



SABM[®]
SOCIETY FOR THE ADVANCEMENT
OF PATIENT BLOOD MANAGEMENT

ANNUAL MEETING EDITION December 2023

NEWSLETTER

Letter from the President



Another year is coming to an end - oh, how time marches on - and so too the 2023 Annual Meeting. Many mentioned that a trail of breadcrumbs was in order to find the way around the Gaylord! We certainly all got in our “steps”? In any event, this year’s meeting saw excellent educational sessions, intriguing workshops,

over 300 attendees from all around world, and a huge show of support from our industry partners. SABM annual meetings are nothing short of arduous; however, I hope you felt it worth your time, travel, and busy days and evenings to reconnect with old colleagues and to garner new ones. I certainly did! Please enjoy this Newsletter with features and highlights of the Meeting and make the most of the available recorded sessions on the website.

I must say that as I was moving about over the 3 days, I really saw the purpose and felt the passion for PBM exuding from each of you. I saw first-hand how people come together to

construct a plan to forward our mission. Your perseverance did not go unnoticed.

2024 awaits with the continued vision of cementing PBM and Blood Health as the standard of care. Let’s hone our individual and team skills, remembering to be clear and consistent, collaborate at all times, and bring our creativity and compassion as we courageously set the path.

I firmly believe this is the “Prescription for Success”. We dare to lead!

Moving into my last year in my role alongside you, I will strive to be a servant leader. I enter the year with heartfelt thanks for each of you- your devotion and your diligence. I am so proud of this Society, for the impactful work it does and the quality it brings to patients around the globe.

And WAIT, yes, there IS MORE to come! Here’s to SABM 2024 and beyond!

Sincerely,

Carolyn Burns, MD

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**SABM NEWSLETTER
DECEMBER 2023
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Featured Affiliates

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Cover photo courtesy of National Cancer Institute on Unsplash



ANESTHESIA & ANALGESIA

Consider submitting your future manuscripts in PBM for peer review and publication in this new section. The success of this endeavor will depend on the provision of material to make it lively and attractive to our colleagues and other professionals in the field.

**Members Invited to Submit
Papers [CLICK HERE](#)**

Looking for Newsletter Content

SABM members want to know:

- Do you have an interesting case study?
- News about your patient blood management program?
- News about a new program at your institution?
- Have an article about some of the latest technology?
- Submitted an article to a journal for publication?

Deadline for the Spring 2024 issue is February 15, 2024

Don't wait! Send your articles today to the Newsletter Editorial team at info@sabm.org

Call for Interesting Case Studies

Authors: Can be submitted by any discipline (MD's, RN's, technologists, perfusionists, students)

Description/Format/components:

- Patient history and diagnosis
- Problem statement
- Relevant laboratory results or tests
- Medical management
- Follow up
- Brief discussion of the disease/problem/condition with up-to-date literature
- Provide 3-4 multiple choice questions
- Answers to questions to be provided on SABM website 2-3 weeks after publication
- Tables/Figures/images are welcome
- 5-10 annotated references

Call for Member Accomplishments

If you have been given an award, received recognition, or have been recently published, we would like to publish it in the next issue of the SABM newsletter.

Please send an e-mail with the details to info@sabm.org. Be sure to include your full name and details regarding the award, the recognition you received, or the publication citation.

Call for Book Reviewers!

The newsletter editorial team is looking for members to review books. You can choose to review a book that you already have, or volunteer to review a book of SABM's choice. If you have a book that you would like to submit a review for, or to be considered as a book reviewer, you can send an email to info@sabm.org with your request for consideration.

WELCOME

to the



This year's annual meeting was an extraordinary event that brought together our diverse and dedicated community. It was a time of reflection, connection, and inspiration, and we'd like to take a moment to relive the memorable moments and accomplishments that made it all possible.

We have compiled just a few of the many highlights of the meeting. In this edition we have included summaries of insightful and thought-provoking presentations that left our attendees enlightened and motivated. You will enjoy photos of attendees who were able to connect with fellow members,

fostering collaborations that will undoubtedly continue to flourish. Lastly, we honor the exceptional award recipients whose unwavering dedication has been the cornerstone of SABM's success, ensuring its continued growth and prosperity.

The annual meeting was not just a moment in time but a culmination of the hard work, determination, and shared goals that drive SABM forward. It was an opportunity to celebrate our achievements and chart a course for an even more promising future.

SABM Advancement of PBM Nursing Specialty



Nurses working within the field of PBM have long known that they are a special and unique sub-set within their profession. With in-depth knowledge of blood health and a broad range of skill sets, nurses have helped to advance the field of PBM through the development and implementation of care strategies, management of programming, contribution to research, leadership in education initiatives, and advocacy for the rights and needs of those at the very heart of PBM—the patient.

Over the past two years, SABM has been supporting efforts to advance the field of PBM nursing and its current effort is to gain official recognition for the 'PBM Nurse Specialist' under the authority of the American Nursing Association (ANA). There are many well-established benefits to the establishment of nursing specialties, including positive

impacts on patients, nurses themselves, and for entire hospital and health-system networks. Advancing PBM as a unique nursing specialty enables further awareness of and advancement of the field, amplifying the work of the multi- and inter-disciplinary teams working within it.

