Improving Documentation of Blood Product Consent in the Outpatient Setting

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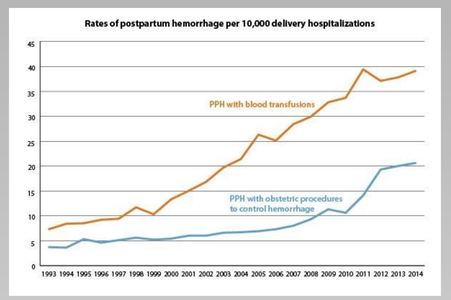
Background

Postpartum hemorrhage is the leading cause of maternal mortality worldwide. In the United States, hemorrhage that leads to blood transfusion is the leading cause of severe maternal morbidity.[1] Therefore, prompt access to blood products is necessary and decreases the risk of death in these cases. The American College of Obstetricians and Gynecologists has started a Safe Motherhood Initiative to address these issues. It is recommended to have antepartum discussions with the patient regarding their potential to refuse some or all blood products. This allows the physician to create a plan for the patient if postpartum hemorrhage were to occur. If blood replacement is not possible, achieving hemostasis in the most efficient and rapid manner is critical.

The progression of care from observation to intrauterine compression balloon to hysterectomy should occur faster in women who refuse blood products.[2] It is important to form protocols in order to address situations in which patients decline medical interventions including blood products. An informed consent should take place with each patient during their pregnancy regarding the risks and benefits of blood transfusions.

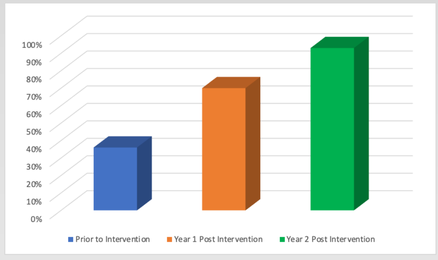


AIM Statement

The primary goal of this project is to improve physician/patient communication for the purpose of capturing the annual documentation of the outpatient blood product consent of obstetrical patients from 70 to 75% compared to pre-education and pre-smartphrase documentations, with secondary goal of universal implementation throughout the OSU Healthcare system.

Project Design and Strategy

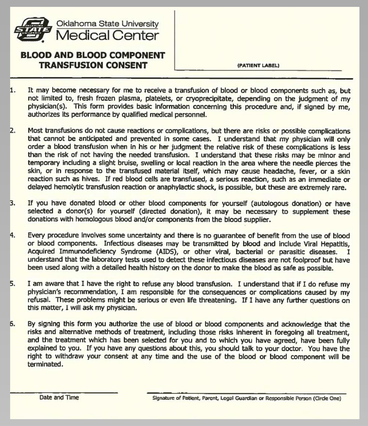
- The project took place across four OSU Family Medicine Residency clinic sites. Women's Health Center, Healthcare Center, Eastgate and Morton Comprehensive Healthcare.
- Key players include Family Medicine Attendings & Residents, Administration, IT, Patient Service Representatives (PSR), and MAs/LPNs.
- Data was collected and separated into pre- and post-education groups from 9/2018 to 4/2020.
- Prior to intervention, 36% of total patients had acceptance of blood products documented. This rose to 70% of total patients at the end of year 1 and 93% at the end of year 2 with described interventions.



Acknowledgements

1. Committee on Practice Bulletins-Obstetrics. Practice Bulletin No. 183: Postpartum Hemorrhage. Obstet Gynecol 2017; 130:e168. Reaffirmed 2019.
2. Patients Who Decline Blood Products. (2019, February). Retrieved April 6, 2019, from https://www.acog.org/-/media/Districts/District-II/Public/SMI/v2/19HEMGuidancePatientsWhoDeclineBlood1.pdf?dmc=1&ts=20190406T2036424614
3. Shaylor, Ruth, et al. "National and International Guidelines for Patient Blood Management in Obstetrics: A Qualitative Review." *Anesthesia and Analgesia*, U.S. National Library of Medicine, Jan. 2017, www.ncbi.nlm.nih.gov/pubmed/27557476.
4. Postpartum Hemorrhage. (n.d.). Retrieved April 6, 2019, from https://www.who.int/medicines/areas/priority_medicines/Ch6_16PPH.pdf Provided by the World Health Organization
5. We would also like to acknowledge Mrs. Heidi Holmes and OSU HIT for their assistance in data gathering.

Changes Made


Oklahoma State University Medical Center

BLOOD AND BLOOD COMPONENT TRANSFUSION CONSENT

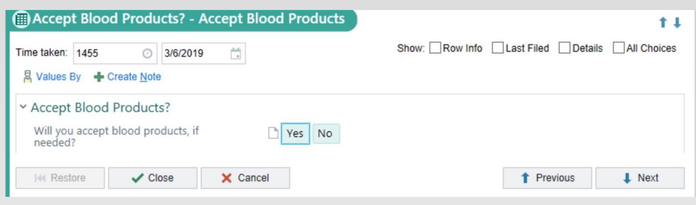
(PATIENT LABEL)

