Peri-Operative Improvement Expert Coaching Team Report:

Niagara Health System Site Visit

This report details the process and findings of the Perioperative Improvement Expert Coaching Team site visit that took place at Niagara Health System.

Section One is a summary of the site visit including a brief review of the Surgical Process Analysis and Improvement (SPAI) Expert Panel; a profile of the hospital; a summary of pre-visit discussions; the process used for the visit and key findings.

Section Two contains a summary of the SPAI Expert Panel recommendations and assists the organization in assessing its ability to meet them. The organization's capability is noted as: **strong** (recommendations are met); **in development** (the organization is in the process of meeting or partially meets the recommendations); and **opportunity** (action is need to meet the recommendations). Recommended timeframes are included within the summary.

Section Three contains the action plan developed by the hospital's Perioperative team with assistance from the coaches. The action plan identifies opportunities for change and links them back to the SPAI recommendations. Hospital barriers/challenges are detailed. Strategies have been identified and the organization has assigned responsible staff and timelines for the action plan. The action plan is intended to guide the hospital in resolving issues and providing an approach to moving toward best practices. It will serve as a review document for members of the coaching team during their follow up site visit within six to nine months. This site visit is intended to provide additional assistance to the hospital and will act as an opportunity for the follow up team to assess progress in implementing the strategies identified within the action plan.

Section Four provides the appendices including a summary of the data elements as identified in the SPAI report and the organization's ability to collect or report them. This is intended as a guide to assist the organization in determining data elements important for their Perioperative services. The report identifies data elements **required** (by the Ministry of Health and Long Term Care); **strongly suggested** (data items likely to be required in the medium term) and **suggested** (data elements considered important to Perioperative management). Additionally, this section includes the hospitals original expression of interest regarding this opportunity and an operating room survey submitted by the hospital to the team prior to the site visit.

Table of Contents

Section One: Site Visit Summary

Surgical Process Analysis and Improvement Expert Panel

In July 2005, the report of the Surgical Process Analysis and Improvement (SPAI) Expert Panel commissioned by Dr. Alan Hudson, Lead of Access to Services and Wait Time Strategy, was released by the Ministry of Health and Long-Term Care. The panel was chaired by Valerie Zellermeyer, Program Director, Peri-operative Services, St. Michael's Hospital and the report is publicly available on the Wait Time Strategy website: www.ontariowaittimes.com.

One of the key recommendations of this panel was to provide hospitals with assistance to build capacity to continually improve operating room efficiency, access and quality of services. In particular, the Expert Panel recommended that Ontario's Wait Time Strategy invest in the development of Peri-operative Improvement Expert Coaching Teams (Coaching Teams) to help the government understand peri-operative issues and assist hospitals to improve peri-operative efficiency and performance. In particular, the coaching teams will provide hospitals with the opportunity to engage peer experts from across the province to assist with the implementation of the best practices and quality improvement initiatives as identified within the SPAI report. The implementation of these recommendations will benefit the overall surgical program.

In the fall 2005, the Ministry of Health and Long-Term Care committed to this initiative and the first site visit of the Coaching Teams took place in December. The second site visit took place on January 10-12, 2006 at Niagara Health System in St. Catherine's, Ontario.

Niagara Health System Profile

The creation of the Niagara Health System is a result of the directions of the provincially legislated Health Services Restructuring Commission (HSRC) which ordered eight independently run hospitals in the Niagara Region to come together as one corporation.

Today, Niagara Health System is made up of the following facilities which provide surgical services: Douglas Memorial Hospital site, Port Colborne General Site, St. Catherine's General site, Welland Hospital site.

Niagara Health System is located in the Hamilton Niagara Haldimand Brant Local Health Integration Network (LHIN) which includes the following hospitals:

Hospital Name	Location
St. Joseph's Healthcare	Hamilton
Brant Community Healthcare System	Brantford
Joseph Brant Memorial Hospital	Burlington
West Lincoln Memorial Hospital	Grimsby
The Religious Hospitallers of St. Joseph of the Hotel Dieu of St. Catherines	St. Catherines
Haldimand War Memorial Hospital	Dunnville
St. Peter's Hospital	Hamilton
The Willett Hospital	Paris
Norfolk General Hospital	Simcoe

As part of the Coaching Team's preparation prior to the site visit, the hospital provided an expression of interest outlining the operating room challenges faced by the organization. The five challenges are as follows:

Anesthesia:
- Lack a standardized approach to scheduled pre-op assessment clinic and across the 3 main sites – only 2/3 sites have scheduled pre-assessment clinics;
- This service remains site based in a programmatic structure

Inappropriate use of ORs
- Endoscopy is carried out in the ORs of 2 of the 3 small sites
- Cystoscopy is carried out in OR's
- Small site OR's under utilized

OR Utilization
- Lack of a unified approach/guidelines across sites to promote appropriate use of elective OR blocks vs. urgent/emergent cases;
- Lack of reliable data to objectively analyze block utilization, delays and identify opportunities for improvement.

Niagara Health System Site Visit Pre-Discussion

Based on the information provided by the hospital, the Coaching Team members were selected. The team members are as follows:
- **Dr. Don Duvall**, Anaesthetist, The Royal Victoria Hospital in Barrie
- **Jane DeLacy**, Operations Director, Sunnybrook and Women's College
- **Tracy Kent-Hillis**, Program Director, Perioperative and Surgical Programs, Kingston General Hospital
- **Pam Bush**, Clinical Director, Perioperative Services, The Ottawa Hospital

Hospital staff members were notified of the site visit four weeks prior to the visit. The Chief Nursing Executive and the Improvement Leader (the person the hospital identified as the point person for this process), the Chief of Surgery, and The CEO of NHS met via telephone with the Coaching Team members the week prior to the visit where expectations for the site visit were outlined and background information was provided to the oversight members.

Niagara Health System Site Visit

While visiting Niagara Health System, the Coaching Team met with key stakeholders including the Chief of Staff, Chief of Surgery, Chief of Anesthesia, Chief of Planning and Development Officer (Medical Affairs), CNE/VP Patient Services, The Health Program Director, Managers of the Perioperative Units , Managers of Inpatient Surgery Units, physicians, Clinical staff, the Regional Manager of CSR and CSR staff. In addition the facility completed a self-assessment against the recommended best practices contained in the Surgical Process Analysis and Improvement (SPAI) Expert Panel report.

The Coaching Team met with staff at various sites and discussed opportunities for improvement and challenges associated with the new amalgamation of the hospitals in the area. In addition, several of the team members observed some of the current practices in the peri-operative areas. Each of the staff groups and management personnel were asked

to identify challenges or issues they felt would benefit from further discussion with the coaching team.

At the completion of the initial interviews the coaching team summarized the overall findings of the staff and created an initial list of opportunities for the peri-operative team to consider for inclusion in an action plan to enhance their peri-operative services. The Coaching Team then worked with the team to prioritize the issues and develop strategies to address the issues contained in the action plan.

Key Findings

As part of the Coaching Teams discussions with the leadership team and staff the coaches undertook to have a better understanding of the peri-operative services and to review the organizations uptake of the recommended best practices. The coaching team felt that the organization had presented an accurate comprehensive review of its current practices and challenges.

Of note the coaches would like to make the following observations:

- Specialty groups undertook some strategic planning, which appears to be supported by senior management. (endoscopy, ophthalmology)
- Clinical staff and physicians are very passionate about making changes to benefit the hospitals and patient care, despite the ongoing challenges of amalgamation.
- The health care team was honest and open in the discussions attempting to identify major challenges.
- The interdisciplinary team demonstrated a collegial relationship and focus on providing good quality patient care.
- Efforts to amalgamate and consolidate services in order to best meet the needs of the region are being examined and need to be encouraged.
- The site specific peri-operative teams meetings should continue.
- The hospital's average lengths of stay and discharge times seem to be good.
- Despite challenges with surgical beds and a lack of emergency case prioritization, cancellation rates are low.
- Day surgery hemi knees are performed, which is a very progressive practice.
- Perioperative staff morale at SCG is high.
- Brushless scrub system has been implemented, which is a best practice.
- At SCG, there is a holistic approach to patient care evident in the perioperative areas, parents walking with their children to and into the operating rooms, families waiting with their relatives preoperatively.

The following opportunities were identified by the leadership team, staff and coaches for improvement:

- <u>Leadership and Accountability:</u>
    - Opportunity exists to create a leadership team that will provide governance for the peri-operative program.
    - A regional interdisciplinary perioperative team should be created, supported by senior management and given authority and accountability for decisions. Such a structure will provide clarity of roles, reporting needs, and decision making authority. We encourage the development and continuous integration

of two way communication, from clinical staff to senior management and vice versa.
- Collaborative transparent decision making should be implemented.
- The perioperative leadership team should carefully consider strategies for recruitment and retention of human health resources.

- Communication
  - Communication of the Corporate Action plan arising from the amalgamation could be enhanced.
  - Although efforts have been made to approach CSR from a regional perspective, onsite supervision of production and processes are required.
  - Staff expressed desire and enthusiasm to be involved in communication and planning.

- Equipment and Supplies
  - An intensive inventory of medical instrumentation should be undertaken, with the goal of having adequate instruments and supplies to meet patient care needs.
  - Instrument tray conflicts were a recurrent concern with the entire peri-operative team. This must be a priority issue for peri-operative team; quality of patient care is being compromised, and acceptable standards are not being met. Flashing of instrument trays and implants is routine at GNG and WH, which does not meet standards.
  - Stocking and inventory of disposable medical surgical supplies need to be maintained and acquired by most appropriate provider. The professional staff within peri-operative services require human resource support dedicated to this function. (material management, purchasing)
  - Custom pack use should be explored to increase efficiency.
  - Senior management team needs to examine capital investment within the surgical program.

- Scheduling and Prioritization of Surgical Cases
  - There is opportunity for the organization to improve the planning of the emergency schedule.
  - There is opportunity for the organization to explore allocation for the elective blocks.
  - Decisions regarding surgical prioritization of cases must be guided by regional based utilization data.
  - NHS should examine, and consider shifting their elective surgeries seasonally (ie hips and knees) to maximize surgical activity during historical slowdown periods.
  - Regional scheduling and booking policies could be established with the goal of improving efficiencies and reducing staff overtime.
  - Various members of the surgical team (anesthesia, surgeons and nurses) expressed concern over the lack of assistance in the Operating Room. (OR attendants, housekeeping) Efficiency lost due to insufficient support.
  - A key indicator of operating room efficiencies is first case start. Barriers impacting start times should be explored.
  - NHS should identify the ability of anesthesia to work on increasing the scope of services outside of the Operating Room to minimize disruption to the Operating room and to recruit additional anesthesiologists.