A working group tasked with the project has received initial approval from the ANA to submit the application and since that time, has worked diligently to identify qualifications and descriptions of the PBM Nurse Specialist, including the who, what, when, where, why and how of PBM practice. The project includes development of a comprehensive scope and standards of practice, that describe the competencies for standard and advanced-level providers.

All multi-disciplinary providers, with particular attention to nurses, are encouraged to look for updates to the status of this project and for opportunities as to how they might take part, support, or promote the endeavor.

Contributor: Becky Rock, RN

Data and Metrics for Patient Blood Management: A Practical Guide

Data collection, analysis, and reporting are considered fundamental for a successful hospital-based Patient Blood Management (PBM) program. Despite this, very little has been published on the topic. A group of international experts in PBM data synthesized the evidence from a literature review to provide a detailed, practical list of outcome metrics, and the required data collection(s) to inform implementation. They included any studies reporting the implementation of interventions or programs study authors defined as PBM and extracted information on data collected and metrics reported. As a result, the PBM outcomes reported by 45 identified studies were grouped into one of 36 metrics. In addition, a list of 65 relevant data elements for PBM programs to collect, and their potential source hospital information systems is presented. The results of this review and presentation can inform PBM programs in planning what data collection(s) are needed, where these data can be sourced from, and how they can be analyzed.

Before collecting data for a hospital PBM program, it is important to plan what data collection(s) are needed, where these can be sourced from, and how they will be analyzed. To assist hospitals in this process, the literature review below

presents a practical list of 36 outcome metrics for PBM programs and a list of 65 data elements for potential collection:

Data and Metrics for Patient Blood Management: A Narrative Review and Practical Guide. *Anesth Analg*. 2023 Aug 8. Trentino KM, Lloyd A, Swain SG, Trentino L, Gross I.



Contributor: Irwin Gross, MD

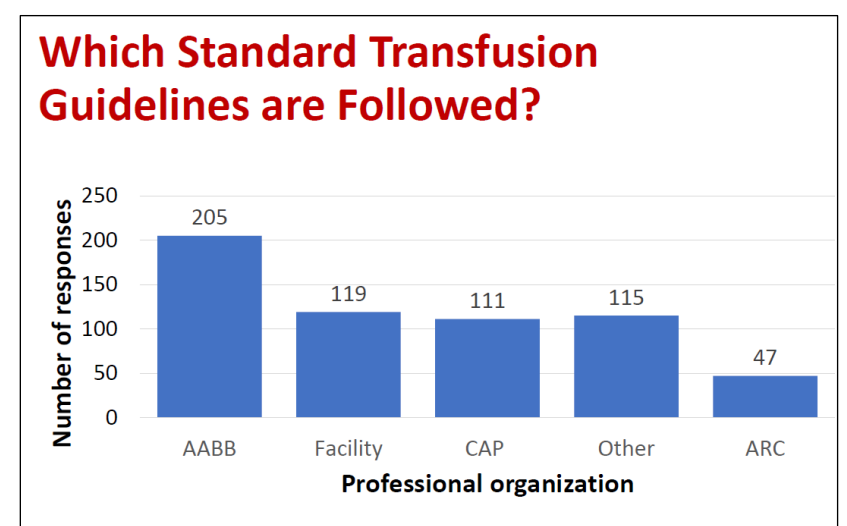
An International Survey of Patient Blood Management Practices

Prior to the current patient blood management (PBM) survey, the most recent was performed by the Association for the Advancement of Blood and Biotherapies (AABB) for PBM practices in 2013. Since that time, much has changed regarding transfusion practices and guidelines published by various professional organizations. These changes include SABM's Choosing Wisely Initiative on Five Things Physicians and Patients Should Question, AABB's clinical practice guidelines (red blood cells and platelets), the WHO issued policy brief: The Urgent Need to Implement PBM, and the promotion of single-unit transfusions.

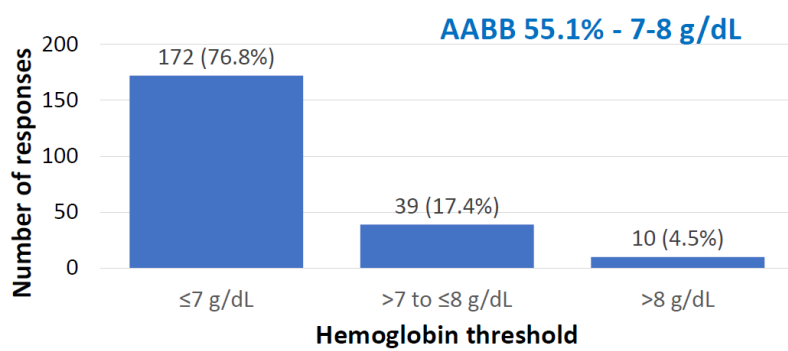
During the past decade, the use of computerized physician order entry and best practice alerts has widely increased in healthcare, and the parallels with PBM will be examined. The development of a culture of PBM must involve educational programs. There will be a discussion on who is part of these programs. The use of alternatives to transfusion will be considered. Implementation of blood-sparing conservation techniques such as acute normovolemic hemodilution, intraoperative cell salvage and postoperative blood collection will be discussed. There will be a conversation on mitigation strategies to avoid hospital-acquired anemia (HAA) that includes reducing the frequency of blood draws and the use of pediatric tubes and devices such as central lines that eliminate blood discard. Metrics used to determine PBM

