Peter Glynn’s article, “Creating a Surgical Wait List Management Strategy for Saskatchewan,” published in a recent issue of Hospital Quarterly (6(3), Spring 2002) described the development of a surgical wait list strategy for Saskatchewan.

The initial strategy development process uncovered several issues that needed to be addressed.

• There was lack of consistent, accurate data on surgical wait lists in the province.
• There was no consistent patient prioritization process.
• Family physicians did not have sufficient information to inform patients of their waiting time.
• Surgeons were frustrated with their inability to operate on elective patients in a timely manner.
• The public was frustrated with the lack of timely access to elective surgical procedures.

This article outlines the key points of the recommended surgical wait list strategy and the work to date in its implementation.

The Wait List Strategy
A comprehensive wait list strategy is presented based on six key elements.

1. Capacity
   • The system should have sufficient capacity to carry out appropriate and necessary surgery in a clinically appropriate wait time.

2. Structure
   • A wait list management strategy must exist in a healthcare system that:
     ◦ incorporates clear role definitions of all participants and parties in the system
     ◦ has consistent and standardized procedures and processes based on best practice models
     ◦ has a continuum of care in place across all sectors and locations
     ◦ incorporates continuous communication and feedback.

3. Accountability
   • All participants must be clearly accountable for their agreed roles and their decisions.
   • The parties involved must accept their responsibilities and obligations to each other and to the public.

4. Knowledge
   • Accurate, standardized, comprehensive and timely data, including an urgency score based on patient acuity, is required for decision-making.

5. Communication
   • Continuous communication between the public, healthcare providers and the government on the functioning of
the surgical care system is imperative.
• Patient confidentiality must be respected at all times.
6. Evaluation
• Continuous evaluation of processes and outcomes is essential to ensure the wait list management system is functioning appropriately and to identify opportunities for improvement.

Two key recommendations of the wait list strategy included: 1) Development of a Surgical Patient Registry that could provide timely and accurate surgical care system information and 2) Creation of a new Patient Assessment Process to ensure fair and consistent prioritization of patients across the province. In addition, the establishment of a coordinating and facilitating structure – the Saskatchewan Surgical Care Network – was recommended to oversee implementation of the initiatives and assist with improving access, equity and efficiency in the provision of surgical services in the province.

The Honourable John T. Nilson, QC, Minister of Health (Saskatchewan), accepted the wait list strategy recommendations and they were outlined in the government’s “Action Plan for Health Care,” released in December 2001. Three months later, Minister Nilson established the Saskatchewan Surgical Care Network (SSCN) as an advisory body to Saskatchewan Health. Dr. Peter Glynn was appointed Chair, along with 15 members representing surgeons, health regions, regulatory bodies and Saskatchewan Health.

SSCN’s Vision Statement
One of the first activities of the SSCN was the development of a vision statement. The SSCN vision is simple and clear: “Timely and appropriate surgical care for all Saskatchewan residents.”

“Timely”
• Patients will receive care in accordance with relative need.
• All patients receive care within generally accepted maximum wait times for their particular need.

“Appropriate”
• Indications for surgical care reflect “best practice.”
• Patient outcomes meet or exceed international “best practice.”
• Surgical care resources are effectively and efficiently utilized.
• “Best practice” follow-up care is consistent across the province.
• Providers meet national norms for education and skill.

SSCN’s Initiatives
Members of the SSCN meet on a regular basis to guide the development of the surgical care system initiatives that were outlined in the government’s Action Plan, which include
• SSCN website
• designation of surgical care co-ordinators and regional surgical contacts
• wait list funding ($13.2 million) – included in the four largest regions’ 2003–04 base budget
• Surgical Patient Registry
• a new Patient Assessment Process
• Target Time Frames

The SSCN also formed two subcommittees to assist in the development of the initiatives and involve more stakeholders. The Knowledge and Evaluation Subcommittee, initially chaired by Dr. Stewart McMillan, has focused on the SSCN website, the Surgical Patient Registry and the standardized Patient Assessment Process. The Clinical Services Subcommittee, chaired by Dr. Rob Weiler, has worked to identify clinical service issues and strategies to address the planning and provision of surgery in Saskatchewan. This work includes the establishment of Target Time Frames for surgery.

Public Web Site
The SSCN’s public website (www.sasksurgery.ca) was launched in January 2003. It communicates the work of the SSCN and provides information about access to surgery and surgical wait times by procedure in Regina and Saskatoon (the only regions for which data was available). The website is hosted by Saskatchewan Health.