- NHS should investigate and support the movement of anesthesia manpower across NHS through the standardization of equipment, processes and documentation corporately.

- Flow and Spacing
  - There is an opportunity to review the processes surrounding bed management, with the goal of optimizing the surgical bed availability.
  - The creation of comprehensive bed management system may help guide corporate distribution of beds.
  - NHS should consider allocating Wait Time Strategy resources to accommodate the medical patients/emergency room overflow, to ensure surgical beds are available for surgical activity.
  - There is opportunity exists to relocate various low acuity procedures to alternative facilities outside the surgical suite. (Pacemakers)
  - The operating rooms in St. Catherines General Hospital, Welland Hospital and Greater Niagara General Hospital are significantly congested, there is notable lack of storage space in the OR and insufficient storage space within the surgical suite. Even with the expansion at GNGH, it appears that there may not be adequate space for storage.
  - An opportunity exists to standardize CSR processes across the region.
  - Greater Niagara Health System has an opportunity to explore support personnel within operating room to improve patient care and efficiency.
  - An opportunity exists to create a standardized approach to pre-surgical screening.

- Information Management
  - Although a comprehensive electronic OR management system has been implemented, ongoing information management support for the system is unavailable.
  - Basic data reporting is unavailable due to insufficient Information Systems support.
  - An opportunity exists to create an effective surgical surveillance program that is communicated to all staff.
  - Additional resources for education and training for the Perioperative and Surgical areas should be explored.
  - Physical space must be designed to support confidentiality and patient privacy. (Surgical Day Care space SCG, PACU SCG)

- Standards of Practice
  - There is opportunity for NHS to assess the skill mix in the OR with the intent of increasing flexibility and effective use of resources.
  - Standards of practice in the Operating Rooms and in the Post Anesthesia Care Units need to be followed.
  - Quality Indicators for the Surgical/Perioperative Program need to be established and monitored, in particular surgical infection rates.

Section Two: SPAI Expert Panel Report Assessment

Peri-operative Improvement Expert Coaching Team
Niagara Health System Site Visit - DRAFT

This document provides a summary of the SPAI expert panel recommendations and assesses the organization in terms of their current status. Recommendations from the report that were specific to the MOHLTC have been removed.

Legend:
Status: Strong (recommendations is met), In development (organization is in process of meeting the recommendations), and Opportunity (action required)
Timeframe: short term (1-6 months), medium term (6-12 months) or long term (12 months and beyond).

SPAI RECOMMENDATION	COMMENTS	STATUS	TIMING
AN ACCOUNTABILITY FRAMEWORK			
R1 Hospitals that provide surgical services establish an accountability framework for peri-operative resources that include the following elements: i) the Board and Chief Executive Office (CEO) of the hospital are accountable for governing and managing the hospital's peri-operative resources, including patient safety, quality, efficiency and effectiveness; ii) an inter-disciplinary Peri-Operative Leadership Team is directly accountable to the CEO and responsible for the ongoing functioning of an effective peri-operative service; and iii) a larger inter-disciplinary group provides support and advice to the Leadership Team.	1. The corporate Perioperative Committee that exists regionally needs to be reviewed. The terms of reference and membership need to be reviewed/revised and communicated to all members of the Surgical/ Perioperative team. 2. We would recommend implementing site specific perioperative committees. The existing site committees need to be reviewed. Corporate terms of reference for site committees need to be developed .The site committees would report to the corporate perioperative committee.	1. In development 2. In development	Short term
MAPPING PERI-OPERATIVE PROCESSES			
R3 Hospitals map their peri-operative processes, analyze the results, and systematically identify areas for improvement.	The organization has identified patient flow issues due to inpatient unit beds, intensive care beds, and Post anesthesia care beds.	Opportunity	Short Term
BENCHMARK AND BEST PRACTICE TARGETS			
R4 The Ministry of Health and Long-Term Care support the development and implementation of an Ontario-wide program to develop surgical targets that draws on the expertise	NHS must support the completion of the implementation of the Surgical Information System, which is not generating basic utilization data.	Opportunity	Short Term

SPAI RECOMMENDATION	COMMENTS	STATUS	TIMING
of practitioners in the field. These targets should be used by hospitals to make improvements and by the Ministry and Local Health Integration Networks to link funding with performance.	Ongoing support of the Surgical Information system is required.		
R5 Hospitals review peri-operative best practice targets as part of their annual operating plan process, assess their progress in meeting each target and initiate steps for improvement.	The hospital recognizes the need to review best practice target. Through the action planning, the organization will be reviewing peer best practices. Focus group participants identified a need to review scheduling practices in terms of the order of surgeries to maximize instrument and CSR/CPD support. Instrument inventory is a significant issue; significant flash sterilization is occurring.	Opportunity	Medium term
R6 Hospitals review supply chain best practice targets as part of their annual operating plan process, assess their progress in meeting each target and initiate steps for improvement. In addition, Local Health Integration Networks should bring a network perspective to supply chain targets through such initiatives as bulk purchasing, instrument sharing and joint inventory management, where appropriate.	Significant opportunities for improvement exist. Depletion of basic inventory is routine. Opportunity for financial savings through standardization of product e.g. joints Efficiency through use of custom packs should be examined. Additional material management and purchasing support is required.	Opportunity	Long term
R7 Hospitals allocate their operating room resources based on a number of factors including patient need (e.g., length of the waiting list, the urgency of the patient's condition), community priorities as determined by Local Health Integration Networks, the strategic priorities of the organisation, and the importance of retaining physicians by ensuring that they have sufficient operating time.	The organization should consider a comprehensive and transparent prioritization system for their urgent cases. The Perioperative committee should regularly assess historical OR block allocations and determine whether reallocation should be considered based on the factors identified in SPAI Recommendation 7. Accurate utilization data should be generated from Surgical	Opportunity	Medium Term

SPAI RECOMMENDATION	COMMENTS	STATUS	TIMING
	Information system to support decisions.		
R8 Hospitals co-ordinate and schedule their urgent surgical cases as part of their regular planned activity.	The organization should create a process to guide identification and management of urgent cases.	Opportunity	Short term
INFORMATION TECHNOLOGY AND MANAGEMENT			
R9 Hospitals have an Operating Room Scheduling System to support performance improvements within individual hospitals, by Local Health Integration Network (LHIN) and across the province. These improvements should include tracking and reporting on a minimum data set, supporting standardisation of surgical processes, and integrating with other hospital-based information systems. LHINs should take an active role in group purchasing OR Scheduling Systems and encouraging groups of hospitals within the LHIN to share these systems.	Hospital has a newly implemented IT system and requires IT support to complete implementation. Resources are required to complete the education of users, and ongoing support of the system is required from IS.	In development	Short term
R10 Hospitals have a Peri-Operative Electronic Patient Record System (PEPR) that links to, or is part of, the hospital's electronic patient record. Hospitals that do not have a PEPR in place should build the requirements for such a system into their Strategic Information Management Plan and capital plans. Local Health Integration Networks should take an active role in group purchasing PEPRs.	The hospital has a PEPR. The PEPR could benefit from streamlining and modification to best support patient care needs efficiency and data collection. Resources are required to complete implementation.	In development	Short term
R11 Hospitals support the development of a peri-operative supply chain management system.	The organization has opportunity to establish a strong relationship with CSR. CSR could benefit from standardization of practices across the region. See also R.6	Opportunity	Short term

SPAI RECOMMENDATION	COMMENTS	STATUS	TIMING
HUMAN RESOURCES			
R15 Hospitals support the development of innovative interdisciplinary peri-operative teams that include the use of other healthcare providers in addition to surgeons, anesthesiologists and nurses.	The perioperative team has expressed interest in developing innovative interdisciplinary perioperative team.	In development	Long term
R17 Ontario hospitals incorporate the use of teams to provide anesthesia services. Depending on the type of hospital and the surgery, anesthesia teams could include a combination of anesthesiologists, anesthesia assistants, advanced care nurse practitioners, respiratory therapists and others.	The perioperative team has expressed interest in developing innovative interdisciplinary perioperative team. Opportunity exists to increase the scope of anesthesia services outside of the Ors to minimize disruption to the OR schedule and increase anesthesia manpower.	In development	Long term
EDUCATION			
R18 The Nursing Secretariat of the Ministry of Health and Long-Term Care, nursing regulatory bodies and academic institutions develop a standardised operating room nursing education program across Ontario. Innovative methods should be used to support this program such as distance education. In addition, hospitals should have a peri-operative education resource available to help nurses maintain appropriate surgical clinical knowledge and skills.	The organization needs to explore the opportunity for increased educator resources. One nurse educator for the Surgical/Perioperative program on 6 sites is insufficient.	Opportunity	Long term
ORGANIZATION OF REGIONAL SURGICAL SERVICES TO IMPROVE EFFICIENCIES			
R21 Local Health Integration Networks review the surgical services that exist, and identify opportunities to develop regional surgical systems that promote efficiencies, safety and meet local needs. These systems should consider a range of options including as Centres of Excellence for surgery, more specialised	Participation in LHIN planning activity has to begin with director of surgical program meeting with other LHIN directors.	In development	Short term

SPAI RECOMMENDATION	COMMENTS	STATUS	TIMING
surgeries in a few hospitals, and less complex, higher volume surgeries in a wider range of hospitals.			
NEXT STEPS			
R22 The Ministry of Health and Long-Term Care support the development of Expert Improvement Coaching Teams to help hospitals improve their peri-operative efficiencies. Made up of peers with experience in effective management of peri-operative resources, the Teams should assist hospitals with planning, mapping their processes, analyzing the results and identifying areas for improvement (as noted in Recommendation 3), and determining optimal human resources and scheduling. Furthermore, the Ministry should provide incentives to hospitals to participate in this initiative and help make improvements.	The organization should be acknowledged for early engagement in the perioperative improvement expert coaching team process to help improve efficiency and performance in their perioperative program.	In development	Short term

Section Three: Action Plan

Peri-operative Improvement Expert Coaching Team
Niagara Health System Site Visit - DRAFT

The following Action Plan was developed in collaboration with the Perioperative Team at Niagara Health System. The Most Responsible Person and Timeframe sections were added after the site visit by the Chief of Staff, Perioperative Director and Manager of the Surgical Program.