program success will be explored. There will be a discussion of the ability of a PBM program to treat those patients where blood is not an option. Finally, the frequency of informed consent for blood transfusion will be reviewed, and if it is used as a standalone document or incorporated into the admission consent will close the session. If you have a formal/informal PBM program and want to see how your program/hospital/transfusion service compares to others both nationally and internationally and how you can make it more effective and successful, this session is a must-see.

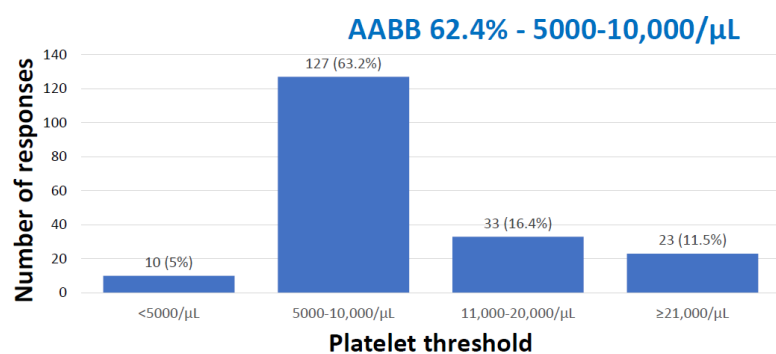
Please note some of the information that was gathered from this survey:



Hemoglobin Transfusion Threshold in General Inpatient Population



Platelet Transfusion Threshold for Prophylaxis in Inpatient Setting



In conclusion, this survey focused exclusively on PBM which has increased significantly over the last decade or so. There is always room for improvement by promoting education and promoting awareness campaigns and scientific societies.

For more analyses, please see the presentation slides available on SABM.org.

Contributor: Richard Gammon, MD

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- Carson JL, Guyatt G, Heddle NM, et al. Clinical practice guidelines from the AABB: Red blood cell transfusion thresholds and storage. *JAMA - Journal of the American Medical Association*. 2016;316(19):2025-2035. doi:10.1001/jama.2016.9185

Thrombosis and Bleeding in the Cirrhotic Patient

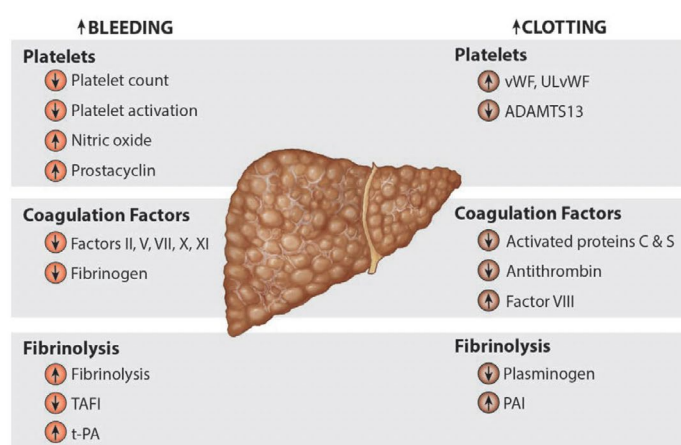
The liver plays a major role in the hemostatic system as it synthesizes the majority of the coagulation factors and proteins involved in fibrinolysis, and it is responsible for platelet production through the synthesis of Thrombopoietin. Consequently, acute and chronic liver disease will have a profound impact on the hemostatic system. Significant derangements occur both on the procoagulant and the anticoagulant processes. Interacting in a complex manner.

It has long been assumed that because traditional testing such as PT and PTT are abnormal in patients with cirrhosis, these abnormalities must correlate with bleeding risk, when in reality they don't. In fact, cirrhotic patients are considered to be in a state of rebalanced hemostasis, a very delicate balance that can be tipped either way in response to minor insults. Current literature shows these cirrhotic patients are in fact at a high risk of thrombosis.

Preoperative or pre procedural correction of hemostatic tests frequently leads to the administration of large volumes of blood products with all the risks that those entail. There is clinical evidence that surgical procedures including transplants can be performed without bleeding complications even when the apparent coagulopathy is not corrected. Viscoelastic testing is a whole blood assay which more closely mimics what is happening in vivo and is an attractive alternative to conventional testing. Although there is not yet evidence that it can predict bleeding, its use correlates with less transfusions.

Current guidelines and guidance from different societies consistently recommend against preprocedural FFP and platelet transfusions and underscore the importance of using DVT prophylaxis in this challenging patient population.