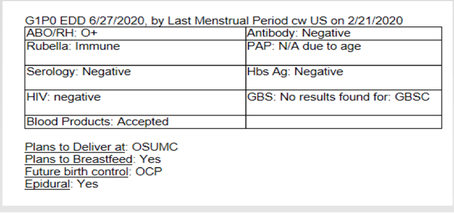
1. It may become necessary for me to receive a transfusion of blood or blood components such as, but not limited to, fresh frozen plasma, platelets, or cryoprecipitate, depending on the judgment of my physician(s). This form provides basic information concerning this procedure and, if signed by me, authorizes its performance by qualified medical personnel.
2. Most transfusions do not cause reactions or complications, but there are risks or possible complications that cannot be anticipated and prevented in some cases. I understand that my physician will only order a blood transfusion when in his or her judgment the relative risk of these complications is less than the risk of not having the needed transfusion. I understand that these risks may be minor and temporary including a slight bruise, swelling or local reaction in the area where the needle pierces the skin, or in response to the transfused material itself, which may cause headache, fever, or a skin reaction such as hives. If red blood cells are transfused, a serious reaction, such as an immediate or delayed hemolytic transfusion reaction or anaphylactic shock, is possible, but these are extremely rare.
3. If you have donated blood or other blood components for yourself (autologous donation) or have selected a donor(s) for yourself (directed donation), it may be necessary to supplement these donations with homologous blood and/or components from the blood supplier.
4. Every procedure involves some uncertainty and there is no guarantee of benefit from the use of blood or blood components. Infectious diseases may be transmitted by blood and include Viral Hepatitis, Acquired Immunodeficiency Syndrome (AIDS), or other viral, bacterial or parasitic diseases. I understand that the laboratory tests used to detect these infectious diseases are not foolproof but have been used along with a detailed health history on the donor to make the blood as safe as possible.
5. I am aware that I have the right to refuse any blood transfusion. I understand that if I do refuse my physician's recommendation, I am responsible for the consequences or complications caused by my refusal. These problems might be serious or even life threatening. If I have any further questions on this matter, I will ask my physician.
5. By signing this form you authorize the use of blood or blood components and acknowledge that the risks and alternative methods of treatment, including those risks inherent in foregoing all treatment, and the treatment which has been selected for you and to which you have agreed, have been fully explained to you. If you have any questions about this, you should talk to your doctor. You have the right to withdraw your consent at any time and the use of the blood or blood component will be terminated.

Date and Time

Signature of Patient, Parent, Legal Guardian or Responsible Person (Circle One)

- Prior to the initial study all obstetrical patients were consented verbally and during an initial obstetrical screening questionnaire (H1000) that was scanned into the electronic chart. This was inconsistently completed, it was rarely revisited, and somewhat difficult to access.
- In addition to being consented verbally, this study initiated a paper consent process that is consistent with the paper consent process performed at OSUMC. This paper consent is scanned into the EPIC chart for each patient and is easily accessible for those at OSUMC as well as OSU Women's Health clinic. EPIC blood product consent tab was continued to be utilized with every prenatal visit.
- Smart Phrase completion was continued to ensure both consistency of electronic mineable documentation of blood product consent as well as other vital components for the history of the obstetrical patient.
- Changes were made to existing OB cards (cards with identifying information, dating, and important OB lab values) to include patient blood product acceptance preference, to be documented by provider upon completion of blood product consent.
- OSU/OMECO Family Medicine residents were each again educated on their Women's Health month in regard to usage of the blood product Smart Phrase, blood product tab, and OB cards.
- All deliveries performed by OSU/OMECO Family Medicine, beginning September 2018 to April 2020 were individually data mined to assess rates of postpartum hemorrhage. It was noted for each case whether the patient required blood transfusion or other intervention. Various data points were obtained including diagnoses related to potential need for blood transfusion, consent present in chart, as well as patient race.
- OSUMC Transfusion Committee was consulted to help develop a universal process to utilize EPIC EMR to capture blood product acceptance. We also discussed easy to access blood product acceptance documentation in the EPIC chart that would be universal in the clinic as well as in the hospital setting.
- Discussed with and planned recruitment of interdepartmental specialities including surgery, obstetrics, and internal medicine to be included in electronic blood product consent process study in the future.




G1P0 EDD 6/27/2020, by Last Menstrual Period cw US on 2/21/2020

ABO/RH: O+	Antibody: Negative
Rubella: Immune	PAP: N/A due to age
Serology: Negative	Hbs Ag: Negative
HIV: negative	GBS: No results found for: GBSC
Blood Products: Accepted	

Plans to Deliver at: OSUMC
Plans to Breastfeed: Yes
Future birth control: OCP
Epidural: Yes

Outcomes and Lessons Learned

- 11 diagnoses of PPH/2 years. 9 consented in outpatient clinic to blood products. 4 patients received blood products.
- Review of our consent process by transfusion committee demonstrated areas of capable improvement.
- EMR templates provided easy, consistent tool to promote data capture.

Next Steps

- Review, standardize, improve documentation of PPH in the inpatient setting for the Family Medicine department.
- Review OSU OBGYN's workflow of outpatient consent and continue interdepartmental collaboration.
- Assess integration of blood product consent flowsheet into other patient visit types.
- Assess financial outcomes to both facility and providers by improved documentation fo PPH and management thereof.