The opportunities identified are in order of priority as identified by the Peri-operative Team. The opportunities are as follows:

1. Leadership and Accountability
2. Communication
3. Scheduling and Prioritization of Surgical cases
4. Information Management
5. Equipment and Supplies
6. Flow and Space Issues
7. Standards of Practice

Due to time constraints, the Perioperative Coaching Team was unable to facilitate a discussion and fully populate three opportunities; Equipment and Supplies, Flow and Space Issues and Standards of Practice. The Perioperative Team has agreed that these are priorities. The Perioperative Coaching Team highly recommends that Niagara Health System develop strategies to address these issues.

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
Rec. #1: Accountability Framework	**Leadership and Accountability** Opportunity exists to create a leadership team that will provide governance for the perioperative program. A regional interdisciplinary perioperative team should be created, supported by senior management and given authority and accountability for decisions. Such a structure	Current membership of hospital governance structure is insufficient. NHS perioperative team's role not strong enough. Various members of the health care team expressed confusion over decision making processes. Various specialized personnel recognized upcoming and current human resources challenges (e.g. OB/GYN, Anesthesia at SCG, perioperative nurses and CSR aids.)	Working template of organization structure provided; keep the daily decision making at a site level; Develop standardized Terms of Reference for site perioperative committees, with clear roles and responsibilities allowing for autonomy and authority over decision making. Each site's perioperative committee should include a chief of anesthesia, chief of surgery, clinical manager and clinical supervisor.	(for GNGH only) develop terms of reference for site Perioperative Committees; Chief of Surgery Director of Health Services and	End of April (a month); 1-3 months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	will provide clarity of roles, reporting needs, and decision making authority. We encourage the development and continuous integration of two way communication, from clinical staff to senior management and vice versa. Collaborative transparent decision making should be implemented.	Interdisciplinary input into decision making not sufficiently transparent. There appears to be no feedback loops with proposals made by professional staff, e.g. no progress reports or reasons are provided for rejection of proposal.		Chief of Anesthesia will organize and design a Hospital Perioperative Committee.	
	The perioperative leadership team should carefully consider strategies for recruitment and retention of human health resources.	There is an absence of a physician recruitment retention task force to best market the opportunities of the greater Niagara region.	Continue to work with NHS Physician Recruiter to maximize opportunities to recruit and retain Physicians within the NHS.		1-3 months
	Communication Communication of the Corporate Action Plan following the amalgamation could be enhanced. Staff expressed desire and enthusiasm to be involved in communication and planning.	Staff across the Surgical Program are unclear as to the overall direction of program planning in the context of the Corporate Action Plan.	1. Corporate Action Plan needs to facilitate actioning of surgical program planning to achieve the transformation agenda.	1. CEO in collaboration with the Senior Team	1. 1-6 mos

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	To manage effective change, senior leadership must on a continual basis provide appropriate messaging about the strategic direction and objectives. Coupled with this, investment in early successes will reinforce progress and build confidence.		2. Determine three strategic initiatives and plan an effect "change strategy" to mobilize. Consider establishing a newsletter for perioperative program. Use surgery web page (share point) to communicate in all directions; include summaries of senior management activity. Establish and adhere to meeting free, e-mail free days (to ensure everyone is in their offices) to encourage communication, with the understanding that individuals are in their offices and can be contacted. -Address training needs with Sharepoint for Physicians, Clinical Leadership and nursing, allied Health and other partners	2. vill take strategies and ideas to Operative Perioperative committee to discuss and explore ideas.	2. 1-6 mos
	Although efforts have been made to approach CSR from a regional perspective, onsite supervision of production and processes are	Staff members have identified that work is performed in silos; there needs to be integration between these silos, nursing, anesthesia and leadership.	Review CSR production processes and determine the level of supervision required. Ask KGH for advice on their experience with and	3.	3. 1-6 months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	required.	Policies and procedures should be developed to maximize the utilization of peri-operative resources. For the policies that are in place, there seems to inconsistent adherence to them. There is also a lack of monitoring and consequences. Review inventory processes and explore opportunities decrease i.e.) exchange carts, daily deliveries Review current processes and necessary resources to standardize CSR processes.	contact information for external consultation in CSR		
Rec. #7 & #8	**Scheduling and Prioritization of Surgical cases** There is opportunity for the organization to improve the planning of the emergency activity.	There appears to be inconsistent policies and procedures to guide the booking and completion of emergency cases. Patients appear to be waiting extended periods of time for emergency surgery. Emergency capacity does not	1. Develop regional coordination policies and guidelines of on-call surgeons. 2. Develop guidelines for emergency booking for regional implementation 3. Plan and review call	1. & 2. Operative Perioperative Committee 3.	1-2. 1-6 mos 3. 1-6 mos

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
		appear to be available to accommodate patient needs in urgent cases. There is no regionalization of priority cases	schedule throughout NHS	with division Chiefs]	
	There is opportunity for the organization to explore allocation for the elective blocks. Regional scheduling and booking policies could be established with the goal of improving efficiencies and reducing staff overtime. Enforcement of elective and after hours booking policies should be supported with the addition of physician monitors. All decisions about surgical prioritization of cases must be guided by regional based utilization data.	Allocation of surgical blocks appears to be based on historical practice and needs to be reviewed/revised. Policies to guide booking and utilization of OR appear to be unavailable, or if available are not enforced. Various common policies and procedures appear to be missing, e.g. traffic in the OR. Utilization and efficiency data is not available, although surgical information system is in place. Information technology support for surgical information system is not evident.	4. Explore use of elective blocks and add-ons Identify common P & P to be identified and establish a process to standardize -Establish a regional process for each site to review its data and allocate blocks accordingly to address the historical practice issues of block assignment.	4	4. 1-6 mos
		Accuracy of first cast start is not captured and appears to present challenges on a daily basis.	5. Define start time and turnover time Define guidelines for use of elective blocks, urgent and	5. NHS operative and Perioperative team + OB	5. 1-6 mos

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
			emergent cases		
	A key indicator of operating room efficiencies is first case start. Barriers impacting start times should be explored.	Delivery of emergency and after hours ophthalmology care should be re-examined, taking hospital capacity and quality of care as the foundation for decision making.	6. Discussion for discontinuing out of hours eye care at the SCG site to be held at May 8th retreat	6. Division of Ophthalmology	6. 1-3 mos
	Various members of the surgical team (surgeons and nurses) expressed concern over the lack of support personnel in the Operating Room. I think this comment was related to surgical assistants		7. Determine/define cases that qualify for surgical assistants	7.	7. 1-3 mos
	Information Management Although a comprehensive electronic OR management system has been implemented, ongoing information management support for the system is unavailable. The development of key performance indicators that are easily accessed will facilitate better management practices	Dedicated OR clinical support for surgical information systems is not evident. As a result, management and efficiency reports have not been generated.	1. Data and reports that Information Systems provides the Operative Perioperative Committee need to meet both Operational and Ministry of Health imperatives and data requirements. Hire an Informatics (with Clinical) Expertise Personnel that work directly within the Perioperative Program to meet operational and MOHLTC data needs.	1.	1. 1-6 months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	throughout the surgical program environment.		Determine three key performance/quality indicators for the Surgical program.		
			2. Create a Task Force to define data needed to generate usable and accurate reports to guide operative and Perioperative utilization to advance management and efficiency reports)	2.	2. 1-6 mos
			Review the need for an external data expert is needed to oversee and solve problems in data acquisition with existing software systems (PICIS). in IT writes Crystal reports needed by perioperative group; it would be helpful to ask for her support.		
	An opportunity exists to create an effective surgical surveillance program that is communicated to all staff.	The role of infection control is unclear and surveillance appears to be lacking.	Continue to progress Stericycle software to the Information Management Committee post accreditation	3.	3. 1-6months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	Dedicated resources to education and training should be explored.	Operating Room and CSR staff expressed concern with a lack of up-to-date standards and practice guidelines. Clinical education does not appear to be occurring in an organized fashion. There is insufficient educator support to provide this education.	Develop a business case to hire additional educators (at least 3) Included the business case will be the regional polices and procedures	4.	4. 1-6 months
	Physical space must be designed to support confidentiality and patient privacy.	At SCG site, patient confidentiality is compromised with the PACU and pre-op holding, where confidential conversations can be overheard by other patients.	Work with site administration to create solution	5.	5. 6-12 months
	Division devolved budgets	Budgets currently are not by division	Work with Finance to develop	6.	7. 6-12 months
Rec. #6: supply chain management	**Equipment and Supplies** A revisit to the intensive inventory of instrumentation should be undertaken, with the goal of having adequate instruments and supplies to meet patient care needs. Senior management team	Even with increasing volumes, there are challenges around distribution of instrument trays within the system leading to frequent instrument conflicts and demand. Perioperative staff is routinely flashing instrument sets to support the activity. This area requires immediate attention and action.	1. Develop a list of outstanding equipment required to eliminate flashing. 2. Participation in the CSD Best Practice Guideline from PIDAC.	1. 2	1. 1-6 month 2. 1-6 months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	needs to examine capital investment within the surgical program. Instrument trays conflicts were recurrent concern with the entire perioperative team. This must be a priority issue for perioperative team; quality of patient care is being compromised, and standards are not being met.	Standardization of instrumentation sets is yet to be achieved. Instrument sets contain some instruments which are not used, which creates inefficiencies and promotes the appearance of a lack of instruments.	3. Divisions to undertake to standardize top CMG procedure trays and individually pack those which are seldom used	3. nd Clinical Managers in collaboration with Division Chiefs or delegate	3. 6-12 months ? optimistic
		There are no formal processes to acquire/purchase products.	Designate annual capital dollars for surgical equipment	4.	4. 6-12 months
			Work with Finance to ascertain any potential process outside of the capital list for the foundations and unbudgeted request forms	5.	5. 6-12 months
		There appears to be no formal evaluation process to determine financial impact and efficacy of new products.	Work with Material Management and Finance to standardize across the NHS	6.	6. 6-12 months
		No coordinated formal trial and evaluation process.	Work with Material Management to standardize across the NHS	7.	7. 1-6 months
	Stocking and inventory of disposable med surge	There is no inventory control of products in the OR.	Explore role and job description at to	8.	8. 1-6 months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	supplies need to be maintained and acquired by most appropriate provider. The professional staff within perioperative services must have human resource support dedicated to this function	Basic inventory regularly runs out of stock. Operating room nursing staff is routinely ordering inventory items.	support development of business case to hire an FTE see under patient flow below	9.	9. 12-18 months
		There is no instrument tracking system.	Work with of CSR to explore available methods software	10. OR Managers and	10. 6-12 months
		There appears to be no capital acquisition planning process.	Explore the development of a more sophisticated process with Finance	11. OR Managers and	11. 1-6 months
		Vendors appear to have open access to the operating rooms. There needs to be a policy to establish accessibility.	OR Managers and to standardize and enforce an access policy, relates to the Purchasing person as well.		12. 1-6 months
	Action on these opportunities would support and encourage a quality assurance model.	Preventative maintenance program for instruments and equipment not apparent; overuse of instruments and equipment has led to damage and repair.	Work with CSR and the OR Managers to explore Best Practice in this area		
	Flow and Space Issues There is an opportunity to review the processes surrounding bed	A corporate bed management system is not evident. The lack of surgical beds for post operative patients results in challenges on a daily basis.	Explore the concept of a Closed Surgical Units -review occupancy and benchmark acceptable rates.	1. and other Program Leadership	1. 1-6 months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	management, with the goal of optimizing the surgical bed availability. The creation of comprehensive bed management system may help guide corporate distribution of beds. There is opportunity exists to relocate various low acuity procedures to alternative facilities outside the surgical suite. The operating rooms in St. Catharine's General Hospital, Welland Hospital and Greater Niagara General Hospital are significantly congested; there is notable lack of storage space in the OR and insufficient storage space within the surgical suite. Even with the expansion at GNGH, it appears that there may not be adequate space for storage.	Staff were speaking of the issue of constant moving of beds Efforts are underway at some sites to respond to this shortage. Procedures that in many hospitals are performed outside of OR continue to performed within OR, e.g. pacemakers, endoscopy and cystoscopy. As with many hospitals in Ontario, aging infrastructure has not responded to modern technological needs and space requirements. In adequate storage space and clutter were observed, which are a hazard and frustration to staff.	Explore ways of eliminating waits and delays in entering and exiting PACUs which arise from waiting for access to inpatient beds Continue with work underway to relocate Pacemakers out of the OR at SCG site Explore discontinuing Endo procedures in Main ORs at the smaller sites Maximize Endo facilities at the OSS/SCG/WCG and GNG	2. and Medicine Program Leadership, Site Administration at the Smaller Sites 3. Site admin and respective OR Managers	2. 1-6 months 3. 1-6 month

