



The first endovascular insitu saphenous vein bypass procedure performed in Canada was in November, 1998 at North York General Branson Division. Sunnybrook Health Science Centre performed the procedure a month or so later

Benefits

- 1) Endovascular bypass technology facilitates a decrease in the length of healing time as the two small incisions heal faster than a long continuous incision. The risk of wound complications is reduced due to decreased trauma to the tissue.
- 2) Patients are able to ambulate earlier postoperatively. Early ambulation postoperatively increases circulation, eliminating stasis of blood that may result in thrombus/embolus formation.
- 3) Pain is decreased in the postoperative phase reducing the amount of analgesic requirement.
- 4) Patient's length of hospitalization is reduced, as patients are able to care for themselves early on in the postoperative phase enhancing their mental outlook through physical recovery.
- 5) The risk of vein graft occlusion due to incomplete valvulotomy is reduced, as the valvulotomy is performed under direct visualization.

Conclusion

To date there have been six (6) endovascular insitu bypass procedures performed at the Branson

site. The patients have all been afflicted with major vascular disease and range in age from 77 to 88 years. According to research out of the United States patients may be discharged as early as 48hrs postoperatively. As yet our limited exposure has not supported early discharge.

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Sterile O.R. Repack: Collaboration in Action

By Patricia Pocock, RN, Dipl. N.Ed.

Health Care Facilities across the Country are experiencing major changes related to social, technological and economic factors.

St. Joseph's Health Centre, London, Ontario (SJHC) has required unprecedented changes in the way our service is provided. Likewise provider corporations serving hospitals find their market place changing.

London Hospital Linen Service Incorporated (LHLSI), in collaboration with St. Joseph's Health Centre, is providing sterile, reusable linen packs and products to our operating rooms, family birthing centre and radiology suite. The Canadian Sterile Repack® program (C.S.R.) incorporates the following components:

- A high tech surgical barrier fabric from W.L. Gore and Associates, the manufacturer.
- Manufactured product: gowns, drapes and wraps from Lac Mac Ltd.
- Processing, production, sterilization and delivery of packs by LHLSI
- Receiving and case cart distribution by SJHC Central Processing staff to the end users; the staff in the operating rooms.

Major outcomes achieved in this collaboration are an exceptional, reusable sterile product offering superior protection for our patients and health care providers, process improvements, the reduction of numerous steps in rework and a 15% cost savings to the hospital of approximately \$150,000.00 per year.

LHLSI is a not-for-profit operation which began providing centralized linen service in 1972. In 1973, upon request of hospitals, an O.R. Pack Service was initiated. Presently the Company services from Windsor to Kitchener - 28 hospitals (15 of them having O.R. suites), 8 Nursing Homes and many affiliated health care services.

One of the Corporate objectives is to maintain a leadership position in the laundry and linen industry consistent with components of its Mission Statement, being to serve customer hospitals in the best way possible at a contained cost, while improving the quality and scope of its services.

Competitive conditions and the need to be responsible for the entire processing cycle of surgical product was the spark that moved LHLSI into the complete production of surgical packs, including sterilization.

Credibility for providing this service was determined to be the immediate hurdle; the Laundry Corporation required one of its major customers to demonstrate an interest, before it could commit major capital dollars for the sterilizing service.

At the same time, St. Joseph's Health Centre, London, was restructuring its Central Supply, installing a Carousel for distribution purposes and moving to a Case Cart System.

By working together, a Process Protocol was developed that provided the credibility for London Hospital Linen Service Incorporated to provide this new Value-Added service of sterilization and delivery of sterile packs to the O.R.

After consultation, the following criteria and standards established were met:

- The surgical linen is processed in a separate part of the Plant having its own air flow (air pressure),

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humidity control and finished flooring (laminated and heat-sealed);

- The Sterilizers are of Pass-Through Design, keeping pre-sterilized and post-sterilized totally separate, in different enclosed areas;

- The Sterilizers are computer controlled and are monitored by an independent sensing and recording system to do an on-going audit of the computerized report supplied by the Sterilizer;

- Each load has a test pack containing a chemical strip and biological indicator, which is incubated on site. Before sterilized product is delivered the incubation process is completed showing the appropriate negative growth;

- A computerized tracking system of all packs, including their contents and the history of sterilization and use was developed;

- An independent lab audits the biological results every two weeks; and

- An Advisory Committee of Microbiologists, Infection Control Officers, O.R. Managers and Central Supply Managers ensure the Canadian Sterile Repack System is maintaining a leadership role in Process Protocol.

The implementation of this program utilized systems thinking and an effective multi-team approach to achieve our joint purposes.

