



“It’s important to our patients to avoid transfusions whenever possible. The OrthoPAT® system is an important part of that.”

*Dr. Steven Jones
Orthopedic Surgeon*

Physicians Medical Center of Santa Fe employs cutting-edge surgical technology for the benefit of patients

Introduction

As a surgeon-owned hospital, Physicians Medical Center of Santa Fe (PMC) is committed to using cutting-edge surgical technology to better their patient care. With a 96% positive patient review rating, PMC is clearly a leader in providing the best possible environment for surgery.

Dr. Steven Jones, an orthopedic surgeon at PMC, says that the culture is one centered in the belief that not transfusing leads to better patient care, and that technology plays an integral role in minimizing the transfusion rate. He points to the OrthoPAT® system as a perfect example of how PMC is leveraging technological innovation to achieve success.

Challenge

Prior to implementing the OrthoPAT system, PMC surgeons were transfusing over 1.26 units of allogeneic pRBCs per surgery on average. At a value of \$600 per transfused unit, this added up to \$756 per procedure and \$60,480 per year. In 2010, Dr. Jones began searching for a way to lower PMC’s allogeneic blood transfusion rate because of the high costs, as well as the potential complications, such as transfusion-related immunosuppression. He asked the OR director to bring in several technologies to test out that might help. The OrthoPAT system was among these and ultimately stood out as the most effective.

Solution

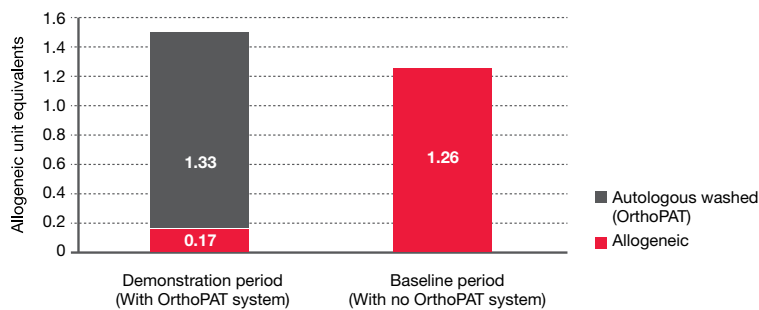
At the start of the three-month long demonstration, a Haemonetics Cell Salvage Consultant brought the OrthoPAT system into PMC. The consultant explained that Haemonetics would be conducting an IMPACT® Program, a data-driven approach to demonstrating the device’s value, at the hospital. Haemonetics partnered with PMC to support the use of the OrthoPAT system on 24 patients receiving hip arthroplasties. During the demonstration, data was collected on both the OrthoPAT system’s performance and the number of PMC’s patients who needed allogeneic blood transfusions throughout the process. At the conclusion of the demonstration, a report that analyzed how PMC was able to improve practice with the help of the OrthoPAT system was presented to the hospital.

Results

During the demonstration, patients received almost all of the blood they needed from the OrthoPAT system. Only an average of 0.17 units needed to be transfused from allogeneic packed blood cells per procedure — a decrease of 87%. Remarkably, at the same time, PMC was able to provide their patients with an even greater average volume of blood re-infused per surgery. Dr. Jones highlights the success:

“ Quite frankly, I was overwhelmed with how much of a difference using the OrthoPAT made. Having the data to back it up really drove the point home and reinforced that what we were seeing in practice was real.”

Average red blood cell utilization per procedure by source



This reduction in allogeneic red blood cell transfusions also represented a significant cost savings to PMC. By using the OrthoPAT system, they realized a savings of more than 23% of their original spending on blood product during the demonstration. Dr. Jones emphasizes the importance of this for PMC:

“ Working at a small physician-owned hospital, we don’t have a big blood bank to work with. Needing to order and maintain fewer units of blood on the shelf really makes a big difference.”

Future

Dr. Jones and PMC are believers in the OrthoPAT system and the IMPACT process, which helped them truly understand their blood management practice. The OrthoPAT system is now being used as the standard of care for hip replacement surgeries at PMC, and Dr. Jones is excited to initiate another IMPACT Program for his knee-replacement patients in the future.

IMPACT® Program performance summary

Decrease in allogeneic utilization	87%
Allogeneic price per unit	\$600
Estimated annual allogeneic blood cost reduction	\$52,320