When most people think of patient care in a medical setting, they envision a patient receiving care from a medical professional – a doctor, a nurse, or even an x-ray technician. Our traditional view and experience of care is centered around a single activity being done to, or for, the patient. But the needs of patients, the knowledge of care providers, and the complex technology of health delivery are changing at a rapid pace. Our traditional idea of how health care is delivered to the patient needs to change dramatically.

In Saskatchewan, transformational change to the delivery of health care services is being implemented through Lean management principles. Using Lean, health care organizations can streamline their activities and eliminate waste – creating efficiencies so that the patient-centred system flows smoothly and operates at peak performance. There are seven flows that affect this performance: the flows of patients, families, clinicians, medication, supplies, information and equipment. Lean management tools are used to identify and implement improvements in these processes.

“When we pursue improvements through shared services, we aren’t just focusing on the cost,” says 3sHealth CEO Andrew Will. “Our main focus is to improve the patient experience.” To that end, 3sHealth is working together with the regional health authorities, the Saskatchewan Cancer Agency, e-Health Saskatchewan, and other groups to identify opportunities to leverage shared services that improve the seven flows of medicine.

Supporting the flow of services... (continued on page 2)
Supporting the flow of services... (continued)

A big step in determining which services will benefit most from a shared service approach is the development of a business case. This process takes a detailed look at the current state, examines best practices, and evaluates data to explore the opportunities for improvement. The business case is built with a team of subject matters experts, consultants, and partners in the health regions. Often Lean tools, such as 3P (Production Preparation Process) events are used to collect the data.

“We are developing businesses cases in a number of areas to discover where we can bring the most value and have the most significant impact on the provincial health care system,” says VP of Business Development Mark Anderson.

Work has already begun in a number of clinical support areas. 3sHealth’s work-to-date in supply chain management and group purchasing has realized a cumulative savings of $33 million over the last three years. Using Lean methodology such as Kanban, the supply chain area is creating efficiencies, standardizing work, and improving inventory management system-wide.

“Several members of our senior team had the opportunity to spend a week at Victoria Hospital in Prince Albert participating in a Kanban seminar,” said Will. Kanban, a Japanese term that means ‘signboard,’ refers to a visual ordering system that streamlines the ordering and supply process using visual cues. “In the space of a week, we were able to create additional time for nurses to spend with patients by eliminating the need for them to review inventory and order supplies. We could see first-hand how this process increased efficiency and improved patient care.”

3sHealth’s payroll and benefits programs for health region staff are already supporting human resources in the health care system. To further streamline staff scheduling and other human resource functions, 3sHealth will begin to explore the implementation of a provincial Human Resource Information System (HRIS) this spring.

“Saskatchewan is breaking new ground. By applying Lean to the seven flows of medicine, we are creating a long-term sustainable solution for health care in our province,” said Will. “Our commitment to the process is strengthened as we see the difference our work is already making to patients and health care providers.”
Creating a Vision for Supply Chain Management

Early this year health system leaders from the Regional Health Authorities (RHAs) and Saskatchewan Cancer Agency (SCA) met to create a common vision for supply chain services. The goal was to develop a vision that would support a Lean, Just in Time (JIT) system in which just the right supplies are available in just the right amount, at just the right time, in just the right place. JIT delivery reduces the costs associated with storing and monitoring excess inventory, frees up valuable space, and results in health professionals having more time to focus on patient care.

“These two days were filled with unbelievable spirit and incredible team work, where people worked together to deal with some of the challenges we face in Supply Chain Management. I am thrilled with everyone’s involvement and the progress that was made over the course of these two days,” Vice President of Business Development, Mark Anderson said.

Some issues identified in the current Supply Chain Management functions were:

- The use of multiple ordering processes (manual, electronic and fax)
- Products moved several times before they arrived at point of use
- Dealing with vendor requirements for minimum order quantities
- Excess inventory
- Significant variation in geography, distribution and supplies

By recognizing commonalities and differences across the regions, participants were able to explore options that led them closer to an ideal state. Ideas included central warehousing to support a “milk run” of mixed supplies, Kanban (a signal to identify when supplies have been consumed and new supplies are required), standard work, electronic ordering through Radio Frequency Identification (RFID) technology, and inventory control. By agreeing on what an ideal state for Supply Chain Management would look like, all participants were able to visualize a plan for the future state of their departments in their own health regions.
Mark Anderson, Vice President, Business Development, leads representatives from 3sHealth and supply chain managers from the RHAs and SCA through a two-day visioning session held at Imagination Space in Regina.

relations consultations and subsequent contract negotiations with K-Bro. It is estimated that this solution will save the health system approximately $93 million over the next ten years through lower operating expenses and capital cost avoidance. It will be fully implemented in approximately two years.

“These changes will put the needs of patients first. This solution will ensure a high standard of infection prevention and improved patient safety through improved processes and delivery of a better product,” said Health Minister Dustin Duncan. “Sharing services between health regions will also create efficiencies and contribute to cost savings and a more sustainable health system – helping us achieve our goal of better health, better care, and better value for Saskatchewan people.”

The central laundries now serving Saskatchewan’s health care system, located in Regina, Prince Albert, Weyburn, Yorkton and Moose Jaw, are aging and outdated. In November 2011, a structural failure occurred in the Saskatoon laundry plant causing its closure. In February 2012, it was announced that the Valley View Centre in Moose Jaw, which currently processes linen for the Five Hills Health Region, will be closed. Several million dollars in capital expenditures would be required to improve all of the facilities. These plants will be replaced by the new state-of-the-art plant once it is operational. Smaller laundries that serve long-term care and other facilities were not within the scope of this project. Personal linen for long-term care residents will continue to be processed locally.