Surgical Care Co-ordinators and Regional Contacts
In addition to the information provided on the SSCN website, Saskatchewan Health has funded new positions of “surgical care co-ordinator” in the Regina Qu’Appelle and Saskatoon Health Regions. Surgical care co-ordinators are available to answer questions that persons waiting for surgery may have about their wait for surgery. This service is accessible through a toll-free number. Other provincial regional health authorities have a designated contact person available to assist patients with questions about their wait for surgery.

Surgical Patient Registry
On July 23, 2003, The SSCN and the Minister of Health officially launched the Surgical Patient Registry in Five Hills (Moose Jaw), Prince Albert Parkland (P.A.) and Sunrise (Yorkton) Health Regions. Province-wide implementation of the Registry will be completed in the fall of 2003. The Surgical Patient Registry initiative is central to the overall strategy of managing the surgical care system with accurate and shared information.

To assist with smooth implementation of this initiative and to ensure that ongoing Registry-related issues are managed effectively, the Surgical Registry Office was established. This office
is responsible for the management of day-to-day operations of the Registry and acts as liaison between health regions and Saskatchewan Health in addressing policy and process issues.

The Registry is a comprehensive database that will track all patients needing and waiting for surgery in the province. It will also include a clinical priority score for each patient as generated by the new Patient Assessment Process (described in detail later in this article).

The Registry will enable surgeons, regional health authorities, Saskatchewan health officials, family physicians and patients to plan for a healthy future for surgical services in Saskatchewan. The information gleaned from the Registry will enable long-term resource planning. Regional health authorities will have detailed information related to the surgical services they provide and the population they serve. The public will see a system that enables equitable access to all who require the specialized services of surgeons in Saskatchewan. The Registry will also provide an essential information base from which the SSCN can monitor and assess access to surgery and recommend action to improve surgical services in the province.

However, the Registry is not a centralized surgery booking system. The responsibility of scheduling cases remains with surgeons, hospitals and health regions. The Registry will be used to monitor access to surgery to ensure that needs are met within clinically appropriate time frames, to plan resource requirements and to facilitate the evaluation of patient outcomes.

The development of the Registry’s requirement specifications, which include business processes, procedures and policy framework, took almost one year to develop and finalize. In January 2003, Five Hills Health Region (Moose Jaw) administrators, staff, physicians and patients participated in an initiative that tested the Registry's processes, policies and procedures, along with the Patient Assessment Process. The initiative included surgical services such as general surgery, dental surgery, obstetrics and gynaecology, orthopaedics and urology. The pilot was successful at identifying issues and solutions that will enable province-wide implementation.

Development of the Registry’s information technology was also a significant challenge. A thorough review of existing computer software failed to produce a viable solution that could simply be purchased and applied. Ultimately, the SSCN asked the Computer and Information Technology Branch (CITB) of Saskatchewan Health, in conjunction with the Saskatchewan Health Information Network (SHIN), to build the information technology component of the Registry from “scratch.” As part of this work, it was necessary to create a common surgical procedure list for the province as each region used significantly different nomenclature to identify identical procedures. Each region’s procedure list was then mapped to the provincial list of surgical procedures. It was clear during the development of the Registry that there were numerous benefits to having a CITB representative sit as member of the Knowledge and Evaluation Committee. While the complexity of the task was enormous and the timelines were tight, the first version of the Web-based Registry software was available for testing by summer 2003.

**Patient Assessment Process**

The SSCN, with the advice of a wide range of surgical specialists, has established a consistent Patient Assessment Process for the province that combines (1) a common understanding of the “urgency” of specific surgical procedures performed in the province; and (2) use of prioritization tools based on the work of the Western Canada Wait List (WCWL) Project that established a common method of determining patients’ relative need.

The need for a new Patient Assessment Process stems from the fact that, historically, surgeons in Saskatchewan prioritized patients based on their individual assessment of relative urgency within the caseload of patients they managed. There was some consistency in identifying patients as requiring surgery on an “emergent” basis, and all cancer patients were (and currently are) classified as “urgent” and assigned target time frames for surgery. However, other than cancer patients, the urgent classification was not consistently applied across the province. There was no ability to advise patients waiting for elective surgery of their relative urgency or provide them with an expected time frame within which the surgery would be performed. This lack of agreement and consistency also made it difficult to plan and organize surgical resources to meet the needs of the patient, or monitor the performance of the system. The development of a prioritization process that includes the use of consistent, commonly used urgency rankings and scoring criteria – the new Patient Assessment Process – was fundamental to achieving these goals.