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
		There appears to be a lack of surgical assistants in the OR, which affects safety and quality of care.	Explore the ways of creating an attractive environment to attract Surgical Assistants, 1st RN assistants to explore	4. and Division of Surgical Assists	4. 1-3 months
	An opportunity exists to standardize CSR processes across the region.	Inconsistent practices in CSR departments exist across the region, for example case carting, decontamination near/within the surgical suite, and ETO. (Continued use of ETO needs to be reassessed.)	Work with HR to have postings released. Explore staffing skill mix to identify opportunities to transfer non-nursing tasks to existing or newly created support personnel -role for clerical to be reviewed	5. and OR Manager	5. 1-6 months
	Greater Niagara Health System has an opportunity to explore support personnel within operating room to improve patient care and efficiency.	Postings currently on hold due to need for redeployment of staff. Trained staff currently fulfilling this function		6. and OR Managers	6. 1-6 months
		Professional staff and RNs spend significant amount of time ordering, stocking and maintaining medical surgical supplies.	Hire an individual for an OR purchasing person (one for each large site, perhaps WCG needs a PT person only-include vacation and sick relief) to support supply chain management. As above obtain role description from	7.	7. 1-6 months

SPAI Ref	Opportunities	Barriers/ Challenges	Strategy	Most Responsible Person	Time-frame
	An opportunity exists to create a standardized approach to pre-surgical screening.	A standardize approach to pre-surgical screening is not evident; a variety of practices and policies exist.	Pursue the implementation of a standardized scheduled approach to pre-admission clinics and anesthesia assessments		
	Standards of Practice There is opportunity for NHS to assess the skill mix in the OR with the intention to increase flexibility and effective use of resources.	There is not an adequate number of support staff including perioperative assistants, respiratory therapist and material management technicians. A case cart system is not fully implemented at any of the sites. Nursing staff are pulling the instruments sets, and supplies.	Assess the skill mix within the OR include clinical managers, benchmarking and undertaking an external scan for best practice. Develop business cases for support/clinical staff as appropriate	1. and Managers 2. and Managers	1.1-6 months 3. 1-3 months
	Standards of practice in the Operating Rooms and in the Post Anesthesia Care Units need to be followed.	Understand that business cases for this are under development	Hire additional staff to meet the OPANA standards as per business cases in development.		
	Quality Indicators for the Surgical/Perioperative Program need to be established and monitored, in particular surgical infection rates.	Standardization of anesthesia drug carts is not evident. There are limited resources to move forward with standardization of written documentation.	Optimize the Accreditation Team (rename OR-CQI) to review the standards, identify gaps, investigate alternatives and bring to the Surgical Leadership team for problem solving/resolution.	3. and	4. 1-6 months

Section Four: Appendices

Niagara Health System: Peri-Operative Improvement Expert Coaching Team Expression of Interest

Niagara Health System provided the following information to the MOHLTC as their expression of interest for a site visit.

Q1. What five things do you feel that your institution is doing successfully in your peri-operative program?
1. On-call across the multiple sites 2. Regional on-call for some of the non-core services 3. Utilization in key Pathways for Joints, Fracture Hips and Colorectal to obtain, sustain and exceed the 50 percentile 4. Regional Care Pathways for Joints, Fracture Hips and Colorectal – significant CMGs 5. OR Internship program for succession planning
Q2. What are your five greatest peri-operative challenges and what type of assistance do you feel your institution requires from the coaching teams?
Anesthesia: • Lack a standardized approach to scheduled pre-op assessment clinic and across the 3 main sites – only 2/3 sites have scheduled pre-assessment clinics; • This service remains site based in a programmatic structure Inappropriate use of ORs • Endoscopy is carried out in the ORs of 2 of the 3 small sites • Cystoscopy is carried out in OR's • Small site OR's under utilized OR Utilization • Lack of a unified approach/guidelines across sites to promote appropriate use of elective OR blocks vs. urgent/emergent cases; • Lack of reliable data to objectively analyze block utilization, delays and identify opportunities for improvement.
Q.3 If you received funding for additional cancer, cataract or hip and knee surgeries as part of the wait time strategy in the 2005/06 fiscal year, what is your proposed strategy to improve surgical efficiency (a part of the conditions of funding)? What barriers do you face in the implementation of this strategy? How do you think the coaching teams can assist you?

- Developed and successfully implemented a Hip, Knee and on the tails of this a Fracture Hip Care Pathway across 3 sites, serving 11 Orthopedic Surgeons
- Worked collaboratively with CCAC to enhance the pre-operative assessment to facilitate discharge
- Initiated movement of Surgeon and Anesthesia to other sites to support wait list
- Support for the additional nursing resources required

Although surgical efficiencies may help throughput of 'wait-list' cases, the coaching team input would help the Surgical Program by underscoring basic OR efficiency principles and help promote the concept and its advantages throughout the surgical process.

Q.4 Are you currently working on any initiatives that you would like to highlight for the coaching teams prior to their visit? Please feel free to attach further details.

- Operating Room Manager (ORM) is still under implementation with the development of delay codes and external input may be valuable in directing and expediting current efforts.
- Centre of Excellence for Ophthalmology;
- Regional review of Endoscopy services
- Standardizing nursing staff with common processes and documentation;
- Consideration of instituting variable cut off times for booking of cases to reflect the inherent predictability of patient populations.

Q.5 If your institution did not fill out the Surgical Process Questionnaire requested by the Surgical Process Analysis and Improvement Expert Panel in January 2004, please provide the following general information regarding your institution:

- The number of surgical suites (groupings of ORs);
- The approximate number of operating theatres in each surgical suite;
- Identify how many of your surgical suites are currently operational (staffed/funded); and
- Please estimate your institutions approximate operating room case volume. Do not include cystoscopies/endoscopies;

The questionnaire was completed and submitted, however, updated information to reflect the program transfer will be available prior to the visit.

- Queenston Street site- St.Catharines General –St.Catharines
- Greater Niagara General-Niagara Falls
- Welland county General –Welland
- Ontario Street Site –St.Catharines-
- Port Colborne General site-Port Colborne
- Douglas Memorial site –Fort Erie

The approximate number of operating theatres in each surgical suite;

- Queenston St Site-7
- Ontario Street Site-4
- Greater Niagara General Site-6
- Welland county General Site-5
- Port Colborne Site-4
- Douglas Site-Fort Erie-2

Identify how many of your surgical suites are currently operational (staffed/funded); and

- Queenston St-6
- Ontario St-2-3
- Greater Niagara General site-4-5 includes Cysto
- Welland County General Site-3-4 includes Cysto
- Port Colborne Site-2 includes Endo/Cysto
- Douglas Site-Fort Erie-2 includes Endo Cysto

Please estimate your institutions approximate operating room case volume. Do not include cystoscopies/endoscopies;

Q.6 Identify the five success factors you feel are needed for the perioperative coaching teams to be successful?

1. Team must possess a strong MD lead and someone with a strong background in OR data systems and report generation 2. A clear and definitive appraisal of the ORM's current ability to provide accurate data to guide surgical 3. Provision of relevant published, generally accepted 'best-practice' OR reports 4. Ability to highlight areas where our current practice is aberrant, dysfunctional or, in particular, where it may be substandard by current professional guidelines. 5. Assess and critically appraise current practices supply chain, sterilization procedures and other 'non-clinical' aspects of OR efficiencies 6. The program decision-making (within a matrix reporting structure of site and program).
Q.7 Please feel free to make any additional comments that you feel will assist the Peri-operative Coaching Teams prior to their site visit.
Critical review of the 3 small sites and need to address inefficiencies

Data Elements

This chart summarizes the data elements as identified in the SPAI report and assesses the hospital ability to provide them. This is based on interviews and information available through the Senior Management Team. Organizations are encouraged to use this as a tool for future data considerations and update for future indicators.