Contributor: Claudia Dida, MD, FACP, SFHN



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- Periprocedural management of abnormal coagulation parameters and thrombocytopenia in patients with cirrhosis: Guidance from the SSC of the ISTH. Roberts L, Lisman T, Stanworth S. *Journal of Thrombosis and Hemostasis* 2022; 20: 39-47
- EASL Clinical Practice Guidelines on prevention and management of bleeding and thrombosis in patients with cirrhosis. *Journal of Hepatology* 2022, 76 (5) 1151-1184

A Cardiac Surgeon's Practice includes the Management of Anemia Prior to Surgery Scheduling

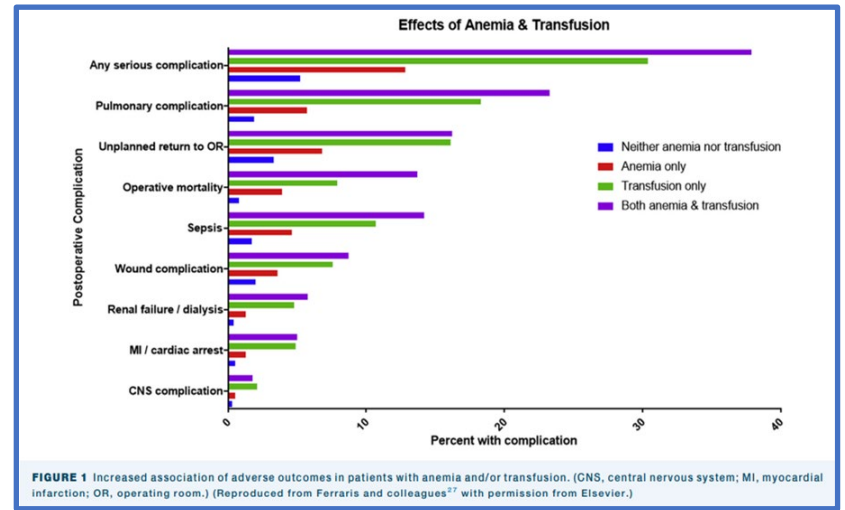
PBM spans the full spectrum of care and is to be practiced long before admission, surgery or any need for transfusion other than immediate and overwhelming blood loss. Prior to elective procedures the surgeon is in the best position to do so.

Anemia is a worldwide epidemic and in response the World Health Organization (WHO) published a policy brief in 2021 entitled "The urgent need to implement patient blood management".

Some staggering statistics from this brief were highlighted:

- Preoperative anemia in surgical patients is more prevalent than in the general population
- With an estimated global volume of 313 million surgeries, more than 100 million are likely to be performed on anemic patients
- In surgical populations, preoperative anemia rates can reach 75%

In cardiac patients, anemia is extremely prevalent and the proactive management of such, specifically by the surgeon, is an integral part of quality assurance. The consequences of untreated or poorly managed anemia include increased perioperative complications, prolonged hospital stays, and reduced long-term patient prognosis. By understanding these risk factors and consequences, cardiac surgeons can identify high-risk patients and implement appropriate management strategies.



In the publication "Management of Preoperative Iron Deficiency in Cardiac Surgery" by Corwin *et al*, the following recommendations for preoperative management were outlined:

Recommendation 1: All patients undergoing cardiac surgery be evaluated for ID, whether or not anemia is present.

Recommendation 2: The evaluation for ID includes iron studies (serum iron, TIBC, transferrin saturation, serum ferritin) and reticulocyte hemoglobin content.

Recommendation 3: Patients found to be non-ID anemic be referred for further evaluation.

Recommendation 4: All cardiac surgical patients identified with preoperative ID (with or without anemia) should be treated with parenteral iron.

Recommendation 5: ESAs should be considered for treating patients with preoperative anemia on a case-by-case basis.

