



## Healthcare Organization Commitment

### Contact Details

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#### Position

Administrative Coordinator for the Patient Blood Management Program of UPMC

#### Organization Name

UPMC

#### Organization Address

4601 Baum Boulevard  
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### Commitment Details

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#### Commitment Name

Patient Blood Management: Achieving improved quality outcomes at a lower cost

#### Participants

Jonathan Waters MD  
Darrell Triulzi MD

#### What Patient Safety Challenge does your Commitment address?

Challenge 5 - Patient blood management

## How Many Hospitals Will This Commitment Represent

17

### Commitment Summary

The UPMC Healthcare Enterprise is committed to continuing the Patient Blood Management journey to achieve improved patient outcomes and safety at a lower cost per capita. As an ever-growing and complex organization, we continue to adapt our program to meet systematic PBM spread and foster communities of learning. We have added a new Bloodless Medical Management program to identify anemia sooner, so that treatment and management are proactively addressed. Each hospital within the enterprise contributes to the success of the program and our patients are our key benefactors.

### Commitment Description & Detail

Our strategic approach is based on a six-point strategy developed by our program's medical director, Dr. Jon Waters. 1.Leverage computerized physician order entry (CPOE) systems to guide evidence-based transfusions 2.Reduce all forms of waste related to blood transfusion practices 3.Promote alternative blood transfusion methods and systems 4.Promote anemia management strategies 5.Limit iatrogenic blood loss 6.Provide blood management education, awareness and auditing for clinicians; in addition to patient-centered shared decision making tools This PBM framework provides flexibility in developing on-going initiatives to enhance the programs success. In March of 2018, a Bloodless Medical Management Program was developed to enable each enterprise hospital to maintain an in-house group of Hospitalist who serve as medical consultants for patients who refuse blood transfusions for personal or religious reasons. This program is the springboard for a concerted approach to anemia management for all hospitalized patients. Our bloodless medicine patients have emphasized the need to address anemia early on and this concept has translated to an overall appreciation of the salience of this disease. Pre-surgical anemia is a frequently occurring event, leaving patients vulnerable for intra or post operative transfusion. Again, moving from reactive to proactive the PBM medical leadership developed a pre-surgical algorithm to identify and appropriately treat the anemia prior to an elective surgical case. 2018 Achievements: 1. 12% RBC,18% FFP, 14% Platelet reduction in in-warranted transfusion orders. (Evidenced by orders heeded/orders alerted) 2. Experienced the lowest blood waste rates since PBM program established in 2013. RBC: 0.42% FFP: 0.59% Platelet: 1.40% 3. Blood and Blood Component Purchases reductions compared to previous year: RBC: -7.0% FFP: -22% Platelet: -1.0%

### Action Plan

1) Continue to develop the newly structured Bloodless Medical management model and expand anemia surveillance beyond bloodless medicine patients. 2) Continue to monitor quality reports for non-evidenced based transfusion practices and preventable waste incidents and identify opportunities to for continued quality improvement. Goal to reduce 3) Develop an educational PBM program for General Medical Education (GME) for medical

residents and APP students. Goal to reduce unwarranted blood transfusions by 10% and reduce waste 5% within the next year.

### Commitment Timeline

We will monitor PBM initiatives and data over the next year and report findings in July 2019.

### Impact Details

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#### Lives Saved

Lives Saved predicted = Lives Spared Harm predicted \* Mortality Rate

10

#### Methodology for Determining Lives Saved

Our population of Jehovah's Witnesses is approximately 1600 patients per year with 25 becoming anemic and 10 reaching critically low values. It is hoped that by leveraging our hospitalists, we can prevent anemia from occurring in our JW patients and that we can avoid critically low anemias. In addition, we just received approval by the FDA for an expanded use IND for Hemopure which is a bovine derived blood substitute. Approximately 10 of the anemic patients drop below 3 gm/dL currently but through a proactive anemia prevention program, earlier identification and the use of hemopure, we hope to have no deaths related to severe anemia.