

# A case study for achieving Patient Blood Management Certification

**MedStar Georgetown University  
Hospital: First to Achieve AABB and  
The Joint Commission's Patient Blood  
Management Certification**



In spring 2016, MedStar Georgetown University Hospital, a not-for-profit, acute care academic medical center in northwest Washington, DC, decided to pursue Joint Commission certification in patient blood management—which is based on AABB standards—for its patient blood management (PBM) program. Founded in the Jesuit principle “cura personalis”—or “caring for the whole person”—MedStar Georgetown wanted to both formalize and validate its approach to transfusion therapy while identifying new opportunities to further improve the program.

The hospital had been successful in reducing blood usage, but only on an ad hoc basis that varied from department to department. An important goal was to systematize and focus a formal patient blood management program to bring everyone together within the hierarchy of reporting committees up to Administration.

The organization also wanted to bring more organizational visibility to its successes and adopt recognized guidelines to make its PBM program more robust. Finally, it hoped to gain fresh perspective from an external review process by “outside eyes” to gauge strengths and weaknesses of the program in its quest to change transfusion therapy from a component-centric paradigm to one with a patient-centered focus.

## **Getting Buy-In**

“Laboratory personnel understand the value of this kind of certification, but it’s critical to get early support of senior executives in Administration as well as key physicians who can bring other clinicians on board,” explains Mike Hofmann, Bloodless Medicine and Surgery Program Coordinator. “In our experience, a ‘top-down’ approach is most effective.”

As a result, Hofmann brought his proposal to three natural champions: the chief medical officer of MedStar Health, the vice president of quality and safety, and the vice president of medical affairs, who also serves as the executive sponsor. Each of them recognized the medical evidence in support of the initiative and success of the program to date.

## Setting Goals

The PBM program at MedStar Georgetown focused initially on three groups of patients: the bloodless patients, orthopedic patients undergoing primary total hip and knee joint replacement, and the medical inpatients:

**(1) Bloodless surgery patients.** The organization had a long established bloodless medicine and surgery program before expanding into a broader patient blood management program. The practices utilized in optimizing clinical outcomes for those patients who decline transfusion therapy for religious reasons became the cornerstone of the PBM program.

As the bloodless patient population had become more integrated into the hospital, clinicians had noted that the severely anemic bloodless patient could be managed effectively without transfusion and that patients could tolerate a lower blood count. The goal was to formalize and standardize the approach taken with bloodless patients into a much broader patient-focused blood management program aimed at reducing the need for transfusion therapy to as little as possible.

**(2) Orthopedic patients.** Prior to the patient blood management program, it was common to give two units of blood to patients both during surgery for blood loss and/or after surgery when rehabilitating patients complained of fatigue. In 2010, MedStar Georgetown was transfusing 50 percent of total hip and knee replacement patients. The goal was to further study this patient population to determine if these routine transfusions best served patients and positively impacted clinical outcomes.

**(3) Medical patients.** While blood had been more frequently used for surgical patients rather than other medical patients in the past, over time, general medicine patients—including those with chronic illnesses—began to use the majority of blood at MedStar Georgetown. The goal

was to identify better approaches to improve clinical outcomes through fewer transfusions for this group.

## Structuring and Operationalizing the Team

Over the years, an ad hoc team had been meeting at MedStar Georgetown to coordinate as the need arose for bloodless surgery patients. At the outset of the PBM certification journey, the goal was to gather those individuals into a formalized committee to meet regularly.

Team members included individuals from upper management, transfusion services, laboratory, quality and safety, perfusion, anesthesia, bloodless medicine and surgery, pharmacy, and the hospitalist group. While those representatives had been included in past meetings, a new addition to the team was Kelly Henry, MS, CLSSGB, LSSB, CJCP, assistant vice president, regulatory readiness, who had recently joined MedStar Georgetown. Henry provided project management and facilitation towards certification oversight.

Her role was to guide the team through the certification process for a shared understanding of the survey process (from assessing compliance with standards to submitting the application for certification). She helped to identify participants in each part of the survey process, discussed preparation processes (e.g., how to apply tracer tools), developed written documentation that tied back to the standards, and guided the development of a quality plan that identified the team's focus, goals, and methodology. Henry also sought clarification from The Joint Commission when the team required additional information to interpret standards for more clarity.

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Once everyone had a clear and shared understanding of standards they'd need to meet, the team performed a gap analysis to identify areas that would require new focus to meet the standards. Because the organization had already established a successful bloodless medicine and surgery program, it decided to pursue Level 1 certification.

## Overcoming Challenges

The team identified computerized provider order entry (CPOE) as an effective PBM tool to reduce transfusions and encourage providers to consider risks and benefits for transfusion therapy. The challenge was to implement a CPOE that provided decision support for transfusions, adopting a one unit transfusion position for stable non-bleeding patients.

The team elected to embed a “transfusion advisor” into the EMR. The transfusion advisor serves as a guideline by providing an evidence-based approach to addressing the patient’s anemia. MedStar Georgetown also utilized the electronic medical record to flag the bloodless patient in the hospital. A “no blood products” alert is used to identify all the bloodless patients.

