

In early September, Saskatoon Health Region outlined our next steps for Children's Hospital of Saskatchewan — to reduce project construction costs to fit within the approved funding while retaining the services planned for this building.

### *Where are we now?*

Saskatoon Health Region has hired John Black and Associates whose expertise in lean methodology has transformed design and care delivery in hospitals such as Virginia Mason in Seattle.

Their team arrived on September 12 and has been meeting with vice-presidents, directors, physicians and managers from clinical and support areas over the past two weeks. They are diving deep into the data already collected and are working to further identify what other information is needed to make decisions about the hospital's design.

### **What is the result?**

This work has included tours of current clinical areas, reviews of process improvements identified in spring, and data searches on the patient experience.

This past spring, we mapped out processes focusing on work flows and how those affect the patient, including measurement of distances travelled for patients, families, physicians and staff. Now, that work will be supplemented by focusing on time.

### **Stopwatches in the Hospital**

Directors, managers and quality services consultants are now out in hospital areas with stopwatches to document and time the patient process. They are not timing how fast care providers deliver care. They are not monitoring job performance or documenting a patient's personal health information. They are simply learning how long a patient is actually waiting for service. They are learning how many stops a patient has to make to get their care.

For example, timing may start when a patient enters the unit and how long they wait before registration. Once registered, will they have to travel somewhere? Are patients having to repeat any of the steps such as registering at more than one location? How long will it take to travel to the next area and how long will they wait to see the next care provider?

This will reveal the bottlenecks that need to be focused on first to eliminate the wait, or waste, for patients. For example, if patient sits in a room for 20 minutes waiting for lab results, but the test takes only five, then we know where to fix the process so the patient's time is spent being cared for, not waiting for our system to work.



## ***Data into Design***

This data will drive design changes within the new hospital. Once we understand the waste such as repeated steps and wait times, we can determine what processes we need to focus on first to remove the biggest bottlenecks. Then, with the wait - or waste - removed, we can better establish actual and expected demand for services. This will include, once again, reviewing our forecasted service projections (*i.e. babies expected to be delivered per year in the next 5 to 20 years*).

Together, we will definitively know the amount of rooms we need to deliver care and we can verify that against what we have planned. From there, operational and physician leaders will determine, based on this data, how much physical space would be required to deliver quality care in an area, meet demand and ensure patients are no longer sitting and waiting. Then, a design will be created to work within these new overall space targets.

### **3P and Creating Design**

3P (Production Preparation Process) is a tool used to build ideal, efficient and waste free flows in the design for our patients, families, staff and physicians. This will be the focus of two (2) five day long events with 3 teams per event.

#### ***3P Event Dates and Teams***

November 14 -18 - Maternal, Materials, Surgery

December 5 - 9 - Pediatrics, Materials, Emergency

#### ***What will they do?***

Their mission will be to come up with a design for their unit or floor within the newly defined physical space. First, each team will be asked to come up with seven design options. They will determine how to set up a space to make it work for what the patient needs and for what the care providers need to delivery quality care. This will include considering everything from supplies to unit layout with the focus on having good processes in place that will result in patients not waiting.

Then, everyone, including support services, will come together to discuss the best three options. The teams will make and test small-scale models and pick what everyone involved believes is the best design. The final test will be a full-scale mock up of some of the areas of the facility.

Finally, the chosen design will be handed over to architects to work with and incorporate into the building.

#### ***Who will be on the teams?***

Physician and operational leaders, along with the vice-president of acute care, will be choosing the teams' members. Participants will be notified shortly. Teams will be led by physician leaders and directors, and will include physicians, staff, patients and families. The teams will have representation from both clinical and support services.

## ***Transformational Care***

This is an opportunity for Saskatoon Health Region to transform Children's Hospital of Saskatchewan care, service and work experiences, and expand those improvements throughout the Health Region.

#### ***Want to learn more about lean and health care?***

*Read: The Toyota Way to Healthcare Excellence: Increase Efficiency and Improve Quality with Lean*

by John Black

This is why everyone from employees, vice-presidents, directors, physician leaders to patients and families have been and will continue to be heavily involved. *Thank you for being part of the process so far, and for making the next steps in this journey possible.*