A Bloodless Revolution

Can less equal more? It can when hospitals use blood transfusions more judiciously, according to an education campaign by Johns Hopkins anesthesiologist Steven Frank and members of the Armstrong Institute for Patient Safety and Quality’s Blood Management Clinical Community.

Through Frank’s dedicated lectures about evidence-based transfusion practice over the past three years, and asking doctors and nurses to give only one unit of red blood cells (about a pint of blood) for adult patients who are not actively bleeding, the Johns Hopkins Health System has seen a decrease in blood use across all five hospitals—for an estimated total annual savings of about $1 million.

Blood transfusion is one of the top five overused medical procedures, according to a 2012 Joint Commission summit. “It’s right up there with heart vessel stents, antibiotics for the common cold and ear tubes for children,” says Frank, medical director of the Johns Hopkins Center for Bloodless Medicine and Surgery. The risks of transfusion are often underrecognized, he notes.

Patients receiving transfusions are at increased risk both for hospital-acquired infections and for adverse reactions, such as transfusion-related acute lung injury and transfusion-associated cardiac overload—the No. 1 and No. 2 most common causes of death from transfusion, respectively, Frank says. Using less blood yields clinical outcomes that are the same or better for patients, he adds: “Blood management is one of the few areas in medicine where you can reduce risk, reduce cost and improve outcome at the same time.”

Blood is one of the largest cost centers in most hospitals, Frank says. The Johns Hopkins Health System spends about $28 million a year on blood. “If we can reduce blood use by 10 percent,” says Frank, “that’s almost $3 million a year that we can save.” The cost of blood is either poorly reimbursed or not reimbursed, and because blood is a charitable donation, Medicare doesn’t pay for the first three units administered to a given patient in any calendar year. A single unit costs $220 to acquire from the Red Cross, but factoring in all the steps necessary to bring that unit to the patient can easily quadruple that price, Frank says.

In 2012, Frank began educating groups of nurses, hospitalists, surgeons, anesthesiologists and others at The Johns Hopkins Hospital about better blood management. Eight large randomized trials had shown there was no benefit to giving two units of blood instead of one for hemodynamically stable, nonbleeding adults, he told them, and the optimal threshold for transfusion is when hemoglobin—the protein in red blood cells—drops below 7 grams per deciliter. The average adult has about 13 to 14 grams of hemoglobin per deciliter.

In 2013, the group added a pop-up computer screen alert that appears whenever staff members order red blood cells for a patient with a hemoglobin level equal to or greater than 7 grams per deciliter. The pop-up alerts were added at the other hospitals in August.

The clinical community also created two educational videos about blood management available on YouTube.

Watch these videos to learn more

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THE JOHNS HOPKINS HEALTH SYSTEM HAS SEEN A DECREASE IN BLOOD USE ACROSS ALL FIVE HOSPITALS—FOR AN ESTIMATED TOTAL ANNUAL SAVINGS OF ABOUT $1 MILLION.

— STEVEN FRANK
Change and Accountability

In this era of health care reform, we all recognize that we’ve got to do things differently, and it’s our job to ask ourselves how we can do better and bring enhanced value to patients. New payment models and their associated incentives are inspiring us to look for untapped opportunities to improve health care delivery and value, while embracing the best evidence-based medicine. Our cover story on better blood management is a shining example. Although there had been eight randomized trials demonstrating no clear benefit to giving two units of blood instead of one to stable, nonbleeding adults, most staff members weren’t aware of those findings. So Steve Frank and the Blood Management Clinical Community got to work, educating different departments throughout Johns Hopkins’ five hospitals. Then they added a computer-based reminder that pops up when a staff member orders blood for a patient not fitting the normal parameters. The result? Blood usage already has dropped at our hospitals, saving over $1 million.

Embracing change also requires a commitment to accountability. I’m pleased to welcome two new leaders to Johns Hopkins who bring different skill sets to help us accomplish our goals. Robert Kasdin, a powerhouse from Columbia, has been recruited as Johns Hopkins Physicians’ first senior vice president and chief operating officer. He brings a wealth of experience from other fields, and we look forward to his applying that knowledge in the execution of our Strategic Plan and other initiatives. Laura Herrera Scott, whom some of you may know from her work with the state Department of Health and Mental Hygiene, has joined Johns Hopkins HealthCare in the new role of medical director of population health and community health programs, where she can share her talents as we work to better integrate care delivery and engage local communities. The Armstrong Institute for Patient Safety and Quality recently launched a patient safety and quality website through which our patients can learn more about our performance scores and commitment to quality of care and the patient experience. I look forward to continuing to share our best practices in future issues.

Seeing the Big Picture Through the Details

As a medical school student at the State University of New York in the late 1990s, Laura Herrera Scott would frequently pass homeless individuals and crack vials between her subway stop and classes. Unable to turn a blind eye, she and some fellow students started a volunteer-run health care clinic to benefit the homeless. It was originally referred to as a foot clinic, Herrera Scott says, because so many of the patients complained that their feet hurt or they didn’t have the right shoes. “I have always seen myself as a public health policy person,” says Herrera Scott, which is one reason she was intrigued when Johns Hopkins HealthCare began accepting applications for the newly created position of medical director of population health and community health programs. A former deputy secretary of public health services for the state Department of Health and Mental Hygiene, she was selected for the role and launched into it on July 6.