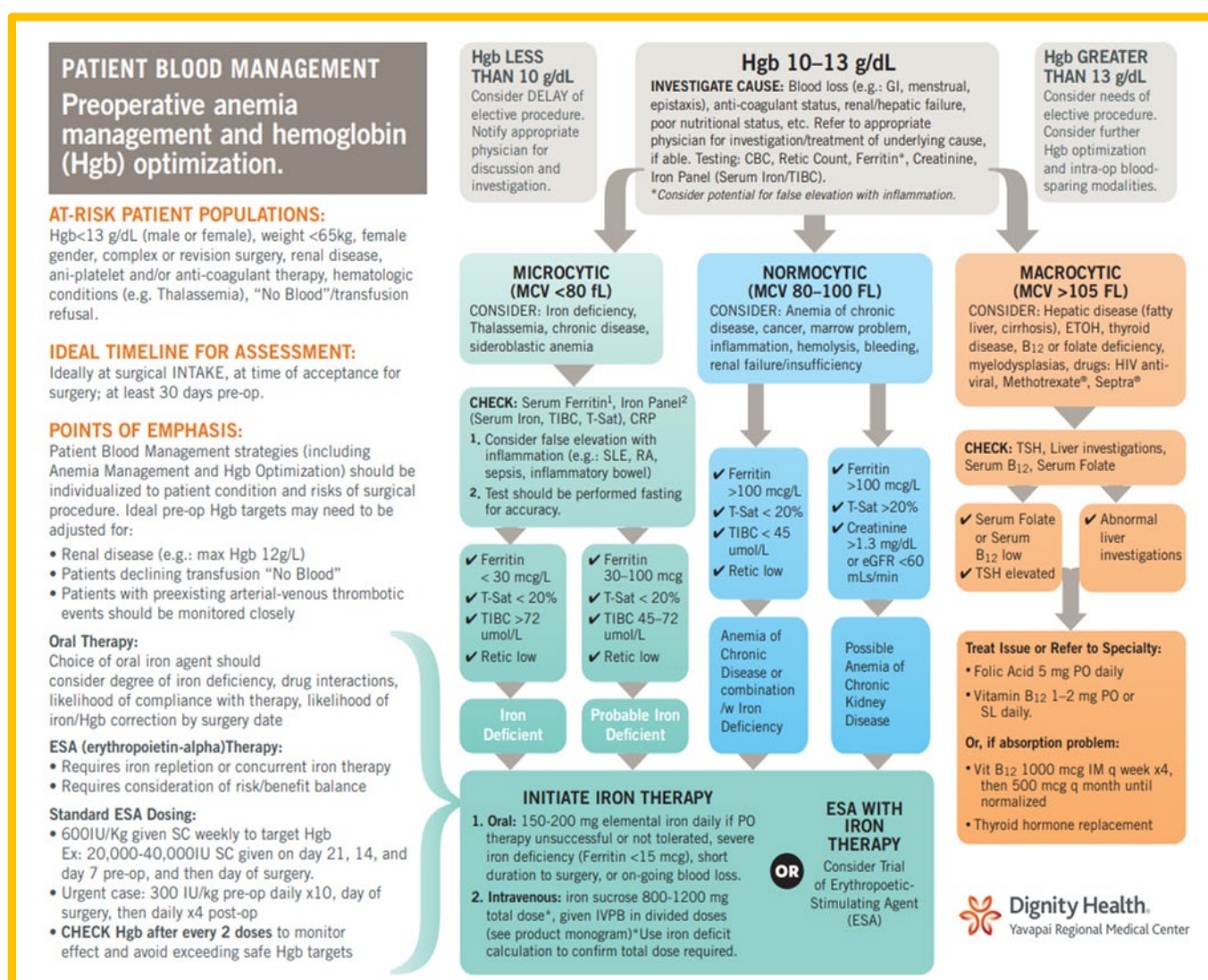


Figure 2: SABM Algorithm Adapted for DH YRMC in Preoperative Anemia Management

Ideally anemia is diagnosed and treated several weeks preoperatively. Barriers to the use of erythropoietin-alpha (ESA) as a preoperative management strategy exist due to current insurance restrictions on outpatient use of ESAs for cardiac surgical patients. In light of these restrictions, most centers limit treatment to iron, B12, folic acid supplementation and nutritional support. If unable to treat as an outpatient, it may be reasonable to use high dose ESA with intravenous iron 1-2 days prior to surgery to decrease transfusions.

Contributor: Pierre Tibi, MD

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Is Pharmacologic Replacement of Hemostatic Factors Safe in the Setting of Cardiopulmonary Bypass?

Bleeding after cardiac surgery is a serious problem that often requires transfusion of allogeneic blood products. It has been well established that both bleeding and transfusion are associated with increased postoperative morbidity and mortality after cardiac surgery. Yet, despite efforts for developing and implementing safe and effective patient blood management practices, as high as 50% of cardiac surgery patients require blood transfusion.

Factor concentrates are approved for clinical care in patients with hemophilia and for the reversal of the effect of warfarin and other vitamin-K antagonists in the settings of acute bleeding or urgent/emergent surgery. Over the last 10-15 years, a growing body of publications exists regarding the effective and safe use of factor concentrates in bleeding cardiac surgery patients.

In a study published in *JAMA* in 2021 Karkouti *et al*, demonstrated that 4-factor complex concentrate may be superior to plasma transfusion in avoiding red blood cell transfusion during and after cardiac surgery. Additionally, no adverse effects were reported up to twenty-eight days post-operatively.

There are several advantages of PCC compared to FFP:

- No need for blood bank processing
- Longer shelf life
- More effective hemostasis
- Significant lower infusion volumes (avoids TACO)
- Prevents TRALI

Several professional societies, such as the Society of Thoracic Surgeons (STS), the Society of Cardiovascular Anesthesiologists (SCA), and others, have made recommendations for the use of PCCC in serious bleeding.

In 2022 the *European Journal of Anaesthesiology* made the following recommendations in the article entitled, *Management of severe perioperative bleeding: Guidelines for the European society of Anesthesiology and Intensive Care*

- Treatment with PCC is recommended, if available, instead of FFP if bleeding is accompanied by signs of coagulation factor deficiency (viscoelastic signs of a functional coagulation factor deficiency or a high PT ratio).
- rFVIIa may be considered for patients with bleeding that remains intractable after conventional hemostatic therapy has been applied, although the risk of thrombosis must be taken into account.