“A Collaborative Team Approach” (see Diagram 1) outlines the purposes of both SJHC in this program, as well as LHLSI and looks at all of the people and teams that were involved in its development. The contribution that this program made to the hospital’s organizational redesign was significant.

In March 1994 St. Joseph’s Health Centre embarked on an ambitious journey to redesign processes and restructure our organization. This effort was consistent with our philosophy and CQI initiatives.

The organizational redesign was built on the foundation of CQI and is the term we used to describe radical change in systems and processes. The purpose of such a large scale change was to achieve dramatic improvement over a short period of time. The CQI principals, tools and methods were pivotal as we embarked on the redesign. The diagram depicts the implementation phase of redesign.

The goals of redesign were to maintain and improve the quality of care, maintain or improve the quality of work life, maintain appropriate service volumes and to reduce health care expenditures by 15 percent.

“Cost savings to the hospital of approximately \$150,000 per year were realized by the OR Repack Program”

The Canadian Sterile Repack®Program contributed to each of these goals; with particular emphasis on the contribution to departmental redesign, both in the central processing area and the operating room.

With the sterilization of packs off site and the reduction of several process steps, the central processing department renovated an area and installed a double carousel sterile storage system. Sterile storage and packs from the O.R. moved to the central processing area.

The Carousel supports a case cart system and picking of four case carts at a time. This supports 19,200 O.R. procedures per year. The space freed up in the centre core in the O.R. contributed to a major renovation within the operating room. A storage space was created for equipment and supplies that previously cluttered hallways.

The installation of half elevators with automatic off-loading devices contributed to a smooth process flow of case carts between the two departments.

Another key component in this System is driven by downloading of the pick list, generated in the O.R. booking and data centre from our surgi-server computer system to the ESI system in central processing.

Successful Outcomes

The outcomes and results for the health centre:

✓ All O.R. packs are delivered to the health care centre sterile and in closed, locked carts. SJHC was working with LHLSI on the transporting of packs to the hospital. We originally thought the packs would be on open carts and each individual pack would be covered in plastic. Responding to the concern of adding to environmental waste, enclosed carts were

Diagram 1

A Collaborative Team Approach

Purpose: St. Joseph’s Health Centre, London - To contribute to the Organization redesign and Reduce health care expenditures by 15%

London Hospital Linen Service Incorporated - To address increased market competition by providing a value added service using superior product enabling our customers to reduce costs and improve performance

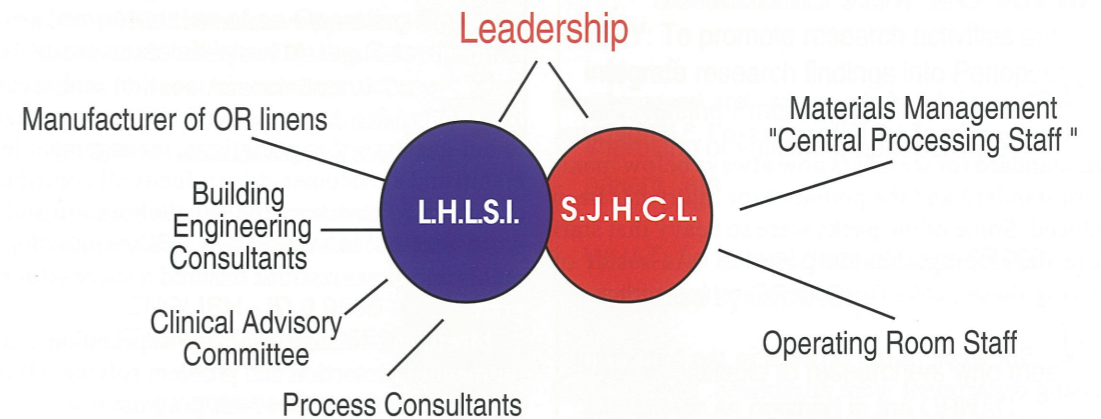
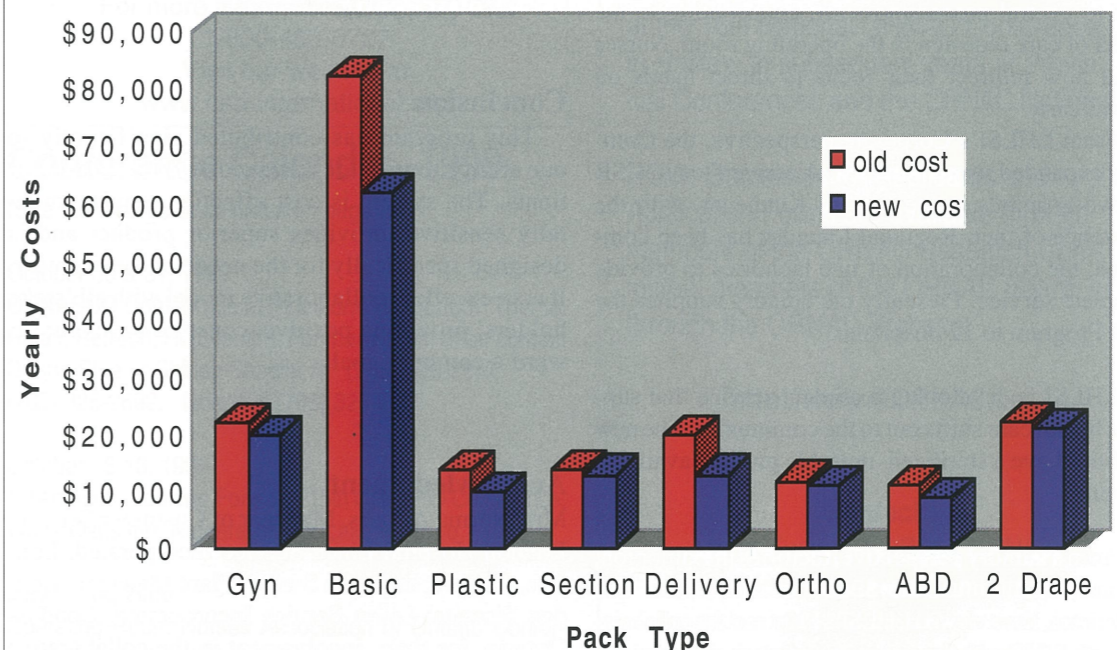


