Team Building in the OR and MDRD

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Background

- Work life balance is my priority not yet achieved.
- Husband retired RCMP now a commercial pilot.
- 1 son and 2 grandchildren.

Professionally

- Director ORNAC Board
- Co-chair CORL
- OR Nurse since 1990
- OR nursing rural and urban across BC and AB
- OR Manager at FMC site

Key Objectives

- Introduce the Foothills Medical Centre
- Share evidence based quality improvement process
- Share our story
- Demonstrate quality can be achieved with ongoing commitment to the process

Who are we?
Foothills Medical Centre

- Level 1 Trauma Centre
- Largest healthcare centre in Canada
- 1013 surgical beds
- Serves 2 million across:
  - Southern Alberta
  - Southwestern SK
  - Southeastern BC

Key Associations

- University of Calgary Medical Centre (UCMC)
- Tom Baker Cancer Centre (TBCC)
- Cancer Care
- Libin Cardiovascular Institute of Alberta
- Stephenson Cardiac MR Centre

Operating Room Resources

- Program Leadership
  - 3 Unit Managers
  - 1 Core Coordinator
  - 1 Business Manager

- Staff
  - 4 Nursing Educators
  - 13 Nurse Clinicians
  - 4 RNFA
  - 111 FTE RN
  - 9 ORT’s
  - 19 Surgical Processors
  - 16 Service Worker II
  - 8 Unit Clerks
Geographical Details

OR Specifics
- 32 OR’s
- 28 elective slates daily
- 3 different buildings
- 7 different areas

Technological Advanced Theatres

Interventional Trauma Theatre (ITOR)
- 1st of its kind in North America
- ITOR only 2nd in the world

Cardiac Hybrid Theatre
- Open June 2014

Operative MRI Theatre
- 1st intraoperative MRI system first of its kind in the world

MDRD

Key Features
- 24 hour service delivery
- Largest MDRD in AB
- One of the largest MDRD’s in North America

MDRD Services Delivery

- 42 nursing units
- 32 Operating Room
- 1 off site clinic

- Foothills Medical Centre – OR McCaig Tower
**MDRD Human Resources**

- Manager
- 1 Unit Manager
- 2 Educators
- 1 Business Manager
- 1 Case Cart Coordinator
- 7 Working Leaders
- 120 Surgical Processors

**MDRD - Equipment**

- 5 Single Chamber Washer/Disinfectors
- 2 Multi-chamber Washer/Disinfectors
- 5 High Level Disinfectors
- 3 Pasteurmatic Machines
- 1 Manual Sonic Machine

**AHS Quality Focus**

**Mission....**

To provide a patient-focused, quality health system that is accessible and sustainable for all...

**Quality in the OR Environment**

Accreditation Canada defines quality as “the degree of excellence; the extent to which an organization meets clients needs and exceeds their expectations” (CPSI, 2012).

**Key Attributes**

- Safety
- Timeliness
- Effectiveness
- Efficiency
- Equity
- Patient centeredness
How does this apply to OR/MDRD?

Lebouf (2011) acknowledges the relationship between the OR and MDRD is:
  ➢ Symbiotic
  ➢ Co-dependent to achieve success

However this critical relationship is impaired by:
  ➢ Poor communication
  ➢ Strained cooperation

Defining Patient Safety

The reduction and mitigation of unsafe acts within the health-care system, as well as through the use of best practices shown to lead to optimal patient outcomes (Davies & Hoffman, 2002).

OR / MDRD key performance indicators that impact patient safety
  • We need the right equipment, at the right time, in the right condition
  • OR and MDRD equal partners in making this happen

Perioperative Process Improvement Working Group (POPI)

Chose the IHI process to guide the quality initiative's ....
  ➢ Scientific evidence based
  ➢ Can be tested in the real work environment
  ➢ No expensive consultants
  ➢ Adaptable to any quality initiative
Tests of change the PDSA cycle

Plan
- what is the change
- tasks needed to do the test (by whom and when)
- prediction of results

Do
- run the test
- document what happened (good, bad, surprises)

Study
- compare results with the prediction
- discuss as a team (huddle)

Act
- adopt, adapt, abandon
- next PDSA(s)

PDSA Principles

- small scale tests
- e.g. 1 patient, 1 day, 1 nurse
- test rapidly, feedback results quickly
- any idea worth testing
- failure teaches as much as success
- collect process or outcome data over time and compare results to test cycles

The PDSA Cycle Model

- Project Aims
- Measures
- Ideas for tests of changes
- Systematic change for running tests

Improve efficiencies
Improve communication

Document:
- Disrespectful communication
- Efficiencies between departments
- Usage of standardized communication

1. Introduce standardized communication tool (ORIS language)
2. Increase computer usage
How does this apply to building teams?