During the two-year transition period, the regional health authorities will work with unions and staff to develop mitigation strategies to reduce the impacts on staff.

Options that were considered during the review process included rebuilding existing laundry plants, consolidating the central laundries into fewer and larger sites, contracting services to a third party, or a combination of these options.

The team identified a series of next steps to get them closer to their vision. These included:

- Just in Time language in tender documents so that suppliers can support the vision
- Developing common colours and bins for products to make it easier for end users to find supplies
- Continued Lean work through Kanban seminars
- Creating a business case that develops the value proposition for the vision and creates winning conditions to implement it

“Today, I think we realized that we have some common goals and a common understanding of where we want to go with an improved Supply Chain Management system. I think we’ve also acknowledged some of the smaller steps we need to take to get there, and we are all leaving here a little more charged to do so,” Heartland Health Region Director of Corporate Services Katie Haubrich said.
The single-plant, private model was ultimately selected based on its ability to improve quality while significantly reducing costs.

“3sHealth has worked with our health region partners, and after diligent examination of all the options, we have determined that this is the best solution for a high-quality and efficient linen service,” commented Jim Rhode, the 3sHealth Board Chair. “3sHealth’s role is to identify and provide shared services that improve quality and create efficiencies for the regional health authorities and the Saskatchewan Cancer Agency (SCA). Our support enables the regions and SCA to focus on providing the best care possible to the patients, residents and families they serve.”

In the summer of 2012, 3sHealth issued a request for strategic partner (RFSP) to identify experienced partners who could deliver a high quality of service. Through this process, K-Bro Linen Systems (K-Bro) has been selected as the preferred vendor for Saskatchewan. 3sHealth will now enter into contract negotiations with K-Bro and attempt to finalize an agreement.

“Using an experienced third-party contractor to provide linen services to our health care system assists us in fulfilling our on-going commitment to improving quality and sustaining our publicly funded system by saving costs,” stated Andrew Will, 3sHealth CEO. “Our ability to implement best practices and leverage economies of scale and shared expertise will ensure the new provincial linen service will make a significant difference to the patient experience.”

“The two RPIWs held in Weyburn have both been sustainable,” said Shirley Wheeler, Regional Director of Environmental Services for the Sun Country Health Region. “The linen is there just in time and the waste has been reduced greatly, which has created more linen for circulation.” There needed to be some adjustments in the original improvements to get everyone on board, but once that happened, the new system began operating well. For instance, rewash of clean linen has been reduced by 80%. “Continued improvements like Kanban will improve inventory control and processing even further,” explained Wheeler.

3sHealth and the health regions have been working to improve quality and efficiency for the Provincial Linen Service. Using information gathered at the 3P (Production Preparation Process) event in October 2012, a number of initiatives have been taking place to determine ways that linen inventory and infection prevention and control can be improved.

- In November 2012, two Lean events called Rapid Process Improvement Workshops (RPIWs) were held at Tatagwa View long-term care facility in Weyburn. One workshop looked at reducing rework and mistakes in the clean linen supply provided by Tatagwa View’s laundry facility to the third floor of the Weyburn General Hospital. The goals of this event were to reduce required storage space, reduce steps in the delivery process, and reduce the amount of rewashed linen. A second RPIW in the same facility looked at improving the flow of linen to other areas in Tatagwa View. Again, the objectives were to reduce inventory in laundry carts and resident rooms, and reduce steps and time in the process. The RPIW teams consisted of Sun Country Health Region staff and participants from across the province.

- 3sHealth conducted a customer service survey in March 2013. The survey asked patients, residents, health care facility staff, and others questions about the current linen service in the province. Those responding were asked to rate the linen according to cleanliness, condition of linen, and the available quantities. The survey also asked people to determine their level of customer satisfaction in the areas of customer service and delivery of linen. The information gathered from the survey will help create province-wide standards for infection prevention and control, quality, inventory control, safe working environments for staff, and customer satisfaction.

- Also in March 2013, two more RPIWs were held at Wascana Rehab Centre in Regina. One event focused on designing processes and standards for infection prevention and control for clean linen from the loading dock to point-of-use, and for the removal of dirty laundry from the patient room to the truck. The objective of the second event was to increase staff efficiency by reducing walking distances and time spent searching for supplies.
Savings Allocations – Shared Services Initiatives

As 3sHealth continues to develop as an organization, we are committed to building on the shared services with the Regional Health Authorities (RHAs) and the Saskatchewan Cancer Agency (SCA). We have identified an opportunity to enhance our reporting processes related to the shared services savings initiatives. We are examining our reporting processes to ensure that our measurement is as consistent, transparent and accurate as possible.

In the fall of 2012, 3sHealth began reporting the provincial savings and allocations to each RHA and SCA. 3sHealth’s Internal Audit function has done work to review and recommend improvements to the reporting framework as well as a supporting documentation binder. To enhance the reporting methodology and the value of the information provided, the services of a national accounting firm were engaged to work together with 3sHealth, the Regional Health Authorities and the Saskatchewan Cancer Agency. We are also collecting data from provincial suppliers and HealthPRO to verify that savings available from group purchasing contracts are being realized across the health care system.

The shared services work that we have done together has identified considerable savings for the provincial health sector. Working together to improve our processes to validate, report and allocate savings is the next logical step in the development of our shared services partnership. This work began in June 2013.

The savings for the 2012 – 2013 fiscal year reached $8.5 million, surpassing the $7 million target and bringing the cumulative savings at March 31, 2013 to over $33 million. This accomplishment contributes significantly to the five-year savings target of $100 million by 2015.