Introduction

A Registered Nurse First Assistant (RNFA) is an experienced operating room nurse who has acquired additional education, knowledge and judgment, along with advanced technical skills to function effectively as an assistant to the surgeon throughout a patient’s perioperative (surgical) experience (1).

Prior to the role of the RNFA, the cardiac assistant role traditionally was held by Physician Assistants (PA). At St. Mary’s General Hospital (SMGH) the RNFAs and PAS work collaboratively as a team, although their roles differ slightly. The RNFA role at SMGH has provided continuity of quality care to our patients undergoing cardiac surgery since its opening in July 2003.

As this was a new role to the perioperative team at SMGH, the RNFA’s role was seen as an additional conduit for capturing feedback from their colleagues and patients and thus created and distributed “Peer” and the RNFAs recognized the importance of capturing feedback from their colleagues and patients and thus created and distributed “Peer” and "Peer Surveys" were completed post-operatively by cardiac surgery patients or their family members.

In 2007, 85 “Perioperative Patient Information Satisfaction Surveys” were completed post-operatively by cardiac surgery patients or their family members.

From 2003 to 2006, 123 ‘Peer Surveys’ were distributed, 101 were completed, lending to a 82% completion rate. Respondents include surgeons, anesthetists, perfusionists, Registered Respiratory Therapist (RRT), Day Surgery nurses, and CVOR nurses.

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Pre-Operative RNFA Role

The RNFAs at SMGH visit the patient/family approximately one hour prior to transport to the OR. The patient’s chart is reviewed for completeness (consents, medical history, lab work, special testing, medications etc). Occasionally the process addresses concerns about the patient having surgery at this time due to potential for further optimization prior to surgery. After greeting the patient’s family, the RNFA confirms the patient identity, what procedure they are having and explores the patients understanding of the procedure. The RNFA obtains a brief nursing history including any changes in the patient’s condition since last hospital visit. The RNFA then completes a skin assessment, confirms CHG pre-op-washes, and may perform Allen’s test and hair removal via clipping when applicable.

The RNFA role is to communicate pertinent information from the preoperative assessment to the cardiac surgery team.

Survey Results

100% of respondents of the ‘Peer Survey’ felt the preoperative visit by the RNFA has been beneficial to the patient, family, and the OR team. Co-workers all agreed that the RNFA communicated pertinent patient information to the CVOR team.

89% of patients agreed that their pre-operative RNFA visit decreased their anxiety level.

98% of patients/families surveyed agreed that the information provided by the RNFA, addressing any issues and answering questions was helpful.

Intra-Operative RNFA Role

When the patient arrives in the OR the RNFA introduces the patient to the intra-operative team members. The RNFA assists anesthetists (and RRT) as required.

Once the patient is anesthetized, the RNFA/PA insert the Foley catheter, and along with other team members, position the patient. Prepping and draping of the patient is then completed. In procedures such as coronary artery bypass grafting (CABG) where conduits are required, RNFA harvest the radial artery, and/or saphenous vein as requested by the surgeon. Once conduits are harvested, the RNFA first or second assist the surgeon at the chest.

Peer Survey Results

57% of respondents indicated the RNFA communicates pertinent patient information to the CVOR team.

Comments:

* RNFAs have good assessment of patients pre-op.*

* RNFAs are reliable, dedicated and capable assistants in the OR *

Conclusion

The RNFA role at SMGH provides continuity of quality care to the patients undergoing cardiac surgery. Based on the feedback from the ‘Peer Survey’ (completed by the surgical team) and the ‘Perioperative Patient Information Satisfaction Survey’ (completed by cardiac surgery patients/families), the RNFA role has made a positive impact in several areas throughout the perioperative phase including:

1. Addressing preoperative issues prior to being called to the OR,
2. Helping patients feel more comfortable about coming for surgery,
3. Providing useful information and decreasing patients/family anxiety levels.

According to the cardiac surgeons, RNFAs are reliable, dedicated, consistent assistants during surgery. RNFAs collaborate with staff throughout the continuum of patient care.

The RNFA role is a challenging yet very rewarding career for the experienced OR nurse.
Making Sense of Prosthetic Heart Valve Implantable Devices

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**Purpose**

The primary objective of this poster project is to demonstrate how the identification of an issue can lead to the implementation of a process to maintain a safe patient care environment and achieving optimal outcomes. The secondary objective is to share the design of the prosthetic heart valve implant reference chart with colleagues from other institutions.

**Introduction**

As technology advances, the selection of prosthetic heart valve implantable devices has become increasingly diverse in the Operating Room. The cardiac surgeons, anesthesiologists, and registered nurses at St. Mary's General Hospital expressed concern related to the confusion and time delay during aortic and mitral valve replacement and repair cases. As a result, the Perioperative Educator met with the designated cardiac nurses to develop individualized learning plans.

This exercise identified a lack of knowledge in several areas:
1. Ability to proficiently identify and pick appropriate valve prosthesis and sizers
2. Prosthetic implant availability
3. Care and handling of prosthesis

Suggestions for improvement included restructuring of the valve implant cart, updating the valve reference chart with colleagues from other institutions.

**Process**

**Identification of learning need:** In some instances, surgeons were having to wait more than usual for their valve prosthesis due to the nurses lack of understanding of the correlation between sizer sets and prosthesis.

**Distribution of learning plans:** The perioperative educator supplied learning plans to have the nurses assess their learning needs.

**Staff Meeting:** On review of the learning plans, it was found that there was a general need for clarification of the valve prosthesis currently being used at SMGH. The nurses were able to give feedback on the valve charts being used at that time, and identified what they felt worked, and what needed improvement, and/or clarification.