Herrera Scott, who says she was drawn to the position because of Johns Hopkins’ innovation in population health, will provide physician leadership in designing, developing, implementing, executing and evaluating the population health care management programs of the organization and the Johns Hopkins Medicine Office of Managed Care and Population Health. To do that, Herrera Scott says, she is focusing on ways to better integrate care delivery, engage the local communities, and support the quality improvement and transformation work of both the Johns Hopkins health plans and delivery system. She also will work with other Johns Hopkins HealthCare medical directors on clinical resource utilization strategies and will assist the provider relations department in strategies to engage providers in innovative, data-driven quality improvement and accountable care models.

Herrera Scott is well-prepared to manage these wide-ranging responsibilities, having previously held leadership positions in the Veterans Health Administration and with the Baltimore City Health Department. Early in her career, she served as a clinical associate at The Johns Hopkins Hospital’s HIV/AIDS Moore Clinic.

Herrera Scott holds a bachelor’s degree in business administration from The City University of New York’s Baruch College, a medical degree from the SUNY Health Science Center at Brooklyn and a master’s degree in public health from the Johns Hopkins Bloomberg School of Public Health. She completed her internship and residency in family medicine at the University of Maryland. Herrera Scott is a former major in the military corps of the U.S. Army Reserve and served in two state-side deployments and briefly in Iraq. She also has volunteered for medical missions to Costa Rica, Haiti and, through the Indian Health Service, to Alaska and Arizona.

Population health innovator: With her background in business, medicine and public health, Laura Herrera Scott is bringing unusual insight to her new role with Johns Hopkins HealthCare.

Code 10: Ready, Set, Go

On Oct. 1, health care organizations nationwide switched from the ICD-9 billing code system to the more detailed ICD-10. Not only was Johns Hopkins Medicine ready, but most doctors were expected to barely notice the change because they already had begun providing more detailed documentation within the Epic electronic medical record system, says M. Tyrone Whitted, interim senior director of compliance and training in the Office of Billing Quality Assurance. Epic helps walk clinicians through the new coding.

One goal of ICD-10 is to provide a different code for every imaginable injury; there are nearly 70,000 codes in all. The codes add such details as whether the diagnosed injury or ailment is on the patient’s right or left side and how it is progressing over time. “That level of specificity is going to make it easier for us to do public health, research and financial analysis,” says Jennifer Parks, director of clinical integration in the Office of Johns Hopkins Physicians.
New Opportunities and a Fresh Perspective

Robert Kasdin began his career as a corporate attorney on Wall Street, but in subsequent jobs over the years he found he really enjoyed working in mission-driven institutions. So when the opportunity to join Johns Hopkins Medicine in the newly created role of senior vice president and chief operating officer became available, he says he had to take it.

Kasdin, who started July 1, will partner with leadership to drive organizationwide change within a rapidly evolving environment. “Academic medical centers around the country are under financial pressure because of both declining NIH funding for research and declining reimbursement rates,” he says. “The ways they find resources to support research and education are being re-thought.”

Kasdin will be responsible for overall operations, including strategic direction, administration of existing programs and development of new initiatives to ensure that Johns Hopkins Medicine achieves—or exceeds—its strategic imperatives.

He comes to Johns Hopkins from Columbia University, where he had been senior executive vice president since 2002. In that role, Kasdin supervised overall operations, finances, human resources, information technology, and development and commercialization of intellectual property. He also played an important role in shaping his new role with Johns Hopkins Medicine.

Strategy wrangler: Robert Kasdin will tap all his past experience as he shapes his new role with Johns Hopkins Medicine.

SAFETY AND PERFORMANCE

Conversations About Safety

Johns Hopkins Medicine this spring launched the Patient Safety and Quality website to answer important questions about the health system’s quality of care and the patient experience, aiming to help consumers understand the institution’s performance scores and draw their own conclusions about each hospital’s performance.

The site shares how Johns Hopkins works continuously to improve its performance on five initial safety issues (see below) and how well each of the system’s five adult inpatient hospitals and its home health care service provides evidence-based care.

“This site is about our patients and the communities we serve,” says Matt Austin, the project’s leader and a faculty member with the Armstrong Institute for Patient Safety and Quality. “Our goal is to build relationships and trust.”

The two-year project enlisted quality experts, graphic designers, Web strategists, communicators and data analysts systemwide. More than 40 former strategists, communicators and data analysts systemwide. More than 40 former

Data Made Friendly: The Patient Safety and Quality website includes key information about safety issues and more.

Patient Experience: How patients rated their experience of care from a Johns Hopkins health care provider.

Infection Prevention: The rate of central-line-associated bloodstream infections.

Hand Hygiene: The percentage of medical staff members who were observed washing their hands or using hand sanitizer before and after caring for a patient.

Hospital Readmissions: How many Medicare patients with specific conditions were readmitted to the hospital within 30 days for any reason.

Core Measures: How often a hospital follows national standards of care and treatment processes for common conditions.
A Bloodless Revolution

Platinum Performance

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