Data Element	Required/ Suggested/ Strongly Suggested	Data Elements that Niagara Health System is Currently Collecting
Pre-operative		
The number of patients and families who are educated about their procedure and care	Suggested	Not observed
Operative		
The number of in-patient and out-patient surgeries by doctor service and procedure	Suggested	No
The number of same day admits by doctor service and procedure	Suggested	No
The number of surgeries that are delayed more than 15 minutes, by service and surgeon. Reason for the delay in surgery.	Suggested	No
Operating room time by surgeon compared to the time allocated	Suggested	Manual collection
Supply Chain Management	Suggested	
Number of cancellations or delays due to insufficient instrumentation and supplies	Suggested	No
Magnitude of investments in instrumentation and supplies to support surgical activity and throughput	Suggested	No

Data Element	Required/ Suggested/ Strongly Suggested	Data Elements that Niagara Health System is Currently Collecting
Data Elements for Utilization		
Cancellations: Number of operations cancelled on the day of surgery (cancelled by patient, by hospital for non-clinical reasons, by hospital for clinical reasons).	Required	Yes, but manually
Cancellations: Total number of patients cancelled within 48 hours of the surgical day (cancelled by patient, by hospital for non-clinical reasons, by hospital for clinical reasons.	Required	No
Delays (First case start-time accuracy – greater than 15 minutes): delays driven by patient action (i.e., late arrival, etc.), due to clinical reasons, due to non-clinical reasons (i.e., equipment failure, ICU delay, etc.).	Required	No
First Case Start-Time Accuracy (delay greater than 15 minutes): Defined as first patient in the room.	Required	No
Unplanned OR closures: due to unplanned events (i.e. no scheduled cases, lack of Anesthesia, lack of staff, etc.).	Required	Yes
Pre-Admission Process: percentage of scheduled surgical cases pre-assessed and/or pre-screened through a pre-admission process.	Required	No
Drug cost analysis	Strongly Suggested	No

Data Element	Required/ Suggested/ Strongly Suggested	Data Elements that Niagara Health System is Currently Collecting
Inpatient length of stay	Strongly Suggested	Yes
Surgical device costs	Strongly Suggested	No
Unit Producing Provider salary per case	Strongly Suggested	No
OR downtime	Strongly Suggested	No
Turnover time between surgical procedures	Strongly Suggested	No
Number of surgical emergencies by surgeon and service	Strongly Suggested	Manually inputted
Service hours scheduled for surgery versus hours used	Strongly Suggested	Manual
Ratio of inpatient to outpatient surgery	Strongly Suggested	Yes
Number of urgent cases in the average surgical work load	Strongly Suggested	No
OR case mix: emergency, urgent or elective	Strongly Suggested	No
Case time accuracy: actual versus scheduled	Strongly Suggested	No
Data Elements for Clinical Care		
Number of patients with discharge goals established and services scheduled prior to surgery	Strongly Suggested	Yes

Niagara Health System: Pre-Survey

Niagara Health System completed the following survey prior to the site visit and attached it as a separate document.

		Turnover in Managerial and Physician Leadership • 2nd Chief of Surgery since January 2005; • Acting chief of Anesthesiology for 2 and 1/2 years • 2nd Health Program Director since November 2004; • 2nd Corporate Lead since Nov 2004; • WHS – new Clinical Manager July 2004; • GNG 3rd OR Clinical Manager since June 2005 **Regional on-call** • Problem of orthopedic coverage at GNG....impact on other sites • Issue of impact on the SCG OR with the regional call, because of additional ENT, Plastics, Urology, Vascular and Thoracic along with their core services because the numbers of surgeons is higher. i.e.) Plastics GNG 1 in 4, WCG 1 in 4, SCG 2 in 4 **One Health System – 7 communities** • Community commitment to their sites. **Endoscopy** Insufficient Endo resources at 3 sites is an issue
		SCG • Major construction in all areas of pre-admission, patient reception, recovery room, and two Operating rooms. Removal of 2nd on call **anesthetist** and main OR covering emergency C-sections, affecting staffing with an additional nurse required to be on call, educational needs and surgeon comfort level. • Learning curve by acquiring two new services, urology and total joint replacement and emergency eye surgery since October 2005 • Major staff training to the SCG site in all surgical areas.
		OSS • Change in leadership, culture, implementation of ORM, Meditech, and transition to an ambulatory care centre supported by a Prompt Care.
		GNG and WHS • Increase in number of C-Sections undertaken

1.2	What are the major barriers to getting surgery completed?	Emergency cases – add ons urgent case due to no room within elective blocks for 80% + of the Surgeons.
		SCG • Anesthesia does not have scheduled pre-assessment clinics which results in delays by this activity being carried out between cases; • Overambitious bookings by surgeons
		GNG • Some shortage of instruments
		WHS • Anesthesia insertion of lines
1.3	What regular reports do you receive to assist you in managing your budget? Is their sufficient information to manage? What would you change?	**Regular reports include a summary of budget standing, which includes staffing as well as supplies. The information is basic; with any follow up is the responsibility of the manager to investigate. Finance assists with variance reports. Nursing staff should be the responsibility of the manager but supplies would benefit from being managed differently.** Budgets should be the responsibility of a multi-disciplinary team, particularly when discussing the Operating Room. To explain further, the end user of the supplies (which is the major budgetary impact) are the surgeons and anesthetist. All parties should have a target budget for the year allocated per service and any new equipment or supplies required should be brought forward to the surgical committee to ask 'what will be given up to acquire this new technology'. Cost centers should be established to identify what supplies are being consumed by which division with quarterly reports distributed to the division to engage discussion on why or why not the division is within budget. This should be reflective of the number of volumes that are being completed within that budget. Division specific detail may indicate need to cap certain procedures Reports from purchasing regarding total costs of repairs

1.4	Are there any resources/processes/technologies that you feel would make your unit more efficient?	**Anesthesia resource is a major concern, both in the management of the Operating Room time as well as the pre-admission clinic and the L & D department. Presently the anesthesia department is providing L & D services between OR schedules as well as PAC consults between cases which causes delays.** **Cataracts** • Elimination of need for anesthetic support for cataracts • Standardized pathway across the NHS • Customs packs • Centre of excellence for the NHS • One centre for emergency procedures **Pacemakers** Work is underway to remove Pacemakers from the SCG and GNG Operating Rooms as it is recognized that they should be completed in the outside of this area. Specific resources need to be allocated to manage pacemakers in a block of elective time thereby removing them from the emergency list. Presently these cases are added to the emergency list and occupying surgical inpatient beds (at all sites pending transfer to SCG and GNG), particularly when there are product recalls. **Urology** • Standardized pathway across the NHS • Centre of excellence for the NHS • Remove cystoscopy from the OR **Elective Scheduling** • The booking processes needs to be revamped to include strict day(sites vary on number of days) cut off times as well as introducing different types of bookings such as 'Patient prepared list', which would facilitate holding elective time for urgent patients in the surgeons regular block time. • Surgeons' office should be identifying the type of ASA risk the patient is likely to fit into, therefore allowing for the appropriate care at pre-admission clinic. This could be as simple as establishing ASA guidelines for the surgeons office to use as reference to book the appropriate type of PAC appointment. **Educators increase from one to 3-4 educators for the surgical program**

		SCG • Plastic cases generally can be handled as an outpatient surgery and yet the statistics show that 71% of plastic emergency cases are inpatients. Alternative arrangements need to be explored (perhaps at OSS) to manage these cases as an outpatient, increasing the main OR efficiency as well as saving inpatient beds.
		OSS • Cataracts need to bypass PACU
		GNG • Evening ward clerk (4 hours) to answer the phones • Inventory control person as now nurses spend extraordinary amounts of time dealing with equipment, instrument and supply issues • Resources to clean, stock, etc. • Case cart system
		WHS • Evening ward clerk [illegible] to answer the phones
		PCH • Elimination of cataracts being carried out under general anesthesia • Surgical services workers for cleaning vs. nurses

1.5	Are there any resources/processes/technologies that would allow you to perform more cases?	**Accurate data from ORM** **Provide more equipment and CSR resources to reduce waiting for reprocessing.** • **Surgical aides (or equivalent) to eliminate nursing undertaking non-nursing tasks, help move equipment and set up rooms for quicker change over, particularly in the heavy OR such as orthopedics.** **New technology such as, balloon ablation, thus increasing the patient numbers served as well as potentially decreasing the need for hysterectomy, one of our higher CMG's and further support relocating this procedure out of the operating room.** **Resources to look at map current processes to identify areas for improvement. i.e. telephone admission process and those CMG's that could successfully be transitioned to Day Surgery i.e. breast surgeries**
		SCG and OSS • Remove the anesthesia delays between cases.
		GNG • Minor construction to one OR suite to remove a drain • Update equipment such as smoke evacuator • Additional instruments
		WHS • Minimal Invasive suite for laparoscopic surgical procedures

1.6	What performance indicators do you currently measure?	**Utilization – includes individual surgeons as well as departmental utilization.** 1. Emergency cases, includes date, procedure and any overtime incurred. 2. Inpatient vs. Outpatient stats, including elective vs. emergency. 3. Urgent lists. 4. Specialty programs such as AV Fistula, Hips, Knees, and Cataracts. 5. Grasp workload analysis. 6. PACU times for receiving patient and discharge times. 7. Inpatient surgeries 8. # cancelled OR's 9. LOS 10. Pathways and improved LOS and patient outcomes Delay codes would be very helpful through ORM, however, this is still under development
1.7	Do you have a benchmark for performance? If yes, what are you using?	**There is no formal benchmark for performance in relation to the other Operating rooms in the region. Program is working to establish standard rules in collaboration with the surgical team for block utilization.**
1.8	What do you do with the data/information that you measure? Is this shared with your team? How?	**There is a plethora of information that has been collected over the last five years, including surgical time vs. procedure times, delays and so forth and most of the information is distributed to the Surgical Team at the monthly site Surgical Team meeting, or via fax from the secretary after in the form of minutes. Site Chiefs are expected to distribute to their teams** **Need to standard use of data to accelerate improvements**
1.9	What are quality initiatives that you are currently	**ORNAC and OPANA standards are highly influential as ONA supported**

	involved in or are considering? Do you have a quality model or process that your organization uses? If yes, please describe.	**SCG** and **OSS** **Presently, there are three initiatives underway.** • In the operating room restructuring the evening hours in a team nursing model. Each nurse picked a service that they feel they have expertise within and these nurses will be assigned on evenings, with one orthopedic nurse, one vascular and abdominal nurse and one ENT, plastic nurse. Voting on a new schedule reflective of union guidelines is underway. • Endoscopy is expanding hours and therefore services. New equipment, staffing and an on call system has been developed. • An external scan regarding 'fast tracking' in the PACU is underway. One of our major issues is that at the OSS our cataract patients are going to the recovery room. We need to have a full assessment of peer hospitals to approach anesthesia to try to standardize the process to bypass PACU for this type of patient. The second phase of this project will be to include other types of procedures such as the balloon ablations and knee arthroscopies. A tracking tool and criteria needs to be developed in collaboration with anesthesia. Then extensive education will be required for staff as well as physicians to ensure best patient care.
2.0		**Peri operative Screening**
	Please provide comments in the space provided	

