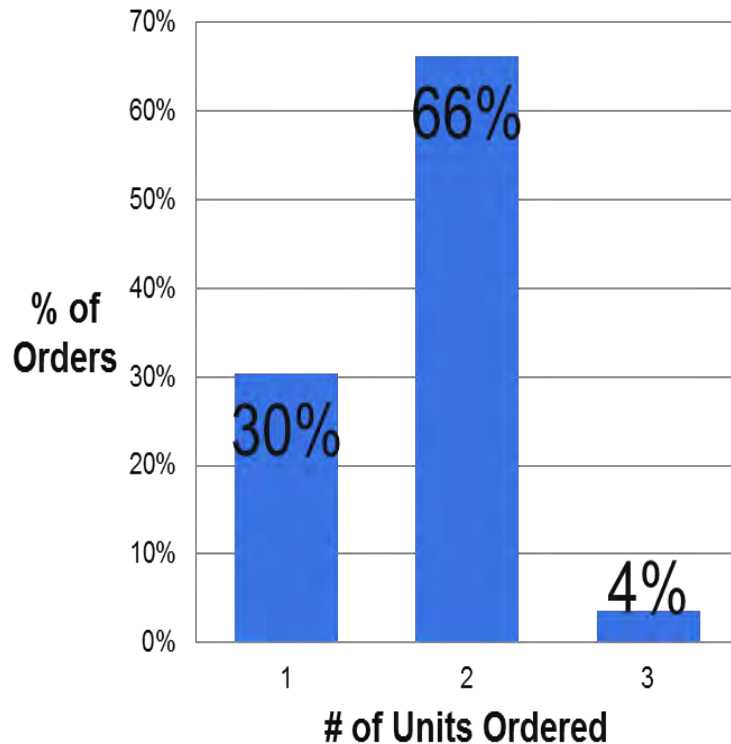


2017 % One Unit Transfusions



GBHS Owen Sound Feb- June 2018

% Single Unit Orders (n=166)



Where Are We Today - 2018

- February 1 2018 MAC approved Transfusion Guidelines for beginning the (START) Screening by Technologists Auditing to Reduce Transfusion

Hemoglobin	Units	Recommendation on when to consider transfusion
Less than 60 g/L	1-2	Transfusion highly recommended except: <ul style="list-style-type: none"> Young patients may tolerate hemoglobin levels under 60 g/L without transfusion Patients with chronic iron deficiency anemia without symptoms rarely need transfusion (consider iv iron)
Less than 70 g/L	1	Likely appropriate
Less than 80 g/L	1	Likely appropriate in patients with cardiovascular disease
Less than 90 g/L	1	Only if there are signs of impaired tissue oxygenation (shortness of breath, chest pain, tachycardia, dizziness)
Greater than 90 g/L	None	Likely inappropriate <ul style="list-style-type: none"> Consult blood bank physician before ordering