Adequate fibrinogen levels are crucial for hemostasis in cardiac surgery as fibrinogen decreases during cardiopulmonary bypass due to consumption, loss, hemodilution and fibrinolysis. Fibrinogen concentrate may be an appropriate alternative to cryoprecipitate as it has a more reliable fibrinogen content, has a longer shelf life, and requires no blood bank processing. This product is approved for perioperative use in both Europe and Canada. Though fibrinogen concentrate lacks Von Willebrand, fibronectin and factors VIII and XIII some studies have shown non inferiority to cryoprecipitate in achieving adequate hemostasis in perioperative bleeding.

Contributor: Jacob Raphael, MD

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Management of Anemia in Pregnancy

Anemia is a common occurrence in pregnancy affecting up to 40% of pregnancies globally, and nearly 20% of pregnancies in the Americas¹. In the United States, this prevalence is even higher among marginalized populations and the prevalence has only been increasing over the past 10-20 years². There are physiologic causes for a decreased hemoglobin in pregnant women and established normal ranges for hemoglobin for each trimester of pregnancy^{3,4} but given the high prevalence and potential consequences of pathologic anemia, patients with low hemoglobin warrant work up^{2,5,6}. Women should be screened with CBC in the first trimester, and again between 24 and 29 weeks of pregnancy by current guidelines⁷.

Management of acquired anemia in pregnancy starts with uncovering the underlying cause. Evaluation should include repeat CBC, reticulocyte count, and nutritional studies. Iron deficiency is the most common cause of pathologic anemia in pregnancy, primarily due to the high iron requirements of the developing fetus and the high prevalence of iron deficiency among premenopausal women³. Guidelines recommend against use of IV iron before 13 weeks⁸ and IDA diagnosed in early pregnancy should be managed with oral iron⁹. That said, by the third trimester, fetal iron requirements exceed the maximal absorption of dietary iron by the gut¹⁰ and IV iron is an important tool for rapid correction of iron deficiency in the second and third trimesters. Initial response to iron therapy should occur within 2-3 weeks of starting oral iron, or within a week of a dose of IV iron¹¹, and it is reasonable to repeat testing to ensure appropriate reticulocytosis is seen 1-2 weeks after starting therapy. Assessment of iron parameters should occur no sooner than 4 weeks after IV iron to avoid interference with transferrin saturation assessment. The folate present in prenatal vitamins is adequate to prevent folate deficiency and the associated anemia, but patients with low B12 intake or who are otherwise found to be deficient should be started on an oral supplement. Although autoimmune disorders can be provoked by pregnancy, autoimmune hemolytic anemia is rare¹² and should be managed with standard therapies including steroids and IVIG. Because IgG can cross the placenta, neonates should be tested for RBC autoantibodies and monitored for hemolysis if pregnancy was complicated by AIHA, with some research suggesting nearly 60% of such neonates show signs of hemolysis at birth¹³.

Patients with inherited anemias including sickle cell disease and thalassemia still warrant the same assessment for nutritional causes, but also require additional care. Pre-pregnancy counseling is critical for both conditions. In sickle cell anemia, the earliest decision in pregnancy relates to use of hydroxyurea. Guidelines recommend discontinuing this agent during pregnancy and lactation, citing low-quality evidence of potential harm¹⁴. Chronic transfusion therapy for SCD in pregnancy is controversial, although a meta-analysis suggests improved maternal outcomes with this strategy¹⁵. In thalassemia, it is important to consider pre-conception genetic counseling and end-organ function evaluation¹⁶.

Contributor: Daniel Hausrath, MD

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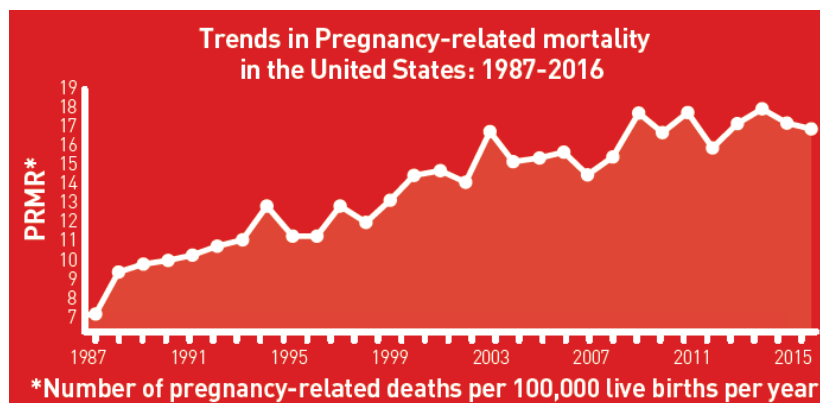
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Postpartum Hemorrhage and the Use of Cell Salvage in Cesarean Delivery

Obstetric hemorrhage requiring transfusion is a leading cause of preventable maternal morbidity and mortality worldwide¹⁻³. The United States ranks 65th among industrialized nations in maternal mortality⁴. The Joint Commission, ACOG, WHO and other prominent organizations promote new standards and guidelines to address maternal mortality.



The Joint Commission developed Provision of Care 06.01.01 (Hemorrhage) and Provision of Care 06.03.01 (Severe Hypertension and Preeclampsia) in 2019 and started surveying to the requirements on January 1, 2021.