2.1	Describe your prescreening program? • What % of patients are prescreened? • What % are prescreened at the hospital? • Are you using other strategies for prescreening? • What % of patients are admitted on the same day of their surgery? • What are barriers to same day admissions?	**Our goal is that all patients are prescreened. Patients at the OSS are prescreened over the telephone. The aim is to transfer this technique to the SCG site and this has been part of the Pre Admission Clinic (PAC) planning since transfer.** **Off service patients result in daily delays in the assignment of beds for same day admits and multiple transfers within and inter-site.** **Cleaning of beds following discharge**
		SCG • Currently at the SCG 50% of elective cases are seen in PAC. • 50% of cases screened at the hospital at SCG. • Almost 100% of all patients are admitted on the day of surgery, although coagulation problems present the biggest challenge • Telephone pre-assessment technique is utilized. • Advancing the booking dates for joint replacement would support an increase in the number of joint patients that benefit from consultation with the Blood Conservation Nurse
		OSS Use telephone pre-assessment Only undertakes day surgery, failed day cases are rare
		GNG • 70 % are prescreened • All are prescreened at the hospital • No • Almost 100% are admitted on the day • Nothing significant at this time are barriers to same day admissions

		WHS • PAC for all patients except Urodynamics • Anesthesia consults as ordered by surgeon and nurse in clinic identifies need • Blood conservation nurse, case manager and pharmacist consults joint replacement and other major cases. • 99.9% of all patients are prescreened at the hospital • No other strategies are used for pre-assessment • Majority of patients are admitted on the day of surgery • Access to beds for post op patients
		Peri operative Screening
	Please comment on the accuracy of the following statements for your program. Please feel free to provide additional comment in the spaces provided.	
2.a	All electively scheduled patients are screened either by telephone or in person to ensure patients are ready for surgery.	Yes
2.b	Patients who have similar clinical conditions and are scheduled for similar procedures are screened and tested in a like manner regardless of surgeon, anesthesiologist or surgical procedure.	Yes **SCG** Implementation of the standardized pre-assessment grid is not in place by the Anesthetists **GNG** Yes **WHS** • Joint Replacements and Major Surgical cases are booked in PSAC on Mon. and Tues to facilitate Anesthesia. Case Manager, Pharmacist, Blood Conservation Nurse consults. • Screening and diagnostic testing is according to physician orders. • History and Physical often missing
2.c	Programs include assessment, patient education and discharge planning.	Yes
2.d	Patients are medically optimized before surgical admission.	• In most cases, coagulation still present as a problem. • If necessary patients are admitted preoperatively, but this is rare
2.e	The pre-operative chart is completed and available at least one day prior to surgery.	Yes – Have a Scheduling & Booking project completed that would help have the chart completed three days in advance allowing identification of problems in a

		timely manner and the option of putting in a 'patient prepared for surgery' if the patient is not ready. Meditech does not support pre-admission.
		OSS Face sheet is generated on the day of surgery
		GNG No. Lab work as it is done off site and history and physical are often missing – significant issue
2.f	All patients and their families will be educated to ensure that they understand the procedure and participate in care.	Patient and those family members attending the pre-admission appointment. The patient is asked at pre-admission who their main contact will be concerning their care.
2.g	Discharge planning will begin before surgery.	If indicated by the surgeon. Joints have discharge planning initiated through the CCAC pre-op home visit
3.0		**Day Surgery/Same Day Admission**
	Please comment on the accuracy of the following statements for your program. Please feel free to provide additional comment in the spaces provided.	
3.a	Day surgery units are in the same physical location rather than in different locations.	**SCG** • Day surgery is located one floor below the OR.
		GNG • Yes
		WHS • Day Surgery and Day of admission surgical patients are on the same unit prior to surgery.
		OSS Day Surgery is one floor below the OR
3.b	Fully prepared charts are received in advance of surgery.	Yes.
		OSS 90%, but all Face sheets are added the day of surgery
		GNG

		No
3.c	Staff are cross-trained to function effectively in the same day admit, PACU and second stage recovery.	**SCG** • No. Phase 2 recovery is not cross trained. Recovery is trained to work in Patient Reception, which is where most patients present up for surgery.
		GNG No
		WHS • Day surgery nurses are not trained in PACU
		OSS Not the PACU staff, but Day Stay is the 2nd Stage Recovery
3.d	The unit is strategically located adjacent to the Operating Suites.	**SCG** • No
		GNG Will be post construction
		WHS • Yes
3.e	Surgery will be conducted on an outpatient basis in a separate location, wherever possible.	**SCG** • No
		GNG • No
		WHS • Day surgery and day of admit patients are managed on the same unit.
3.f	Surgical patients will be admitted on the same day as the surgery, wherever possible.	Yes
4.0		**Intra-Operative Process**
	Please provide comments in the space provided	
4.1	What role do each of the nursing staff have in your Ors? **Manager** **RN**	**Clinical Manager** – provides leadership and advocates for nursing and patient through the administrative process. All managerial, capital, HR, conflict resolution, visioning and development are the responsibility of the Clinical Manger with the support of the Health Program Director.

	ORT **Other** **Resource/charge RNs**	**Charge Nurse** – Has the responsibility of managing day to day operations. **RN** – Has the responsibility of working within the scope of their practice in a peri-operative setting. Each nurse has added responsibilities to manage, such as endo-surgical supplies. **Circulating Nurse** – occasionally scrubs **RPN Tech.**- Has the major responsibility of scrubbing for the operative procedure. **Housekeeping**- Has the responsibility of cleaning the OR's after each case. **Unit Aides/Porters** – varies by site RT-checks anesthetic machines at the start of the OR day at OSS
4.2	Who in the OR other than nursing staff provide direct/hands on care to patients? What percentage of their time is spent in direct patient care activities?	SCG/WCG: No-one other than physicians and anesthetists.
		GNG Surgical Services workers assist patients to move from bed to stretcher, hold limbs, position patients, help with positioning patient for epidural insertion, spinals – 15 %
4.3	Where are surgical preps and pre-operative medications administered?	**SCG** Surgical prep in OR. Pre-operative meds in the Patient Reception Area. Our Total joints begin in Day stay now due to the physical limitations of the patient reception area and receive pre-op meds on the fourth floor.
		GNG Day Surgery Unit
		WHS Day Surgery, same Day Surgical Unit. If patient in-patient on surgical unit prior to transfer to the OR.
		OSS Surgical preps in OR Pre-op medications on Day Stay
4.4	Are any of the staff cross-trained with other areas? If so, which areas?	**SCG** OR is cross trained to Recovery (approx 7 nurses). Only 7 nurses are cross trained to ensure that their rotation enables them to maintain their skill level.

		OR & Recovery room are cross trained for patient reception including RN & RPN Tech.
		GNG No
		WHS No
		OSS Yes, for Peritoneal Dialysis and recovery for Endoscopy
		DMH Day surgery and PARR **DMH and PCG** OR Techs' work at both sites
4.5	Do you have a surgical information system in your unit? If so, which system are you using?	PICIS-ORM
4.6	Do you have an on call system? How does it work? Does call back cause you to have staffing problems the next day?	**SCG** • Presently 2 RN's and 1 OR tech on call. 1 RN & RPN on call for OR, second RN on call for emergency C-section or difficult case such as AAA. • 2 RN's on call for Recovery. Very little staffing issues due to call.
		GNG Yes. It works well. No issues with staffing as a result of the on call schedule
		WHS • Mon – Fri 1 RN and 1 Tech work 1500-2300 and are on call until 0800 hours • Mon – Fri PACU RN is scheduled 1600-2000 and on call until 0800 hours • Sat., Sun. and Statutory Holidays 1 RN and 1 Tech are scheduled 0730-1530 and are on call until 0800 hours the following day • Sat., Sun. and Statutory Holiday PACU RN is scheduled 0900-1300 and is on call until 0900 hours the next day.
		OSS, • For Ophthalmology at SCG an OSS staff member takes call until all cross trained – this is not cost effective given that the number of out of hours emergencies are under 5 per year. This service would benefit from being centralized at one site
		DMH and PCH No on call

4.7	Annual hours for overtime? Sick time?(average/FTE) Do you have any problems covering for staff?	**Peri-operative staff – average age is over the Ontario average and therefore is it an aging workforce. Hence the OR Internship program to build internal capacity for effective succession planning. Established three Regional OR RN positions to help address staffing situation.**
		SCG OT OR 1170 HOURS RN & RPN Sick Time 1.486 annually and as of the end of January 1,232. On the rare occasion.
		GNG Yes, there are problems covering for staff. Until recently there have been 3 vacancies – OR Internship program has assisted with this.
		WHS OT OR- 2004 – 2621.042 2005 – 2676.485 Sick Time OR - 2004 – 2101.750 2005 – 2583.500 Not routinely, may have problem if vacation, other sick time etc.
		OSS OT OR 78 hours Sick Time OR 252 hours Do not generally have difficulty with staffing Casual staff all post retirement
4.8	To what extent do you have vacancies in your unit? Is this causing you to have to cancel cases?	Zero, in the process of hiring and training the last 4 positions that needed filling. No, this has not resulted in cancelled cases. It did however, result in ORs not being opened to support Wait List 'joints'
		GNG 2 FT RNs 2 RNs on sick leave 2 surgical services workers on sick leave
4.9	What have been the major challenges in your staffing situation in the past three years?	Amalgamating the OSS with the SCG site. Also, when we lost the 2nd on call anesthetist we had to put more nursing staff on call and this resulted in loss of one staff member from regular commitment to casual. Approximately 3 years ago, long weekend hours for nursing instigated the addition of a second shift.