PDSA model is evidence based
- Team allowed to learn from the testing to make better informed decisions

4 steps in cycle
- Measurable successes
- Can be completed quickly
- Minimal time
- Clarify resources who does what when with which resources
- Active means of gaining new information about microsystem
- Stimulates new richer change ideas

Our story...

Barriers preventing efficient service delivery between OR & MDRD....
- Adversarial communication
- 3 communication methods (pagers, telephones, email)
- Slang terminology used
- Standardization of information
- Lack of understanding of the other's work environment

Perioperative Process Improvement Working Group (POPI)

Chose the right process to guide the quality initiatives ....
- Well established evidence-based process improvement approaches in health care
- Can be tested in the “real” work environment
- No expensive consultants
- Adaptable to any size/scopes of project

Three Key Questions

What are we trying to improve?
- Communication

How do we know a change is an improvement (quantifiable/ can be measured)?
- Decreased documented disrespectful communication
- Decreased service delivery time between departments
- Increased utilization of standardized communication

What change can we make that will result in an improvement?
- Need to select the quality team
Quality Team Members

Executive Sponsor
- Executive Director of Surgical Services

Clinical Leader(s)
- OR Manager
- MDRD Manager

Technical Experts
- Quality support

Day to Day Leadership
- Core Coordinator – OR
- OR Theatre Aides (SP) that provide care in OR x 3
- Case Cart Coordinator
- Working Leaders x 7

Establishing Measurable outcomes...

- Decreased negative communication per week
- Utilization of standardized communication tool
- Improved delivery time for emergency case cart or one of a kind requests from MDRD

Challenges

- Complex geographically footprint
- Infrastructure new to old
- OR’s in 3 different towers
- OR’s located in 7 different areas
- Distance between points > than a 1km
- Equipment/sterile supplies delivered to the correct location in a timely fashion

Change 1

Introduction of ORIS language used in OR Manager

Plan implementation

- Introduce common language - ORIS to the OR staff to Nurse Clinician Group

Do

- Introduction of common language to OR (at large)
- Distributing reference master lists to each OR theatre and OR sterile core
- Implementation date chosen
PDSA Cycle 1

Week 1
Study
- OR healthcare team frustrated because of significant change in practice
- Increased length of time to locate new terminology on paper
- Frustrated surgeons
- Couldn’t locate equipment list (paper)

PDSA Cycle 2

Communication between OR nursing and Theatre Aides not working.

Plan
- Communication change between OR and Theatre Aide
- Assignment of Theatre Aide to 3 rooms
- Member of the team
- Pager (text capacity)

Do
- Implement the planned changes

PDSA Cycle 2

Week 2 - Study
- Decreased frustration of nursing staff
- Learning curve seeking assistance of TA
- Change in communication between OR staff using text pagers challenging but “working”
- OR Manager equipment list (paper) continued be misplaced in room
- OR Manager equipment list (paper) in core continued to be misplaced in room
- Accessing OR Manager on computer slow
- Theatre Aides not comfortable with technology

PDSA Cycle 2

Computer technological barriers with staff

ACT
- Approach staff to ascertain comfort level with computers
- Tutorials for TA not confident
- Tutorials utilizing MDRD staff
Sustaining Change

Week 4
Assessment
- OR nursing staff sharing positive experiences
- OR Leadership (nurse clinicians) sharing positive experiences
- OR surgical processors accepting change
- MDRD staff have no negative comments to change

PDSA Cycle 3
3 months later...