Requirements include:

- Early patient risk assessment protocols
- Protocols to identify and treat hemorrhage
- Standard dedicated obstetric supply kit
- Staff education on hospital's hemorrhage procedure
- Perform drills and simulations
- Review hemorrhage cases to determine effectiveness of care
- Provide education to patients

Postpartum anemia is a significant contributor to peripartum morbidity. A preventative effort which focuses on antepartum anemia represents best practice in this population. Optimization strategies include iron supplementation and risk reduction bundles to prevent postpartum hemorrhage. Intraoperative blood conservation (cell salvage) is an option to prevent postpartum anemia but is underutilized in

obstetrics. Concerns about amniotic fluid embolism have been dispelled by numerous studies as leukocyte depletion filters demonstrate effective removal of amniotic fluid components and microorganisms from autologous blood.

Shed blood collection on each case:

- Improves recognition of blood loss
- Increases ability to quantify blood loss
- Maximizes potential return to patient
- Enables patient centered care

The implementation of cell salvage provision during cesarean sections is undeniably a valuable and impactful tool in maternal healthcare. Its demonstrated ability to reduce the incidence of post-partum anemia and the need for post-partum iron infusion highlights its importance in improving the overall well-being of mothers during the peri-partum period. This practice not only benefits individual patients but also contributes to more efficient and cost-effective healthcare by potentially reducing the need for allogeneic red blood cell transfusion.

Contributor: Gary Koenig, CCP

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Neuromodulation to Regulate Hemodilution

Bioelectronic medicine in an emerging field focused on technologies that modulate nerve activity to affect end-organ function. Vagus nerve stimulation (VNS) is a well-accepted method of bioelectronic medicine, which has been approved

by the FDA as an implantable device for the treatment of refractory epilepsy, depression, and stroke recovery. By 2013, more than 100,000 devices have been implanted in over 70,000 patients worldwide demonstrating clinically

meaningful improvements and no reported safety concerns. Implantable VNS systems typically target the cervical vagus nerve, but more recent technologies demonstrate that cranial nerve pathways can also be modulated transcutaneously. For example, the auricular branch of the vagus in the cymba concha region of the ear, as well as the auriculotemporal nerve (branch of the trigeminal nerve) just anterior to the ear, are neural targets of a non-invasive wearable device that has been FDA-cleared for managing opioid withdrawal symptoms in adults.

The “inflammatory reflex” is a vagus nerve-mediated pathway through which the central nervous system both detects and regulates the immune system. Multiple studies in both preclinical models and humans have shown that VNS, either implanted (cervical) or transcutaneous (cervical or auricular), inhibits inflammation by changing the phenotype of circulating monocytes and neutrophils. Studies conducted at the Feinstein Institutes for Medical Research over the last two decades have demonstrated that VNS, via the same inflammatory reflex pathway, also significantly improves hemostasis in preclinical models of soft tissue injury. Studies of the mechanism of action of VNS to reduce bleeding have demonstrated upregulation of thrombin generation specifically at the wound site as assessed by thrombin/antithrombin complex formation in blood shed from the wound; notably, no evidence of systemic activation of coagulation has been identified. VNS “primes” or prepares platelets to respond more rapidly to a subsequent injury by increasing platelet intracellular calcium stores. Ex vivo challenge of these platelets with thrombin leads to increased surface expression of the cell adhesion molecule P selectin. The hemostatic effects of VNS are independent of coagulation Factor VIII, suggesting that VNS may be a

therapeutic option for Hemophilia A and potentially other coagulation disorders.

Although VNS has demonstrated pre-clinical effectiveness, these devices require surgical implantation, which inherently challenges this therapy translating to humans. Thus, we have recently launched a prospective, randomized, controlled, single-site healthy human subject study to evaluate the effect of transcutaneous auricular VNS (taVNS) on biomarkers of hemostasis. Additionally, the study will examine the effects of transcutaneous auricular neurostimulation (tAN), which simultaneously delivers stimulation to the vagus and trigeminal nerve branches. The vagus and trigeminal nerves share a common effector pathway, which could lead to a potential synergetic effect. If effective, the results of this study will pave the way for the development of a novel device to safely facilitate hemostasis. Auricular neurostimulation has significant potential to reduce blood loss from surgical, trauma, or bleeding disorder patients; the use of blood and blood products; transfusion-related costs; morbidity and mortality.

Contributors: Chris Czura, PhD; Navid Khodaparast, PhD

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SABM Annual Meeting Awards



Kathleen Sazama Award: Patricia Ford, MD

Patricia Ford, MD, is an oncologist, hematologist and Director for the Center of Bloodless Medicine at Pennsylvania Hospital in Philadelphia. She is widely considered the pioneer for bloodless surgery and medicine. In 1995, she performed the first bloodless stem cell transplant. Ford has performed the procedure over 700 times and teaches this technique to doctors all over the world. In 2001, Ford was a founding member of the Society for the Advancement of Blood Management (SABM) and has educated thousands of doctors and patients about bloodless medicine.