Another challenge was creating consistency every day of the week—including weekends and holidays—so that someone on staff could be available to prevent an inadvertent transfusion in a bloodless patient or consult with a patient that did not want to get a transfusion. To address this issue, the nurse coordinator for the bloodless management surgery program (BMSP) and PBM programs was designated as the contact for navigating patients. A call/paging system was instituted and disseminated via the hospital’s intranet.

A final challenge was that, as a teaching hospital, MedStar Georgetown had many rotating medical residents. To ensure that PBM guidelines were followed with every eligible and enrolled patient, a nine-minute teaching module with case study examples

was developed for all clinical providers, including every resident and hospital staff. The teaching module, which is available through the hospital’s intranet, consists of the actual case scenarios that show how to use transfusion therapy appropriately, considering all available evidence and weighing the risks and benefits. (In one case scenario, a patient is found to be iron deficient when hemoglobin drops below the trigger for a transfusion. Iron is used effectively as a transfusion.)

“It was important to us to capture more than just new nurses and residents for training,” explains Hofmann. “The bedside nurse is the gate keeper for transfusion therapy. They administer the product, monitor for side effects, and see if the intervention was effective. These nurses need to be the champion and advocate for the patient, so they are critical to a successful PBM program.”

Hofmann adds: “We want bedside nurses to work cohesively with the physician to make the prudent decision on whether a transfusion is necessary so we use an interdisciplinary model of care rounding to discuss different aspects of PBM. The core principle is proactive patient care and reducing reactive responses to a lab value.”

Because the team—and its physician champions within the organization—were so successful in framing the program as a quality and safety initiative for patients (versus a blood utilization effort), the teaching module was made mandatory. “It’s the culture and tone at the top that really made this possible,” explains Hofmann. “We communicated throughout the organization that the evidence shows that transfusion therapy is valuable in specific situations, but should be used judiciously...that the goal is to improve the patient’s outcome and making safety a top priority.”

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## Preparing for the Certification Review

The team prepared for the review by developing tracer tools consisting of specific questions addressing different components of PBM for staff and residents to ensure they could effectively answer questions about the program (e.g. “If a patient refuses a blood transfusion, what further steps are taken to accommodate the patient’s wishes?”). Each tracer tool was designed for specific areas of the hospital (e.g., med/surg units, ICU, pre-surgical testing).

Additionally, the team ensured that Human Resources and medical staff were aware when the review was coming up. By conducting mock reviews of patient files, everyone could ensure that certification components were included.

## Outcomes

The team originally anticipated six months until certification due to its past success with the bloodless surgery program. However, the process was actually completed in nine months, by February 2017, as the team worked to address identified gaps and built out its education initiative for providers. “There were a series of small but significant things we uncovered,” adds Hofmann. “Everything from a missing consent form in our prepackaging for anesthesia to adjustments in procedure protocols.”

To date, MedStar Georgetown’s PBM program has reduced transfusions to just one percent in total knee replacements and below five percent in total hip replacements (down from 50 percent in 2010). Thanks to a hospitalist champion of the program, the team was also able to collect transfusion data for hospitalized patients with chronic health care issues and educate about best practices. This has resulted in a shift to a more patient-centric approach. When transfusions are given, hospitalists now start with a single unit of blood and evaluate if more is needed rather

than giving an initial two units of blood as they had previously.

“Overall, we’ve reduced our red blood cell usage by 40 percent,” notes Richard Verstraete, RN, nursing coordinator. “That’s excellent, but I see the real value of certification as the ability to continually focus on where we can improve next.”

For example, Verstraete recently completed a two-month review of all wound care patients and determined that 85 percent of patients were anemic when they entered the hospital, some of which have anemia or chronic disease who may not be helped by transfusions. He’s currently in the process of stratifying this patient population to develop new standards of care aligned with the PBM program for a better patient experience.

In addition to the above outcomes, the PBM team is particularly pleased at how the certification process has raised the visibility, awareness, and accomplishments of the program within the hospital despite so many competing organizational initiatives. “Everyone understands what The Joint Commission stands for and how important achieving a certification is,” says Verstraete.

“People I hardly know have approached me to share their congratulations because they understand that this certification reflects our commitment to patient safety and the level of care we provide. Just as stroke certification has become well-recognized in recent years, PBM certification will become the standard of care nationally. Because medical culture is so slow to change with respect to the habit of giving blood, certification mandates a new focus for best practice.”

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## The PBM team at MedStar Georgetown recommends:

1. Enlist physician champions early. There's just no substitute for well-respected physician leaders to get other physicians on board. Look for someone who understands the value of PBM certification and is effective at communicating with and persuading his or her peers.
2. Be inclusive. The team at MedStar Georgetown hopes to involve more caregivers at the bedside in its committee moving forward. "A multi-disciplinary approach is most effective," notes Verstraete. "We may think things are headed in a certain direction because of a mandated policy, but the people who implement those policies are so valuable in ensuring that's true. They can share barriers and suggestions to ensure guidelines are consistently applied."
3. Involve any contracted providers. The PBM team recommends written agreements on quality metrics are in place for any contracted providers (e.g. perfusion services) to ensure they're aligned with the goals and expectations of the PBM team.
4. Understand your data story. "Your program leaders should be well-versed in the data you're collecting and be able to articulate it," suggests Henry. "Know your outcomes. When you keep data top of mind, you're ready to move on to the next pain point to address new problems or opportunities once you meet an existing goal."

**For more information on  
Patient Blood Management Certification,  
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