Diagram 2

Product Analysis



Overall Product savings of \$50,000 per year savings were generated by being able to use one layer of fabric rather than two, three or four. Historically, the longer the procedure, the greater number of layers used.

obtained that are cleaned appropriately and locked. This exceeded our expectations, by being able to deliver packs to the hospital in closed cart.

“Six steps in the process in central processing were eliminated. Several steps in the storage and picking process in the OR were eliminated”

✓ The weight of the packs has been reduced from an average of 1.8 Kilograms to 1.3 Kilograms. The standard for weight is now always below maximum standard and the potential for injury has been reduced. Some of the packs were so heavy that staff were developing shoulder injuries as a result of moving these packs from one place to another.

✓ Six steps in the process in the central processing department were eliminated. Several steps in the storage and picking process in the O. R. were eliminated. The picking of case carts was moved from the O.R. to C.P., supported by the installation of the Carousel System. The responsibility for picking the cases was transferred from the O.R. nursing staff to central processing staff, contributing to the model of care redesign in the operating room. Nurses could now redirect their focus to direct hands on patient care.

From LHLSI's Corporate perspective, the Company expanded its market area. A conversion to CSR by two hospitals in the City of Kitchener, with the assistance of their Regional Laundry has been completed; the collaboration of two laundries to provide complete service. Presently the laundry supplies the CSR program to 12 hospitals.

LHLSI is developing a clinical service that supports health care shifts out to the community. The new facilities have a sterilized, reusable product available to them.

From a laundry perspective, facilities in Edmonton, Toronto, Hamilton, Ottawa, Montreal, St. John and Fredericton, have viewed LHLSI's Plant and the collaboration with SJHC with the aim of providing similar service.

To create the next development, LHLSI is begin-

ning to work towards offering custom procedure trays in a 'piggy back' style with O.R. reusable sterile packs providing a procedural-type pack. The Company is also working at tying into the O.R. scheduling computer software. When central supply is picking cases for the O.R., the same supply requirements will be electronically communicated to LHLSI providing a more timely service to meet the health centre's needs.

The conditions that ensured the success of many Teams, in support of this program, are really important. Readiness to make changes; an emphasis on people and improvement in skill levels, a commitment to bring staff into point of service decision making, encouragement, innovation and creativity, support for the concept of 100% conformance to our customers' expectations, management leadership and a customer-driven focus all contributed to successful outcomes. The collaboration and the work that occurred between the various departments and organizations ensured a successful program.

Meeting our many customers' expectations, commitment to protection and problem solving all contributed to the success of this program.

Goals draw us to the future; a vision needs to be alive in the present.

Conclusion

This program has contributed significantly to our ability to provide care and service to our patients. The system is cost effective, environmentally sensitive, provides superior product and is designed specifically for the needs of the end user. It is an excellent collaborative model with all 'stake holders' providing positive, constructive input toward a common goal.

Acknowledgment

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