A provincial supply chain solution will move to implementation planning

Saskatchewan’s Patient First Review in 2009 recommended a provincial shared services organization be established to leverage buying power, achieve greater efficiencies in the healthcare system, improve quality of care for patients and families and realize cost savings. The Review identified end-to-end supply chain as a priority initiative for a new shared services organization. In 2010, a shared services office began work on moving contracts to national, provincial, or multi-provincial group contracts as existing contracts expired, and a partnership with HealthPRO was established. Standardization of products and services, and cost savings, were identified as priorities for the healthcare sector. When Health Shared Services Saskatchewan (3sHealth) was formed in April 2012, it assumed the role of health system product procurement. In 2013, it began a business case to identify opportunities to improve the provincial supply chain system through a shared service approach.

Shared services are not new to the provincial healthcare system. The health regions, their affiliates, and the Saskatchewan Cancer Agency (SCA) were sharing payroll, benefits, administration and some purchasing and human resource functions for a number of years through the Saskatchewan Association of Health Organizations (SAHO). 3sHealth assumed those functions and works collaboratively with the regions, a number of affiliates, and SCA to contract for products and supplies under national, provincial, and multi-provincial group purchasing agreements. The healthcare system now purchases approximately 60 percent of its supply requirements through provincially managed contracts, and has achieved $60.5 million in cumulative savings over the last four years.

The supply chain business case recommends a provincial shared service delivery model for a fully integrated system, including a visual signal system (kanban) for ordering and replenishing supplies. This inventory management system will enhance the patient experience because the right products are available at the right place in the right quantities at the right time.

A provincial supply chain solution is recommended... (continued)
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**What is supply chain?**

Supply chain is a core set of business processes required to move products or services from the supplier to the customer, including:

- **Procurement** includes all steps required to acquire goods and services.
- **Warehouse and inventory control** includes all warehouse operations and inventory management processes.
- **Delivery** involves planning and executing the shipment of product from the warehouse to the end user site.
- **Distribution to end-users** is the process of receiving supplies at the end-user site within the hospital or long-term care facility and delivering them to the end user unit or shelf.
- **Accounts payable** encompasses receiving, matching invoices, and paying the supplies delivered.
- **Foundational elements** are the systems, management structure, and processes that support each of the functional supply chain areas.

The diagram depicts the continuous cycle of the supply chain business processes from procurement-to-payment.

3sHealth, health regions and service provider K-Bro Linen Systems have been working hard to ensure the new linen system scheduled to come online in June 2015 will provide quality linen services to patients and residents throughout the province.

The processing plant will ensure the highest standard of infection prevention and control, improve the quality of linen and linen service, and improve employee safety. It is estimated that the health system will save approximately $97 million over ten years, through lower operating expenses and capital cost avoidance, new linen service is fully operational in December, 2015.

The new plant in Regina, that is scheduled to open in June 2015, is a significant component of the new provincial linen services. But other linen service improvements will contribute to a sustainable and effective publicly-funded system. 3sHealth and the RHAs have begun to implement changes that will improve the patient experience, establish standards for infection prevention and control, improve inventory control, and eliminate waste.

Lean events and tools are paving the way for the successful transition. 5S (Sort, Simplify, Sweep,
Quality improvements show near term improvements

3sHealth, working in partnership with the health regions and the Saskatchewan Cancer Agency, is implementing “Quick Win” linen solutions that will improve the patient experience and capture savings across the province. They are:

- **Fusion pads in Regina Qu’Appelle Health Region (RQHR)** are replacing older protective bed underpads. The new pads that are more absorbent, weigh 25% less, have a longer life, and cost less to launder. The pads are thinner and are more comfortable to lie on.

- **The replacement of small standard wash cloths with softer colour- and size-coded cloths in long term care settings.** The colour and size of the cloths signal to care providers the purpose of the cloth. In addition, the increased size of the cloth allows care workers to use fewer, reducing consumption by 60% in the first year at RQHR. Since 350,000 wash cloths are purchased annually by the province, at 16¢ each, a 60% reduction can save $22,400 annually.