Standardizing patient need is a crucial aspect of ensuring consistency and fairness for patients who require surgical procedures. The SSCN developed “urgency profiles” that describe ranges of potential urgency for specific procedures. For example, cancer procedures are always considered urgent and it is recommended that they be performed within three weeks. In contrast, the need for removal of gallbladders can vary greatly. Currently, the suggested time frame for this procedure is anywhere from within 24 hours to six months or more, depending on the clinical symptoms displayed by the patient.

A second element of the Patient Assessment Process recognizes that patients requiring the same procedure often have different levels of need for surgery. Patient assessment tools for each specialty in the province were developed so that every surgical patient could receive an assessment score using standardized criteria. Saskatchewan has implemented existing WCWL prioritization tools where possible. Tools for all other specialties were modified from the WCWL general surgery tool with the exception of cardiac surgery, which will use the “Naylor” tool.
from Ontario. Physicians, in consultation with patients, will consider a number of factors in determining the level of need for each patient. These standardized factors include the patient’s level of pain, potential for the condition to worsen and the ability to function on a daily basis and so on.

The final urgency score and patient classification is determined following a series of steps using both the patient assessment tools and urgency profiles. Surgical patients will be assessed by their surgeon using a specialty specific patient assessment tool that will produce a score of 1 to 100. A high score indicates high urgency. The assessment scores will then be calculated within the context of the urgency profile range for the specific procedure. A score of 60 produced by a patient assessment tool would produce a much higher urgency score for a potentially urgent procedure such as a breast biopsy and a lower urgency score for a routine tonsillectomy. The final urgency scores, as calculated above, will place patients into one of six priority levels.

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Scoring Range</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority I</td>
<td>100 to 95</td>
<td>within 24 hours</td>
</tr>
<tr>
<td>Priority II</td>
<td>94 to 80</td>
<td>within 24 hours to 3 weeks</td>
</tr>
<tr>
<td>Priority III</td>
<td>79 to 65</td>
<td>within 3 weeks to 6 weeks</td>
</tr>
<tr>
<td>Priority IV</td>
<td>64 to 50</td>
<td>within 6 weeks to 3 months</td>
</tr>
<tr>
<td>Priority V</td>
<td>49 to 30</td>
<td>within 3 months to 6 months</td>
</tr>
<tr>
<td>Priority VI</td>
<td>29 to 1</td>
<td>&gt; 6 months</td>
</tr>
</tbody>
</table>

The Patient Assessment Process will help to ensure that patients across the province are assessed and categorized by surgeons who use the same terminology, take into account the same factors and put a standard level of emphasis to each of those factors when determining patient need. Surgeons will be assured that their colleagues use the same process when assessing patients. Health regions will be able to monitor the individual and overall acuity level of patients waiting for surgery and allocate O.R. time accordingly. All patient information produced by the Patient Assessment Process will be recorded on the Surgical Patient Registry. This large database will be useful in managing the system and extremely valuable for future research projects.

Johnson and Johnson Consulting Canada, under contract, facilitated and developed the new Patient Assessment Process. The development process included:

- A working group that developed a methodology for approaching the prioritization process initiative.
- Using this methodology, consultants began working with surgeons to develop clinical tools to help increase consistency in assessing patients’ level of need for surgery.
- Throughout the fall of 2002, meetings were held with small groups of surgeons from each specialty to develop the standard procedure lists, urgency ranges for each procedure, and patient assessment tools for each specialty.
- The three surgical assessment tools developed by the WCWL Project (general surgery, cataract surgery and hip/knee surgery) were discussed during these consultations, and will be used as designed for the appropriate specialties. The general surgery assessment tool was used as the template and modified for specialties where no other tool was available. For patients requiring cardiac surgery, physicians will use the assessment tool developed by the Cardiac Care Network of Ontario.
- From the consultation meetings, draft procedure lists, urgency profiles and patient assessment tools were developed.
- A letter from the SSCN’s Knowledge and Evaluation Subcommittee to all specialists in the province requested feedback on the draft procedure lists, clinical acuity ranges and patient assessment tools.
- Responses from the specialists were analyzed and considered. In addition, the groups of physicians from each specialty who volunteered to assist in the development of the process were consulted on the feedback received.
- The procedure lists, urgency ranges and assessment tools were finalized and recommended for use to the SSCN.

**Evaluation and Validation**

The SSCN recognizes, however, that evaluation and validation of the new assessment tools and process are critical to the success of this initiative. The SSCN agreed that, as part of the implementation of the new assessment process, a working group consisting of representatives and researchers from the SSCN, WCWL, Saskatchewan Health and Saskatoon and Regina Qu’Appelle Health Regions would evaluate the patient assessment tools for each specialty in the context of Saskatchewan’s wait list management system. The SSCN/WCWL Research and Evaluation Working Group will use data from the patient assessment tools and process in addition to feedback from specialists to confirm the appropriateness and accuracy of the process. Specifically, it will:
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- assess the reliability and validity of the patient assessment tools in real-world settings
- determine the acceptability, utility, and feasibility of the priority criteria scores when used in combination with procedure-specific urgency profiles
- recommend revisions to the tools where necessary, based on reliability and validity evidence
- produce guidelines for the interpretation of scores and make recommendations for appropriate use of the priority tools.