		GNG • Covering for sick time • Finding OR nurses to fill positions
4.10	What type of orientation / on going education do you provide?	An experienced nurse will get six weeks of orientation. A new OR grad will get three months training. All orientation is individually managed. If an employee was not comfortable after the normal orientation period, we would sit together and develop an educational plan to ensure that the learning needs are met. We do not believe in putting staff in any situation they are not comfortable and this probably has accounted for the high retention of staff. Ongoing education is supported on a monthly basis. Nursing is responsible to provide the education using whatever resources they deem necessary, but the point is to encourage ongoing research techniques, such as online journal articles. Nurses have developed educational sessions such as C-section technique, endometrial ablation, count procedures, etc. ORT = 8 weeks Monthly in services Education funds available through corporate funds and also Tyco
4.11	Do you have an educator dedicated to your unit?	No there is one Surgical educator for the region (6sites) While the Surgical Educator is primarily for the inpatient units they also supports Corporate initiatives under Quality and Education Company representatives provide specific instrumentation education December 2005 saw the first NHS OR Educational day
4.12	How is first assistance for surgery provided? Do you have sufficient coverage? Have you had to close or delay surgery because of first assistant issues?	The surgeon is responsible for finding their own assistant for elective cases. On the weekend there is a roster for assistants. Usually retired physicians and surgeons No, and there has been preliminary exploration of the First Assist. Delayed surgery but at this point not cancelled. No, GNG puts an extra nurse in the room under the direction of the surgeon

		Intra-Operative Process
	Please comment on the accuracy of the following statements for your program. Please feel free to provide additional comment in the spaces provided.	
4.a	Data is collected and performance is monitored on start, finish and turnover times, utilization including hours available and hours used, and patient safety (Note: start time is patient in the operating room.)	Given [illegible] is still is still in the implementation stages remain inaccurate; therefore, utilization data is still collected by a manual process at this time. Other reports are used when required. Due to transfer of services this has not been the major focus of the SCG OR, since we have had many different process issues to resolve that have taken precedence. Routinely in the past such data has been collated and distributed at the surgical team meeting.
4.b	Performance is benchmarked against peer group standards.	No, The goal is to standardize the information each OR is measuring within the NHS and then benchmark against peer hospital. In 2000 SCG OR benchmarked with peer hospitals suggested by Price Waterhouse Cooper and have those results available.
4.c	The staffing model is matched to patient need and complexity of the service.	Electively the Charge Nurses establish this assignment to meet the needs of the specific service. We are currently working on emergency services to provide the same type of expertise by implementing team nursing.
4.d	There is adequate and dedicated support staff for ancillary functions (i.e., transportation, housekeeping etc.).	Nursing & manager spends a great deal of time handling purchasing issues, supplies, inventories and such that a clerical purchasing representative could handle. Having the right amount of supplies for the right amounts of surgery is key to efficiencies. Computer support is also lacking. Full time computer support personnel is key to ensure that all OR's within the region are using the system as intended. This person would be key to establishing cost per case across the region.
		SCG Adequate support staff for transportation and housekeeping; however, we need surgical support workers to help with the transfer of equipment since some of it is stored on a different floor. Also, these support workers could assist with stocking of rooms, holding patient limbs, transporting dirty equipment back to the work areas.
		GNG No

		WHS • Dedicated surgical services worker who clean the OR's, transport all patients to the OR, return transport of Cataract and urodynamic patients to the units and stock the OR. • The remains RN and RPN patient transport from PACU to the inpatient unit
		OSS No, a ward clerk would be helpful in the OR to help with purchasing and answering phones and compiling stats
4.e	There are sufficient levels of instrumentation, supplies and equipment to meet the OR schedule providing for the "right instruments at the right time" and "just in time" delivery.	**Generally no, however, this would be reduced if non-core surgical divisions were consolidated**
		SCG No, although we received a significant amount of equipment through transfer of services we are still in need for the services that did not qualify under this type of funding. For example, shoulder arthroscopy equipment would facilitate two orthopedic rooms running post the transfer.
		GNG No,
		WHS Yes, occasionally cause delay waiting for instruments
4.f	Instrument trays are standardization for similar cases.	• Great strides in this area, almost all trays are standardized for the sites. • Cataract tray needs to be standardized for the NHS
4.g	The OR schedule is confirmed 24 hours in advance.	**SCG** Yes **GNG** Confirmed by 1600 hours the day before **WHS** Final OR list is printed day before surgery at 1400 hours
4.h	Urgent volumes are incorporated into the regular daily OR schedule.	No and sometimes yes. This is a new concept for NHS surgeons and implementation has been delayed due to the significant changes that have taken place within the last fiscal year. **SCG –** • some Orthopedic Surgeons leave time in their elective blocks when they are on call – although it is not welcomed by Anesthesia

		• Thoracic surgery is very good at leaving elective time to undertake urgent procedures **OSS** – Urology in particular is making efforts in this direction **GNG** – usually after the day cases are finished **WCG-**Booked as add-ons **DMH and PCH-**Not an issue
4.i	Activities are performed in parallel rather than serial fashion, whenever possible (i.e., room set up and patient induction occurs concurrently).	**SCG** Not in most cases, although one orthopedic surgeon has made this work for total joints. More and more we are seeing surgeons help with the room during change over. Parallel activities requires the participation of all players including assistants, anesthesia and surgeons and not all parties have adjusted to this concept.
		GNG Usually only in the ortho room
		WHS No, room set up and counted prior to patient coming into room
4.j	Theaters are staffed for cases with a target room utilization of 80%.	Yes **DMH-** Two OR suites only one runs at a time. Utilization of one room at a time is approx. 90%
4.k	Unplanned OR day extensions and overtime are regularly evaluated for opportunities to determine a need for extended hours or revised staffing patterns.	**SCG** Yes; however, anesthesia is our limiting factor due to shortage. Also there is a physician 'cop' that can be reached to assess elective cases running overtime and in conjunction with the manager a decision will be made as to cancellation.
		GNG Needs to be reviewed
		WHS Yes, OR staffed to run 2 rooms until 1700 hours daily
4.l	Off-hours and weekend utilization are monitored and reviewed to ensure that utilization meets the criteria for emergency care.	**SCG** Not by nursing, although there is extensive ER information for the last 5 years that could be reviewed by an appointed physician.
		GNG Needs to be reviewed

		WHS Criteria reviewed at site Surgical Team meetings.
4.m	Alternate settings are considered based on case type and acuity (i.e., cataracts and endoscopy may be done outside of a traditional OR setting).	Yes Cystoscopy performed in the Main ORs, except for OSS where there is a suite Endoscopy performed in Minor ORs or Suites Cataracts undertaken in the main ORs, Ophthalmology Division of Surgery undergoing planning to consolidate Ophthalmology on 2 sites Pacemakers are undertaking in the Main ORs at SCG and GNG
		DMH and PCH Endoscopy and procedures such as vasectomies are done in the Main OR setting Both sites have spare capacity
4.n	Supply acquisition is managed by contract and/or on consignment.	Recent change to Medbuy in February 2005 and the impact of contracts etc.
4.o	A Peri-operative information system is used that allows for automated data capture with a goal of case costing.	[redacted] has this feature, but is not utilized due to resource issues.
4.p	The time the patient goes into the operating room to the time the patient leaves the operating room will be equal to the time that was booked for the case.	Not at the present time, although we are working with the IS team to move to this expectation. Set up and tear down times need to be reviewed and updated
4.q	The amount of time scheduled for surgery will be as close to the expected time that the surgery should take.	**SCG** The amount of time scheduled for surgery is what the surgeon requests at this point in time.
		GNG Yes
		WHS True, booked according to previous times for procedures.
4r	Surgeries will begin at the scheduled start time.	That is the goal.
4.s	The "emergency surgeries" that are conducted will reflect true emergencies.	**SCG** Many cases appear 'urgent' rather than true emergencies.
		GNG Classification guidelines not always followed

		WHS Emergency surgeries that bump list are true emergencies. Add on cases are according to A, B, C
		DMH, PCH and OSS No add on or emergency cases
4.t	Surgical cases that have similar procedures will be grouped as a block, where possible.	Not at this point in time, emergencies are handled in a queue.
		GNG Yes
		OSS Yes **WCG**-Surgeons have dedicated block time in a four week rotation
4.w	Surgeons will work in consolidated blocks of time, where possible.	Yes for elective cases only.
5.0		**Post-Anesthesia Care Unit and Second Stage Recovery**
	Please comment on the accuracy of the following statements for your program. Please feel free to provide additional comment in the spaces provided.	
5.a	Patient discharge policies and procedures are based on the clinical condition of the patient. Time-based standards or minimum lengths of stay are not recommended. Discharge policies may direct who, in addition to physicians, may discharge a patient from the PACU.	Yes
s	Policies should be developed to bypass the PACU and enable patients who have received a general anesthetic to be included in the bypass group. As a general rule, most patients receiving a local anesthetic should bypass the PACU.	**SCG** This is currently under development.
		GNG Need to be developed
		WHS Local patients do not enter the PACU.
5.c	A staging model should be in place that includes professional staff and ancillary staff based on the case mix. Staffing should reflect the peri-operative schedule, predicted patient need and complexity of the service.	Yes. • PACU is staffed with a PARR trained RN for each OR operating. • PACU up staff during period with large volume of pediatric cases. • Currently addressing solo nursing in PARR too meet OPANA standards raised by ONA **GNG**

		Need to be developed
6.0		**Instrument Processing and Case Cart Preparation**
	Please provide comments in the space provided	
6.1	What OR supply system is used? (case cart, exchange cart etc)	**SCG and OSS** Exchange cart.
		GNG Pick list – sterile supplies come from CSR Large quantities of supplies are stored in the OR, in cardboard boxes Special orders are placed by the Charge Nurse
		WHS Case cart
		DMH-supplies stocked in the OR
6.2	Where are the supplies picked (OR/SPD)?	**SCG and OSS** Picked in the OR.
		GNG OR for individual cases Large carts for sterile bundles comes up from CSR
		WHS SPD picks case carts and OR staff complete pick list **DMH**-Picked in the OR by the nurse
6.3	Who transports OR supplies? Who do these people report to?	**SCG and OSS** Store transports supplies and they report to purchasing?
		GNG CSR and Stores staff
		WHS SPD and report to SPD Manager
		DMH-CSR
		Instrument Processing and Case Cart Preparation
	Please comment on the accuracy of the following statements for your program. Please feel free to provide additional comment in the spaces provided.	
6.a	Accurate procedure-specific pick lists are used.	Pick lists are generated from computer system