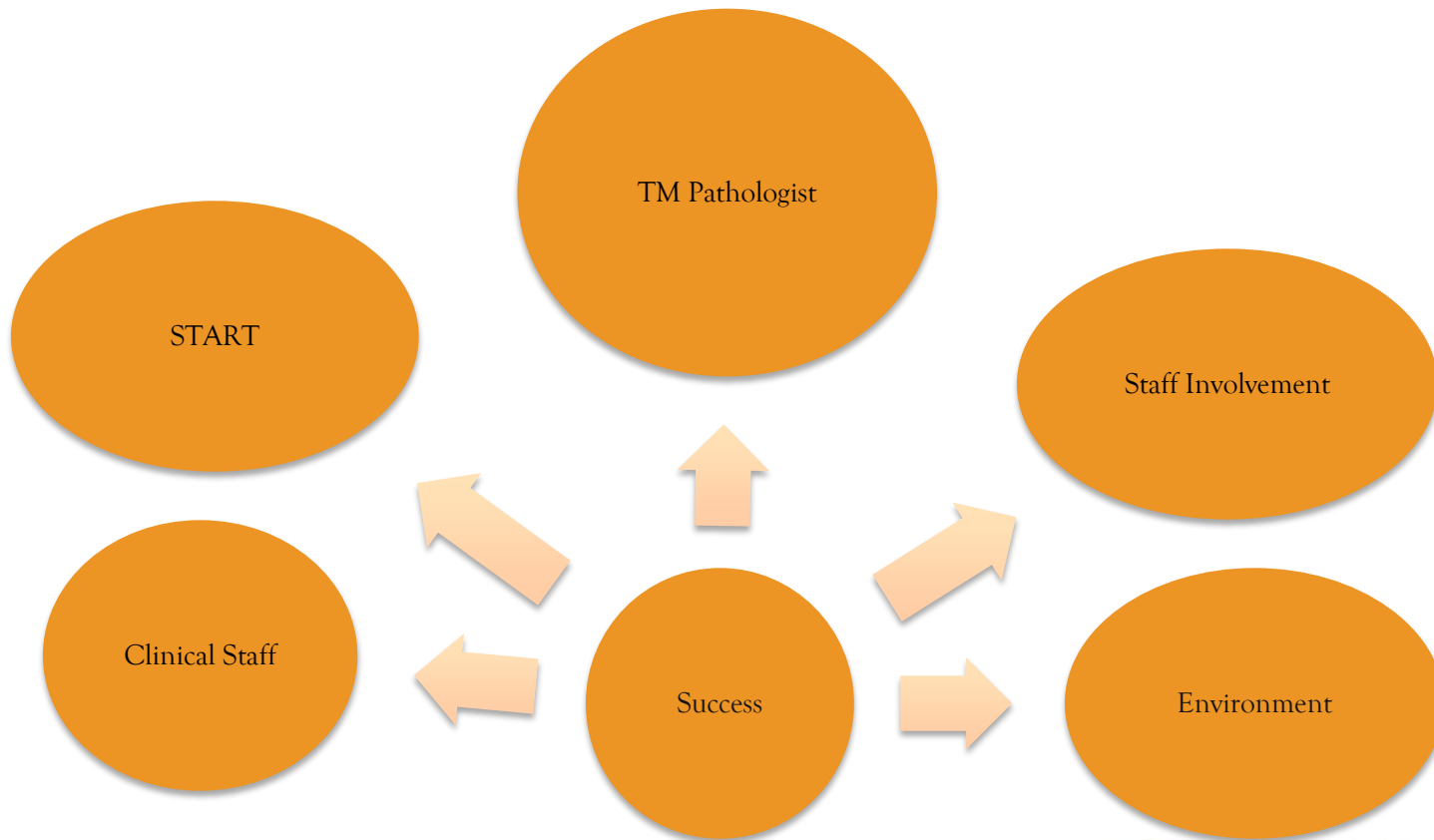


Ongoing Challenges 2018

- Dissemination of Information
- Physician
- Communication
- Screening of Technologists



Success



Steps Moving forward

- Trial a new Blood Component Order form
- Implementation of electronic Transfusion Orders
- Ongoing Education built into orientation and formal program for laboratory, nursing and medical staff
- Ongoing audits to monitor compliance
- Reflex testing post transfusion



Admitting Diagnosis: _____

informed consent completed as per institutional guidelines

Date of transfusion: today other (DD/MM/YYYY) _____ STAT (call blood bank at 2123)

if no existing IV initiate IV 0.9% NaCl to keep vein open
 discontinue peripheral IV after transfusion complete

Pre-transfusion medications

furosemide _____ mg po prior to transfusion or _____ mg IV prior to transfusion

irradiated product required as per hospital guidelines , specify reason: _____

specially matched product required as per hospital guidelines , specify reason: _____

Red Blood Cells

Pre-transfusion Hb: _____ g/L

Indication: Significant bleeding

Symptomatic

BP<90

pre-syncope or syncope(fainting or near fainting)

chest pain

dyspnea(SOB)

SI changes on

ECG(ischemia) Pos Trop History of Cardiac Disease other

Transfuse 1 unit, over _____ hours (e.g. 1 unit over 2-3 hours, maximum 4 hrs)

Note: consider IV iron instead of red blood cells for patients with stable iron deficiency anemia

Post-transfusion laboratory tests, if indicated

_____ (specify)

Prescriber name (print): _____ date: _____ time: _____

Prescriber signature: _____ Pager # _____



Questions?