- **Larger, softer towels for long term care residents.** These towels have a longer life reducing replacement costs and their higher absorbency means fewer towels need to be used.

- **Improved infection prevention and control.** The nylon bags that are currently being used to collect soiled linen are being replaced with recyclable plastic bags. The new plastic bags provide a much more effective barrier between the soiled linen and those who are in close proximity to it. The plastic bags do not need to be laundered. This saves water, energy and the use of chemicals and eliminates processing costs. It is expected that the health system will save up to $100,000 annually in processing costs and infection prevention and control will be significantly improved using the new plastic bags. The plastic bag replacement will be completed across the province once the new plant is operational.

- **New microfiber cleaning cloths** implemented in several regions have longer life and improve cleaning efficiency.
We are proud of the work that all health system partners are doing together to improve health services for Saskatchewan residents.

In 2013-2014, each business case project team—including those for the medical imaging, medical laboratory services, environmental services, supply chain, enterprise risk management, information technology / information management, and transcription services—engaged a variety of groups who were identified as critical to the projects’ success.

Two key types of committees, the Project Lead Committees and the Operations Teams, comprising vice-presidents and directors of the related service lines from across the province were created to provide input from a senior leadership and operational perspective. In addition, the business case leaders established finance, labour relations and communications teams to provide business case development support. Finally, the business case processes involved vendors, clinicians and service providers, patients and families, and unions in their discussions, ensuring that all stakeholders in the service line had multiple opportunities to receive information or provide feedback.

Each business case began its work with a visioning day, which involved participants from all of the service line’s stakeholder groups. At the visioning day, each group was invited to share its hopes and fears around the business case process, as well as establish basic expectations, identify preliminary areas for improvement, and craft an agreed-upon vision statement for the service line.

At the supply chain visioning day in January 2013, Katie Haubrich, Heartland Health Region Director of Corporate Services, noted, “Today, 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. 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.”

While each business case took time to constantly engage senior and operational leadership within the health regions, they also reached out to patients, the medical system’s most important stakeholder group. The medical imaging and medical laboratory services business cases were among those that went to great lengths to involve patients. The business case leaders established patient advisory committees, and several patient advisors attended large-group sessions held at least once every four months. The patient advisors were active participants in the meetings, providing valuable insights and continuously grounding the group in the need to place patients and their families first in all decision-making.
3sHealth has also participated in Health Region improvement initiatives, in a one-week rapid improvement event held from March 3 to 7, a team of physicians and transcriptionists in the Cypress Regional Hospital in Swift Current came together and found ways to significantly reduce wait times and improve service delivery overall for the benefit of both patients and staff. The participants created standard templates for physicians to follow when they dictate to health records, as well as standard sets of data elements for each type of dictation they do. Participants also created three new dictation spaces to allow doctors to dictate immediately after care in a quiet, private space, and came up with a plan to start doing transcriptions the day they are requested instead of putting them into a queue.

“I can now dictate discharge summaries at the point of care without delay,” said family physician and event participant Dr. Zdravka Vlatchanova. “When discharged patients come in for follow-up appointments in one week’s time, my discharge summaries will now be available.”

Liz Gordon, who participated in the event as a patient representative said, “This event will bring a positive impact on continuity of care and safety for patients.”

Andrew Will, CEO of 3sHealth, notes that the level of enthusiasm that participants demonstrate in improvement projects across the province is exciting. “We are poised as a province to transform healthcare for the better, and this is all because of the commitment across the system to work together to improve quality and safety for patients. Strong stakeholder engagement is one of the keys to the success of both health region-delivered and shared services in Saskatchewan. I am particularly grateful for our patient voices, as they provide insights and perspectives that challenge our assumptions and ground us in what matters most—the patient experience.”