Volunteer Leadership Award: Rita Schwab

Rita Schwab is an advisory SABM board member and the retired Program Director of Patient Blood Management at a large Pennsylvania health system. She remains a patient advocate, supporting education and research in advancement of the global practice of patient blood management. Rita has more than 30 years' experience in healthcare and is an experienced writer and public speaker.



President's Award: Richard Melseth

Richard Melseth is currently Project Director, SABM, focusing on the professional development of its membership. His efforts are on PBM learning activities and the development of medical research opportunities.

Melseth served as Executive Director of SABM from 2010-2012 and 2017-2019, SABM Board Member from 2003-2009, and as a founding member since 2001. Melseth is unabashedly a SABM-ophile.

Melseth was introduced to PBM concepts in 1995 while serving as a patient advocate and hired to develop one of the early PBM programs at St Luke's Medical Center, and later as Director of Blood Conservation Medicine at Banner Good Samaritan Regional Center in Phoenix, Arizona. Melseth initiated development of hospital policies, clinical protocols, the alignment of PBM with hospital strategic planning, and the opening of the first Anemia Clinic in 2006. Melseth also coordinated multiple medical education programs for physicians, nurses and technicians—both regionally and internationally—lecturing in fifteen cities in China, Malaysia, Israel and Portugal.

Melseth has relished the opportunities that PBM has opened to improve lives and practice where vision, courage, discipline and action have been essential to success. He believes as Robin Williams said in *Dead Poets Society*, “Carpe diem . . . seize the day . . . make your lives extraordinary”.

Melseth has published on the hospital integration of patient blood management principles, use of intravenous iron in pregnancy, and anemia prevention and management. One of Melseth's most exciting endeavors was globally interviewing clinicians and co-producing the film documentary *Primum Non Nocere (First Do No Harm)*, borrowing another Latin phrase, that was released in 2012.

Melseth is enjoying semi-retirement in Portugal where the sun, surf and wine are plentiful.



SABM Research Starter Grant Award: Anil Tiwari, MD

The SABM-HemoSonics Research Starter Grant serves to advance the field of PBM by supporting a young investigator who intends to study methods of promoting blood conservation. The one-year grant provides funding to further scientific inquiry and clinical knowledge in the field of PBM. This year's winner, Anil Tiwari, MD, at University of California, Irvine, is a board-certified anesthesiologist who specializes in cardiothoracic anesthesiology.

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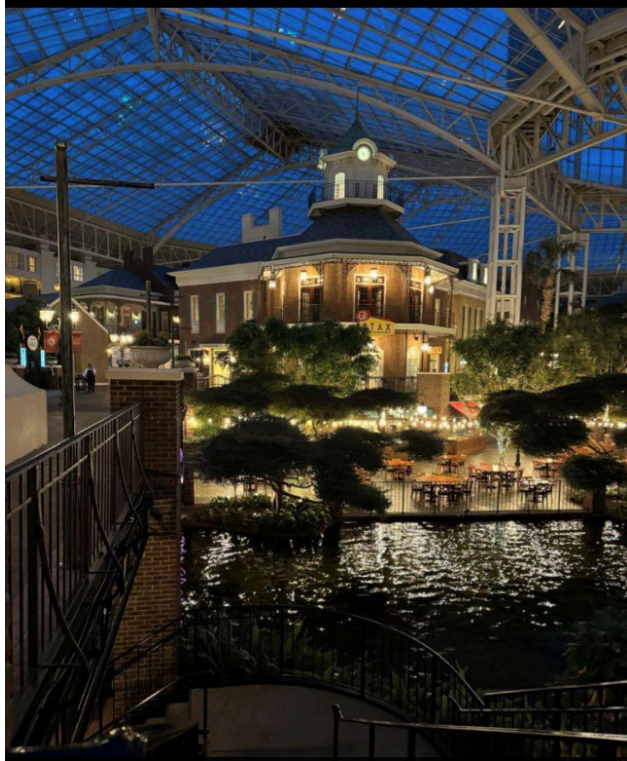
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SABM Annual Meeting Highlights



Lit courtyard of the Opryland Resort and Convention center in Nashville, Tennessee



The Silent Disco sponsored by "Let's Talk PBM" podcast cohosts Mary Ann Sromoski and Sarah Walbolt



Prakash Patel, MD, and Carolyn Clancy, APRN, CNS, at the Ethicon breakout session



SABM nurses devoted to patient blood management



Conference goes at the Keynote speaker session



Carolyn Burns, MD, presenting the President's Award to Richard Melseth

Hospital Affiliates

Hospitals across the world are seeing the important role Patient Blood Management plays in improving patient outcome and optimizing care, as well as the vital part SABM plays in bringing resources to their clinical and administrative teams.

SABM Hospital Affiliates enjoy a wide range of benefits, including individual memberships, annual meeting registrations, educational programs, as well as powerful and evidence-based administrative and clinical tools, all designed to improve the quality and safety of Patient Blood Management programs and patients. We encourage you to avail yourself and your institution of the multiple valuable facets of SABM Hospital Affiliation.

For a full description and list of benefits of becoming a hospital affiliate, please [click here](#).

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