Membership of the working group will be finalized in the fall of 2003.

**Target Time Frames for Surgery**

The third key surgical care system initiative focuses on setting specific goals – Target Time Frames – that reflect both timely and appropriate care. Target Time Frames are being developed by the Clinical Services Subcommittee (CSS).

The CSS has adopted the idea that target time frames are not arbitrary maximum wait times. In some literature, the two terms are used interchangeably. Maximum times are set for when surgery shall occur. Analysis of international experience led to the conclusion that setting arbitrary maximum wait times for surgery has not been particularly successful. Target Time Frames are set for when surgery should occur and are established around explicit prioritization criteria and different variables.

Saskatchewan’s Patient Assessment Process automatically creates notional objectives as the result of the application of the urgency scores to the prioritization levels. The CSS is working to elaborate further reasonable expectations in meeting these time frames by procedure through the establishment of specific targets in relation to patient need. It is currently thought that the Target Time Frames will be expressed as shown in the following table.

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Scoring Range</th>
<th>(Draft) Target Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority I</td>
<td>100 to 95</td>
<td>X% within 24 hours</td>
</tr>
<tr>
<td>Priority II</td>
<td>94 to 80</td>
<td>X% within 3 weeks</td>
</tr>
<tr>
<td>Priority III</td>
<td>79 to 65</td>
<td>X% within 6 weeks</td>
</tr>
<tr>
<td>Priority IV</td>
<td>64 to 50</td>
<td>X% within 3 months</td>
</tr>
<tr>
<td>Priority V</td>
<td>49 to 30</td>
<td>X% within 6 months</td>
</tr>
<tr>
<td>Priority VI</td>
<td>29 to 1</td>
<td>X% within 12 months</td>
</tr>
<tr>
<td>All Cases</td>
<td></td>
<td>X% within 18 months</td>
</tr>
</tbody>
</table>

Consultations regarding draft Target Time Frames will continue throughout the fall of 2003.

**Benefits**

The three interrelated priority initiatives (Surgical Patient Registry, Patient Assessment Process, Target Time Frames) will bring numerous benefits to the surgical care system and the people of Saskatchewan. Patients at all priority levels will know, with increased accuracy, their level of urgency for surgery and where they are on the wait list in relation to most other patients. Health regions will understand the acuity level of those waiting and will be able to predict the O.R. time required to meet the needs of those requiring surgery. Surgeons will have more information to ensure patients are scheduled for surgery appropriately. Surgeons will also have access to information that will identify all of the reasons why a certain patient has been waiting longer than other patients requiring the same surgery. Physicians, regions and the department will be able to use the accurate data produced by the Registry to compare the current performance of the surgical care system to the target time frames when discussing resources required to meet the needs of surgical patients. For the first time, the medical profession, the health regions, the government, the news media and the public will be working from the same set of factual data on surgical waits.

Development of these initiatives has been a partnership journey. It has regularly and actively involved physicians, regions and the department. The results of this partnership will be become evident over time and will be shared among all, as the members manage access to surgical care with improved facts and knowledge.

**References**


**About the Authors**

**Peter Glynn** is a national and international healthcare consultant based in Kingston, Ontario. He is the Chair of the SSCN. He was most recently the President and CEO of the Kingston General Hospital, from which he retired in 2000. He is the Chair of the Board of the Institute for Clinical Evaluative Sciences (ICES).

**Lauren Donnelly** is Executive Director of Acute and Emergency Services Branch, Saskatchewan Health. She worked with P. Glynn to develop the structure and framework for the SSCN and its committees and is a member of the SSCN steering committee. She is responsible for coordinating the SSCN initiatives with government initiatives outlined in the Action Plan for Saskatchewan Health Care.

**Doug Calder** is Director of Specialized Services Unit for Acute and Emergency Services Branch, Saskatchewan Health. He is responsible for providing the administrative and staffing support for this project and oversees the work of the Surgical Registry Office.

**Jeff Brown** is a Project Manager for Specialized Services Unit, Acute and Emergency Services Branch, Saskatchewan Health. He provides support to the SSCN, Knowledge and Evaluation Subcommittee and was instrumental in leading the development of the SSCN website.

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