Updates on all business cases are available at 3sHealth.ca.

Savings of $23.2 million exceeds target

Savings for 2013-2014 reached $23.2 million, exceeding the annual target of $10 million. This brings the shared services cumulative available savings at March 31, 2014 to $73.6 million. The savings target for shared services by 2015 is $100 million dollars.
In partnership with the health regions and the Saskatchewan Cancer Agency (SCA), 3sHealth negotiates national and provincial contracts to secure cost savings for the provincial healthcare system. Standardized products, services and processes result in quality improvements as well as leverage cost savings that can be redirected to patient care. The available new savings this year as a result of group purchasing contracts with national and provincial partners is $7.8 million. Vendor and HealthPRO dividends and rebates are an additional $3.3 million.

The competitive contracting process for new cardiac supplies is well underway, and 3sHealth is currently in the proposal evaluation stage. To reduce immediate costs, 3sHealth worked with vendors to establish price harmonization for existing cardiac services, either by offering rebates based on volume purchased or by decreased pricing. The result is an impressive $1.5 million in savings.

The contract for hemodialysis equipment and consumables (such as needle blood lines) was negotiated in 2013 and over the next two years hemodialysis machines will be installed across the province. Year one (one time) savings for the equipment is $691,000 and $132,000 for consumables. This contract for a provincial fleet is the first of its kind in Canada. (see: Hemodialysis equipment improves patient experience)

The new laundry delivery depot opened in Saskatoon by K-Bro has saved the health system $11.7 million in capital cost avoidance to date. The facility will utilize best practice to ensure high standards of infection prevention and control, and meet quality requirements for the Saskatoon Health Region. An additional $473,000 in savings was achieved through better quality linen products that can be laundered more efficiently.

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New hemodialysis machines are quickly transforming the quality of patient care for the better. “The machines are the newest technology on the market and they are helping us do a much better job of determining the efficiency of dialysis treatments in real-time,” said Shelley Stamm, Clinical Nurse Manager in the Renal Unit at the Regina General Hospital. “Staff can now monitor and adjust blood flow rates during treatment like never before. This means we can better gauge how well the dialysis is working. Patients have also been telling us how much they love the comfort of the new machines and how much better they feel coming off them compared to the equipment we used to use.”

The machines are in place at two Saskatoon healthcare facilities – St. Paul’s Hospital and the Cameco Community Renal Health Centre. In Regina the machines are being used at Regina General Hospital and will be fully operational at the Wascana Rehabilitation Centre by June 2014.

Overall the rollout of the new equipment went relatively smooth and employees who operate the machines have been saying the technology is very easy-to-use. According to Stamm, “the procedure for processing patients has also been streamlined while the turnaround time for servicing the machines between patients is now only five minutes, down from an hour with the 11-year-old relics we worked with previously. Ultimately this frees up time that can be re-directed to patient care.”

“The nephrologists (physicians who specialize in kidney care) are saying lab results indicate patients’ blood is being cleaned better using this new equipment,” added Diane Shendruk, Director of Renal Services and the Saskatchewan Transplant Program in the Saskatoon Health Region. “We’re really encouraged by these results.”
Over the next two years Regina Qu’Appelle Health Region, Saskatoon Health Region, and all the satellite locations will be equipped with the same hemodialysis machines, blood volume monitors, accessories, and consumables (such as needle blood lines).

“Once this work wraps up, we will have established a truly provincial program that will be the first of its kind in Canada. It will allow for the movement of equipment from one location to another, and it will assist healthcare leaders with emergency preparedness and planning,” said Stamm. “Above all else the whole approach, even now, puts patients first.”

The 3sHealth Materials Management staff led the negotiations that landed a provincial contract that will save the healthcare system a staggering $1,150,869 in capital expenditures and an additional $568,165 (over five years) in consumables and accessories.