**Valve Chart**

An anatomical diagram of the heart was used to facilitate the understanding of the anatomical position of the 4 heart valves. The prosthesis were then divided into tissue valves, mechanical valves and bandings. Aortic valve graft prosthesis were added to clarify their corresponding sizer sets. The rinsing instructions for tissue valves, and the pericardial patch were incorporated in order to simplify the preparation required for these products. Helpful notes were included as a quick reference for the nurses.

**Implementing Change**

Through team effort, nursing reorganized the layout of the valve cart. Valve sizers were placed on the valve cart next to the prosthesis they are used for. This allows the staff to quickly find the sizer set the surgeons request, as well as the valve prosthesis.

In addition, unique ideas were generated to recreate the design of the new valve chart. The valve chart was updated to reflect SMGH current valve inventory. Photographs of all the sizer sets were taken to assist with identification. Company logos were used to aid in matching the sizer set on the chart, with the valves on the cart. The inventory of valve sizes available at SMGH was included on the chart for quick reference within the OR.

**Improved Outcomes**

There is now an overall reduction in the time required to access the sizer sets and valve prosthesis requested by the surgeons. The nurses are able to inform the surgeons of available sizes of valves without leaving the OR theatre, increasing patient safety. Nursing staff state that their understanding of prosthetic heart valve devices has improved. In addition, positive feedback has been gathered from physicians and industry sales representatives.
Introduction

After years of planning, in May 2008, St. Mary’s General Hospital, Kitchener, Ontario, completed redevelopment of a new surgical wing, which included:

- Sterile Processing Department (SPD)
- Pre-Surgical Clinic (PSC)
- Day Surgery Unit (DS)
- Eight Operating Rooms (OR’s)
- Post-Anaesthetic Care Unit (PACU)

In anticipation of occupancy, the educators were challenged with the task of orientating nearly 200 staff to their new environment over a period of four working days allocated to OR slow down. Cardiac and Ophthalmology services continued to run during this time.

This poster highlights some of the successful activities implemented by the educators. Additionally, some “helpful hints” and “lessons learned” are shared for the benefit of peri-operative colleagues who find themselves facing this daunting task.

Behind the Scenes - Planning is Everything

Before providing staff with in-services, the following were completed:

- Orientation to new space for Educators
- Confirm number of staff per session
- Book training rooms
- Schedule staff and industry representatives for sessions
- In-service, in-service, in-service – on many different days and at different times
- The Educators’ goal was to provide progressive, varied, fun and interactive learning activities through the use of tours and simulation exercises.

Tours

Purpose - To provide knowledge of layout of new space to all staff working in this area, with a focus on their assigned clinical area. To highlight changes to existing practices pertaining to emergency code responses in the new space.

All Hospital Staff - Tours for all hospital staff were conducted to demonstrate location of each clinical area, & to highlight aspects of emergency codes that pertain to all staff such as code orange, code red, code green, code brown and code blue. Traffic flow for staff, patients and visitors was highlighted.

Community Open House - Tours conducted by staff allowed them to showcase the fabulous new space that both patients and staff will enjoy for many years!

Our Amazing Space Race

Based on the popular television series “The Amazing Race”, staff were divided into teams and given tasks to perform throughout SPD, Day Surgery, the OR’s and PACU.

Purpose - This activity gave staff the opportunity to learn the ‘traffic flow’ of patients and supplies, identify the locations of various supplies, and a chance to meet staff in adjacent clinical areas with whom they would have more frequent contact because of the layout of the new space. Teams were given instructions that took them from one location to the next, and they were required to complete one task before finding the clue for the next task.

Evaluation of Activity - Completed activity records were collected. Prizes were given for first team to complete the race. Peals of laughter and claims of ‘I found it!’ coming from teams scurrying around were evidence of having fun while learning!

Helpful Hints

- Do not give staff vacation over this time!
- Develop good relationships with redevelopment coordinator and site manager
- Get hard hats and steel-toed boots that fit so you can safely and easily move through the space
- Get staff involved in space planning. They know what is needed, what will work and what won’t work. Their sense of ownership makes them feel proud of the new space and work flow when they participate in developing it, they will have a vested interest in maintaining it, and they will gain valuable experience and understanding along the way.

Mock Scenarios

What is it?
Mock scenarios representing several surgical case types were developed. These required that staff would need to search for and use all supplies and equipment in the new area. Scenarios included code blue, code red, code brown, malignant hyperthermia, and difficult intubation. Two full days of mock case simulations were conducted to allow as many staff as possible to participate and learn about the new space, location of supplies, and to identify any disruption to workflow before the first official day of work in the new space.

Who participated?
Surgeons, anesthetists, nursing staff and peri-operative support staff including clerks and porters. Friends and family members volunteered to serve as mock patients.

How was it evaluated?
Educators and managers served as auditors, observing staff, and collecting data on what went well or where there were glitches. After each case scenario, debriefings were held with staff to review findings and address any outstanding issues.

This activity proved to be the most useful in terms of preparing all staff and identifying processes, supply and equipment issues that would have an impact on safe, efficient functioning on day one.

Lessons Learned

Listen to the Staff - Budget restraints resulted in decisions being made about the nurse call bell system without consulting that staff regarding their needs. Consequently, the system that was installed did not meet the needs of the staff. Ultimately, upgrades were done, and although costly and time consuming, resulted in the provision of a system that supported patient and staff safety.

Adapting to a new physical space presents many challenges, especially when a significant amount of new equipment will be used within that environment. As much as possible, work with vendors and the redevelopment team to arrange for new equipment installation and training to take place over a period of time, thus promoting a smoother transition into the new space.

Celebrate the Success - Staff were proud to show off the new space by serving as hosts and tour guides during open house celebrations for the public and for staff.