		GNG - Not always accurate
6.b	Instrument trays are standardized by procedure and service with minimum instrumentation for a typical case.	Yes
6.c	Robust quality assurance processes address the accuracy of instrument trays and case carts, where used.	Yes **GNG/DMH** work in progress
6.d	Instrument tracking and management programs are in place and are monitored. Larger organizations should consider automated systems for instrument tracking and management.	Yes; however, is a manual process, dating in a book what instrument is out and when it was repaired. Monthly PM for our surgical instruments by a mobile service.\ **GNG/DMH** work in progress
7.0		**Scheduling Process**
	Please provide comments in the space provided	
7.1	How are OR cases scheduled or booked?	**SCG-** 15 day cut off for elective time. Three day cut off for vascular services. All booking are done with booking cards only. **DMH/PCG-**Central office at the PCG site **GNG**-Through bookings office, to surgeons blocks **WCG-**Four week master OR booking schedule
7.2	How is case length determined when scheduled?	**SCG/DMH-** By Surgeon at the present time. **GNG**-Initially by surgeon, OR bookings uses case history by surgeon to set up times. **WCG**-Previous times
7.3	How is unbooked time released and filled?	**SCG**-At 15 days the office is notified and they have 48 hours to submit the booking cards. If the booking cards are not received by the booking office the chief of the service is called to tell them that time is available for there service. The service now has 24 hours to submit booking cards or it is then given to open time. All requests for urgent time would be offered the elective time first. **GNG**-Certain cut off times by type of surgery. Weekly OR bookings office looks ahead by 4 weeks, unfilled time offered to same service, then to surgeon with the longest waiting time and/or urgent cases from another service **WCG-**If no bookings at 15 days, released to other surgeons
7.4	What time does the schedule close to elective cases?	**SCG** It doesn't, try to book all the time. **GNG**-Different cut off times for different cases

		WHS 1500 hours
7.5	What time does the schedule close to all cases?	Depends on emergency case volume ORs staffed to 2300 hours M-F, SCG day and evening shift on weekends and stats WHS and GHG from 0730-1530 weekends and stats OSS, DMH and PCH no staff past 1500 hours or on weekends and stats
7.6	How are emergency cases accommodated into the schedule?	**SCG-**If a list is running early efforts are made to fill the time with emergency cases. All surgeons on the emergency board will be contacted, anyone available to do the case will be given the time. No emergency cases are undertaken by **OSS, DMH** and **PCH** **GNG**-Using a classification system
7.7	How are urgent cases accommodated into the schedule?	**SCG-**At the present time 'urgent' cases are kept manually in the booking office. Any open time or released time will be offered to the surgeon on the request list for urgent time. Surgeons sometimes rearrange their block time to accommodate Add ons with the agreement of nursing as it requires authorization of OT **GNG**-Using the classification system **WCG**-as add-ons
7.8	Who is responsible for the day to day management of the OR schedule?	**SCG-**OR Registry clerks handle the day to day list. It is the Clinical Manager's responsibility to ensure that OR lists are managed appropriately. **GNG**-Joint effort between OR booking office, CN with final decision made by the Manager and Chief of Surgery **WCG**-OR Manager/Booking clerks
7.9	Describe the process for monitoring and managing utilization of OR time? Who receives the information? Are issues identified and acted on?	As the ORM data remains inaccurate utilization data is collected and presented at the site Surgical Team meetings. Presently we are trying to establish rules to manage the time. Regional rules need to be established to replace site based rules. While the data identifies issues there is not a consistent redistribution of time based on utilization data to date across all of the sites. It is not within the Clinical Manager's scope of authority to remove or adjust surgeon's elective time; rather it is brought forward to the Chief of Surgery, the specific Site and Divisions. All surgeons and senior management receive the data. WHS in particular is good at this.
		Scheduling Process
	Please comment on the accuracy of the following statements for your program. Please feel free to provide additional comment in the spaces provided.	

7.a	Clear policies and guidelines are in place based on the organization's goals that are communicated, implemented and consistently upheld	Process of transition to standardized policies **OSS** is being brought up to speed with NHS policies and guidelines
7.b	The surgeon's office or requesting clinic provides all the information that is required to develop and prepare a slate.	Yes, although we are trying to move the consent to the surgeons' offices there is resistance
7.c	The duration of cases are scheduled based on real (average) time performance.	Not consistently and this is the result of ORM which is still developing accurate and standardize reports. Solid data must be used when discussing with a surgeon that the procedure takes longer than the surgical time. **OSS** – no as ORM just operational on Feb 1st 2006 and data remains inaccurate
7.d	Each resourced OR block is fully booked based on duration estimates and established block time allocations.	Usually
7.e	Cases are sequenced based on clinical need, effective use of resources, access to resources and clearly defined criteria.	Yes, but with the expansion of our OR block time we have run into some difficulty with equipment and last minute adjustment to the OR schedule has been made to ensure efficiency.
7.f	Block lengths may vary based on established practice patterns patient or case needs, and available staff and physician resources.	Yes, **SCG/OSS** has been adjusting blocks since January on a daily basis in response to anesthesia shortage.
7.g	Block release times are clearly established and determined based on patient needs and service demands (i.e., highly elective or predominantly urgent).	Each site has a process. **OSS** – block release times are not clear, especially for Ophthalmology
7.h	Booking offices have predetermined processes for managing waiting cases and unutilized or released scheduled time.	Yes.
7.i	Block allocations are allocated to service and/or surgeon based on clear criteria that include patient access to care.	**SCG** No our system is based on historical time allocation per service.
		GNG Yes
		WHS Yes
		OSS, DMH and PCH No
7.j	Block utilization and allocations are reviewed on	No.

	regular basis and reallocated based on clear criteria.	
7.k	The schedule is closed 24 hours before the surgical day. Any additional changes are directed through the operating room process and are based on defined clinical priorities (i.e., it may be appropriate to add urgent cases 12-24 hours before the surgical day).	**SCG** Yes. **WHS's** is printed at 1400 hours the day before
8.0		**Supply Chain**
	Please comment on the accuracy of the following statements for your program. Please feel free to provide additional comment in the spaces provided.	
8.a	Peri operative services will ensure that there is sufficient instrumentation and supplies to support the operating room schedule. Appropriate investments will be made to support surgical activity and throughput.	Peri operative services works with the resources available. OR manager in conjunction with surgeons and nursing personnel follow the capital process to acquire the instrumentation to support the services.
8.b	Surgical suites will have separate dedicated physical supports for clean and soiled instrumentation and supplies between peri operative and central processing services.	Yes.
8.c	Systems will be used to help manage instrumentation, and cleaning and sterilization processes.	Yes.
8.d	Hospitals will link supply consumption to surgical activity by actively managing the inventory supply replenishment process using automated systems and material management support.	No, while some supplies are ordered through the computer all inventories are **manually** managed and labor intensive.
8.e	To the extent appropriate to the clinical activity of the hospital, peri operative services will use a limited but sufficient range of instrumentation to enable good choice and minimize inefficiencies and confusion.	**SCG**-Yes. **GNG**-Not in place
8.f	Hospital will develop access management policies for their vendors.	Yes, but it is not monitored or reinforced.
8.g	To the extent appropriate for the facility, custom packs, case carts and pick lists will be standardized by procedure or program, rather than by individual physician.	Pick lists are per surgeon preference, there is potential for standardization **OSS** – not at this time

8.h	Hospital will use clearly defined processes to analyze the value of new peri operative technologies.	No
8.i	A supply chain model is used that includes product evaluation, standardized purchasing processes and specific policies that manage access of vendor representatives to the OR.	No.
9.0		**Support Services**
	Please provide comments in the space provided	
9.1	How are patients delivered to and from the OR? Day Surgery? Who transports them? Who do these staff report to?	**The majority of patients begin their surgical procedure in the patient reception area located within the OR environment. Total joints are the only procedure that begins in the Day Stay area and they are transported to the OR by stretcher or wheelchair. Most patients walk to the operating room.**
		SCG Patients are transferred by porters to both the day stay and inpatient units. The porters report to the inpatient surgical manager.
		GNG Surgical Services workers who report to the OR manager
		WHS • Surgical Workers who report to the Clinical Manager transport to and form Day Surgery • Inpatient surgery nurses do there own transport
		OSS The OR porter transports to the OR and either the OR porter or one of the PACU Nurses transports the patient back to Day Surgery
9.2	Do you have any issues with laboratory support? (specimens; lab results; point of care testing)	No. **OSS** – commenced Meditech on March 1st 2006
9.3	How is pharmacy organized to deliver services to your area? What services does pharmacy provide? Are there any issues that contribute to delays in the Operating Room orecovery phase?	Pharmacy orders are handled by nursing and are computerized. Routine stocking by Pharmacy

9.4	Do you ever lose or cancel cases because of a lack of anesthesia coverage? About how often a week would this occur?	**SCH and OSS** Yes, since January we have had an anesthetic shortage and we have had to cancel total rooms on a day to day or week to week basis.
		GNG No
		WHS Rarely
		DMH and PCH No
9.5	What support services are available to the anesthesiologists? Are these adequate? Who assists with inductions? What are their hours of coverage and to whom do they report?	None. RT needs to take a more active role in the operating room, assisting with anesthetic machine checks and available as a resource. Registered Nurse, Circulating Nurse assist with induction.
9.6	Does the unit have clerical support? If yes what are the hours of coverage?	**SCG** • Ward Clerk 0700-1500, • Ward Clerk 1300 to 2100 Monday to Friday. • Ward Clerk 0900 to 1700 on weekends.
		GNG Ward clerk 0730-1500 More required 1500-1900
		WHS • Ward Clerk 0830-1630 **? Monday to Friday only**
		OSS No, 4 hours per day needed
9.7	How are housekeeping services provided? Do nursing staff provide and housekeeping duties? What are the hours of coverage?	**Housekeeping works 0700-1500, 1000-1800, 1500- 2300.**
		WCG-Surgical Service workers
		GNG-Housekeeping duties provided on the night shift Nursing involved with cleaning
		OSS 0800-1700 hours M-F as no cases undertaken on weekends or stats

9.8	Does equipment breakdown ever cause you to lose or cancel a case. How many times a week or month would this happen? What kind of support do you receive form biomedical engineering? (Equipment trial, repair) What kind of equipment is causing the greatest problem?	**SCG**-No as it only happens rarely **GNG/WCG:** Delays on occasion **Repair and maintenance** **Cysto and Ureterscopes are delicate and always out for repair. This is not handled by biomedical.** **Phaco machines cause difficulties at OSS due to age of machine**
9.9	What level of support do you receive for non-clinical equipment and unit maintenance?	**Limited.**
9.10	Who is responsible for administrative duties such as staff scheduling, sick call replacement; payroll duties? **Approximately what proportion of their time is used in these activities?**	**The Clinical Manager is responsible; however some tasks are delegated to the Charge Nurse or ward secretary.** **DMH-**Charge Nurse **Approximately 25 percent of work week.**
9.11	Are there non-direct patient care activities that are done by nursing staff?	**Yes.** Picking case carts, stocking, checking instrument trays, ordering supplies, putting away supplies, computer documentation, housekeeping