“The collaboration between the health regions, the Ministry of Health, and 3sHealth was impressive, and culminated in better care for patients,” said Shendruk. And Stamm echoed “I’ve never participated in a contract tendering process like it. The clinical engagement team was composed of patients, front-line staff, managers, directors, clinical engineers, Ministry of Health staff, and nephrologists. We used a formal evaluation tool to ensure the selection process truly was fair and unbiased.” Acknowledging the effort required to put this contract in place, Dr. Joanne Kappel, Head, Division of Nephrology at the University of Saskatchewan concludes with, “We appreciate 3sHealth in all these negotiations.”

“I’m thankful to the province for allotting the money needed to purchase these machines. The real winners are the patients who benefit from the life-saving support of this state-of-the-art hemodialysis equipment,” added Stamm.

The provincial fleet of hemodialysis machines is presently 183 units.

**Southern Saskatchewan**  
Regina General Hospital and Wascana Rehabilitation Centre (Regina)  
**Satellite locations:** Yorkton, Estevan, Moose Jaw, Swift Current

**Northern Saskatchewan**  
St. Paul’s Hospital and Cameco Community Renal Health Centre (Saskatoon)  
**Satellite locations:** Prince Albert, Tisdale, North Battleford
Gateway Online implementation complete

On December 4, 2013, the Gateway Online project successfully wrapped up and to mark the occasion, project committee members gathered in Regina to commemorate and celebrate their combined efforts and achievements since the project started two years ago.

“We had a great team that was committed to providing efficiencies and better data access for employees and managers,” said Project Manager Shelda Switzer. “I am very proud of what was achieved and I’m so pleased to have had the opportunity to work on this project.”

Gateway Online is a secure, web-based employee information solution that has been implemented by all health regions, the Saskatchewan Cancer Agency and 3sHealth. It is a comprehensive automated workflow and self-service tool for managers and all healthcare sector employees in Saskatchewan.

The Gateway Online project consisted of various modules that were deployed in stages:

- On January 4, 2012, the Gateway Online web portal launched with the introduction of paperless pay statements. Thanks to paperless pay statements, employees were given online, 24/7 access to their current and past pay statements (going back to January 2011). Paperless pay statements mean reduced paper waste; lower costs associated with printing and distributing paper pay statements; and gives employees quick and easy access to pay information when and where they want it. By June 2012, paperless pay statements had been rolled out to all employers.

- On June 22, 2012, employees were given the ability in Gateway Online to log in and make changes to their personal information including their name, address, marital status, phone number, email address, direct deposit banking details and emergency contacts.

- On November 19, 2012, the Talent Management module was implemented in Gateway. Using Talent Management, employees were given the ability to add or update their work-related talents in the areas of education, licences, memberships, courses they’ve taken, work experience, language(s) and other skills. This information is used by employers for resource planning and career management purposes and helps employees in the job application process.

- On January 14, 2013, the Position Management module was deployed. Position Management provides employers with the automated process to add or update position information online. This information is then fed into an HRM system and supports the job posting process.

- On June 3, 2013, the Job Posting and Applicant Tracking module was implemented. This module provides a means for a provincial job board where all regional, SCA and 3sHealth career opportunities are posted for all to see and all applications for such positions are maintained online. Since then, there have been 13,483 jobs posted and 77,991 applications made through Gateway Online (as of March 11, 2014). 3sHealth and Regina Qu’Appelle are currently testing the ability to have RQHR postings displayed in Gateway Online and postings on Gateway Online displayed in the RQHR Gateway.

- On October 21, 2013, the final six modules were available for implementation. These modules automated workflows with respect to new hires, assignment changes, terminations, leaves of absence, salary changes as well as in the area of HR analytics. A few organizations have rolled out these modules while others are preparing for a rollout in 2014.

As Gateway Online has moved into an operational state, 3sHealth will continue to work with the regions and the SCA to maintain and continuously enhance the system.