THE CHALLENGE

“What if we methodically removed every barrier that exists to the delivery of ideal patient care by examining and optimizing each step in the process?” This was the question Virginia Mason Medical Center (VMMC) asked and answered in 2002 when they developed and implemented the nation’s first continuous improvement production system for comprehensive management of the healthcare experience.

An acute care hospital in downtown Seattle, Wash., with 336 beds, 440 physicians and a multidimensional network of clinics, research and educational facilities, VMMC resolved to embrace rigorous manufacturing-based strategies demanding a relentless “zero defect” mind-set in an effort to control costs and improve customer satisfaction. Utilizing this unique “patient-centric” approach, VMMC has helped redefine healthcare nationwide, setting new standards for improvements in quality and safety via the reduction of waste and inefficiency in administrative processes.

The Virginia Mason Production System (VMPS) has transformed operations and care at VMMC, from department-level changes tested and implemented immediately, such as motion conservation initiatives and inventory waste reduction, to long-range plans involving the redesign and construction of the organization's physical spaces to align with VMPS processes.

VMPS concepts call for a facility’s physical structure to be much more than utilitarian shelter and storage. The architecture must actually help improve the quality of care. This innovative structure/function paradigm drove VMMC to create the country’s first healthcare facility literally “built around the patient” – the Floyd & Delores Jones Pavilion. Leadership abandoned the traditional model of hospital construction – blueprint-wielding engineers and architects dictating space and design – and instead focused on patient, family, clinician, staff and community needs. End-users became the front-line contributors, consulting on everything from ideas for reducing wait times or beautification of public spaces, to the optimization of supply and patient transportation around campus.

Certainly, equipping the facility would require extensive materials management collaboration and development of detailed procurement strategies. “VMMC made the decision to add an equipment planner to the team to work on new construction and renovation,” said senior capital equipment manager Renae Ramirez.

A SHORT TAKE ON SUCCESS

The Challenge:

- Large urban hospital envisions ground-breaking, state-of-the-art addition that represents the needs of the community and serves as a national model for healthcare delivery excellence.
- Collaboration was needed between all project stakeholders to deliver desired outcome while meeting the Virginia Mason Production System quality paradigm.

The Solution:

- Creation of dedicated capital equipment manager position creates a point-of-origin for collaboration among stakeholders and facilitation of contract standardization for the entire project.
- Intalere Facility Management Solutions offer an integrated project delivery focus, assisting in the development and execution of an individualized purchasing plan, including cost-saving opportunities, as well as consultative expertise in supplier negotiations, compliance, product standardization and itemized cross-referencing.

The Outcome:

- New state-of-the-art, Floyd & Delores Jones Pavilion begins operations as the country’s first facility planned and constructed using patient-centric production system quality principles.
- Collaboration and standardization leads to maximization of Intalere contracts and $1,300,307 in actual cost-savings.
“After establishing equipment standards that would support the VMPS, one of my first responsibilities was to demonstrate the value of a systematic equipment purchasing program to all the stakeholders.”

A valued member for more than a quarter-century, VMMC was familiar with the wide variety of services and solutions an Intalere partnership could bring to the table for each step of the project. “I needed to educate the director of Design Construction, Clinical Engineering, general contracting and all the other hospital departments regarding the favorable terms and conditions already negotiated by Intalere,” said Ramirez.

Ramirez and the VMMC team could also take advantage of benchmarking and portfolio management tools and resources readily and exclusively available to all Intalere members. “I was able to access contracts online and maintain oversight throughout the process,” she said.

THE SOLUTION
Ramirez and Greg Andrews, at the time, director of Design, Construction and Management, worked with each department to generate a list of appropriate and desired equipment, then prepared a comprehensive budget that not only included pricing, but also the cost of services such as maintenance, delivery and installation. Once generated, Ramirez was able to source the desired items and identify actionable opportunities for cost-savings.

“We used Intalere resources to cross-reference equipment lists and search for alternative product choices,” said Ramirez. Accordingly, a critical aspect of the VMPS philosophy is the concept of continuous improvement. Therefore, it was important that the protocols developed, intelligence and hands-on experience gained during the project would remain “in-house”; not simply be an application on loan from an outside consultancy.

THE OUTCOME
“Using Intalere resources I was able to reduce our equipment budget for each department involved in the Jones Pavilion project while exceeding the expectations for overall contract savings,” explained Ramirez. VMMC saved $1,300,307 on their capital equipment purchases utilizing Intalere’s Facility Management Solutions to maximize their contract portfolio. “Using the original equipment projections, I was able to reduce costs by more than 23 percent, including ancillary fees like shipping, storage, installation, maintenance and training. However, our greatest success was the development of a lasting purchasing system built on strong working relationships between all the stakeholders,” said Ramirez. “We expanded our motto of ‘Team Medicine’ to the equipment procurement process by collaborating with our Intalere business partner, leading to better equipment purchasing decisions based on value.”

“We buy everything we can on contract from Intalere,” said Andrews, “but our partnership is about more than a portfolio. Our collaborative effort is helping to build a comprehensive construction program.” Andrews explained that Intalere will now also work with VMMC during the design phase of future projects. “In the beginning, there were some holes in our portfolio,” he said, “but Intalere listened to our needs and by working together, both organizations gained invaluable expertise that can now be shared to improve best practices and the quality of patient care for all.”

Projects such as this illustrate the importance of an integrated project delivery focus.

“Using Intalere resources I was able to reduce our equipment budget for each department involved in the Jones Pavilion project while exceeding the expectations for overall contract savings.”

Renae Ramirez · Senior Capital Equipment Manager · Virginia Mason Medical Center
Intalere has concentrated on building a comprehensive program that has them taking an active role in identifying realistic and actionable opportunities for construction savings and contract utilization throughout the six phases of the construction process — Planning, Schematic Design, Design and Development, Construction Documents, Construction and Commissioning.

“We are consistently working to enhance the comprehensive facility management solutions we can offer members in the areas of architecture, general contracting, audit services and equipment planning,” said Mike Gerhardt, senior director, Plant Engineering, Construction and Capital Specialists for Intalere. “From plans to the finished product, we can be on-site to deliver efficient and cost effective facility management offerings for each and every member project.”

As a byproduct of this winning collaboration, Andrews joined the team of Intalere affiliate Health Resource Services (HRS), to help the facility management group bring this proven solution to other members throughout the country.