Plan
- Meet with Quality Team
- Review current state utilizing the chosen communication tool

PDSA Cycle 3

Do
- Group reconvened to discuss current state

Study Key Findings
- Identified some staff reverting to old patterns
- Negative experiences on shift
- Developed Surgical Services OR/MDRD Working Group (SSOM) with key front line staff to attend
- Agenda formalized and includes communication
- Remains lack of awareness of work environment of key

PDSA Cycle 3

Act
- No action to be taken
- Monitor quality change
- Measure staff satisfaction utilizing an electronic format
- Survey Monkey questionnaire developed fall 2014
Three Key Questions

What are we trying to improve?
- Breakdown cultural barriers between departments

How do we know a change is an improvement (quantifiable/ can be measured)?
- Increased understanding of other department
- Increased awareness of professional role in the delivery of quality patient care
- Increase awareness of role of department

What change can we make that will result in an improvement?
- Development of an orientation program for Surgical Processors in each department

PDSA Cycle 1

Plan Orientation
- Select key individuals from each department
- Select key services in the OR (Ortho/Neuro/Spine and MIS)
- Select key areas in the MDRD (Decontamn, Assembly, Sterilization and Case Carts)
- Development of brief educational session on OR protocol
- Support of medical staff (selected services)
- Consent of the surgical patient with assistance from surgeon

Quality Team

MDRD
- Case cart supervisors
- Equipment coordinators
- 22 participating

OR
- Work in all areas
- Range of expertise/seniority
- 4 participating
Plan – Survey Development

- Pre & Post Survey to measure experience using Survey Monkey electronically
- 6 key questions developed

Questions?
- What department?
- Current status?
- How long a surgical processor?
- Identify what best describes your knowledge of the OR?
- Identify what best describes your knowledge of MDRD?
- Comments?

Operating Orientation

Do
- Complete pre-survey
- MDRD staff provided orientation to OR protocol by OR Educators

Day of orientation in OR...
- Surgeon approval prior to experience in OR
- Approval of surgical patient to observe

Areas of focus
- Set up of OR scrub nurse
- Aseptic technique
- Knowledge of surgical equipment
- Knowledge of surgical procedure
- Containment of biohazard/sharps
- QA
- OR Case breakdown

MDRD Orientation

- Orientation of MDRD department
- Duration 3 days

Areas of focus
- Decontamn
- Equipment assembly
- Sterilization
- Case cart picking
Day of Orientation in MDRD

Do
- Complete pre-survey
- OR staff orientated to MDRD protocol by MDRD Educators

PDSA CYCLE 1 – Study

Post-Orientation
- Review pre and post survey of orientation
- Share findings with team
- Discuss learnings
- Explore opportunities

PDSA CYCLE 1 - Act

Assessment of orientation findings
- Development of an orientation that builds the team

Goal:
- Effective
- Efficient
- Sustainable

Survey Monkey – Post Test

Results
How long participants have been surgical processors:
- 0-5 years: 45%
- 6-10 years: 30%
- 11-15 years: 10%
- >15 years: 15%

Current status:
- Certified: 80%
- Not certified: 10%
- IAHCSMM: 75%
- CSA: 2%
“Processing & OR are part of one team...”
“...team work has power (MDRD and OR)....elevated my experience to the better status.”

Survey Monkey – Post Test Comments 2014

“Processing and OR...complete each other to the benefit of the greater good...”

“Total Knee surgery is too surgery for one day like of the”

The correct instruments and items needed for surgery in a timely fashion. Communication between common goal for best outcomes for patient...”

Findings shared with team

- Positive experience.
- Greater understanding that communication is central to providing quality patient care.
- Heightened awareness about individual role.
- Increased understanding of each department's environmental pressures and routines.
- Actively engaged in contributing to development of orientation for MDRD and OR that is sustainable.

Next steps....

Team building in the OR and MDRD is a quality process improvement that will continue to be an iterative process.

“Quality is everyone’s responsibility.” — W. Edwards Deming
Thank my Quality Team Members...

Executive Director of Surgical Services
Denise Brind

MDRD Manager
Heather Rogers

MDRD Educators
Chantelle Eaton; Moy Siow

MDRD Leaders

OR Clinical Support
Melissa Volk

Theatre Aides (Surgical Processors)

OR Nurse Clinicians

OR Nursing Staff

References


