

Perioperative Medicine Summit

Evidence Based Perioperative Medical Care

Building the Perioperative Surgical Home

Barbara Slawski, MD, MS, FACP, SFHM
Professor and Interim Chief, Division of General Internal Medicine
Chief, Section of Perioperative and Consultative Services
Medical College of Wisconsin
Milwaukee, WI

Angela F. Edwards, MD
Associate Professor of Anesthesiology
Section Head, Perioperative Medicine
Wake Forest University School of Medicine
Wake Forest Baptist Health
Winston-Salem, NC

Michael J. Englesbe, MD
Associate Professor of Surgery
University of Michigan Health System
Ann Arbor, MI

Rachel Thompson, MD, MPH, SFHM
Associate Professor, General Internal Medicine
Co-Medical Director, Enhanced Perioperative Care Program
Director, Medicine Operative Consult Clinic
Harborview Medical Center
Seattle, WA

Disclosures

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Perioperative Medicine Summit

Evidence Based Perioperative Medical Care

- 1. How do you define the Perioperative Surgical Home? Thompson
- 2. What are the goals of the Surgical Home? Englesbe
- 3. What is the current state of the Surgical Home nationally & at your institution? -- Edwards
- 4. How does a health care system approach implementation of a Surgical Home model? Thompson
- 5. What elements are necessary to make the Surgical Home model successful? Who are the key stakeholders?--- Englesbe
- 6. What are the challenges to success of a Surgical home model? Edwards

The Perioperative Surgical Home



The Medical Home Model

Concept dates to 1967 in pediatrics

Team based health care delivery model intended to provide comprehensive, coordinated, patient-centered care with accessible services to improve quality and safety

Later evolved in family medicine

Patient Centered Medical Home principles released 2007

-Collaborative effort

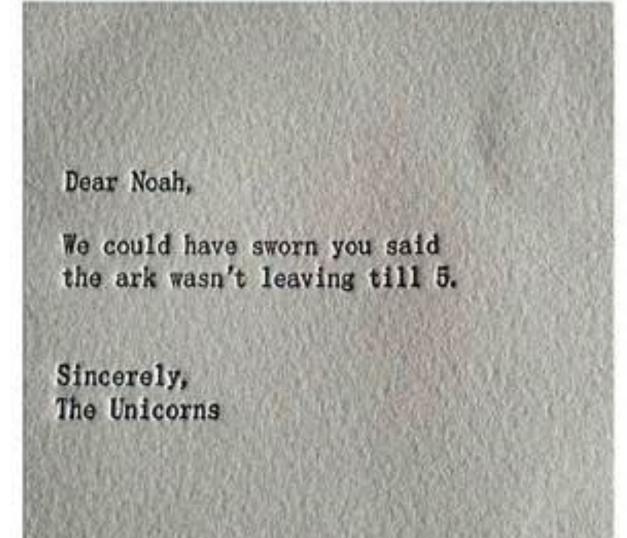
American Academy of Family Physicians

American Academy of Pediatrics

American College of Physicians

American Osteopathic Association

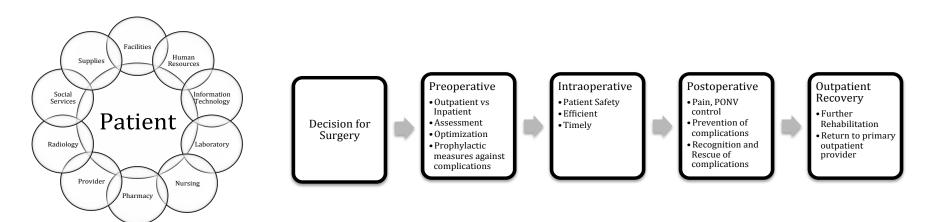
The Perioperative Surgical Home



A Surgical Home?

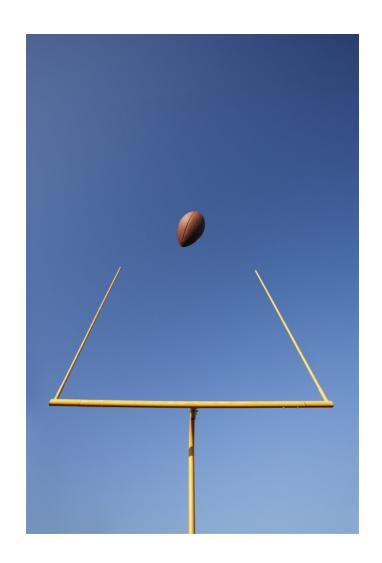


How do you define the Perioperative Surgical Home?



Evidence-Based and Standardized Practices, Data-driven QI, Transitions of Care/Care Coordination

What are the goals of a surgical home

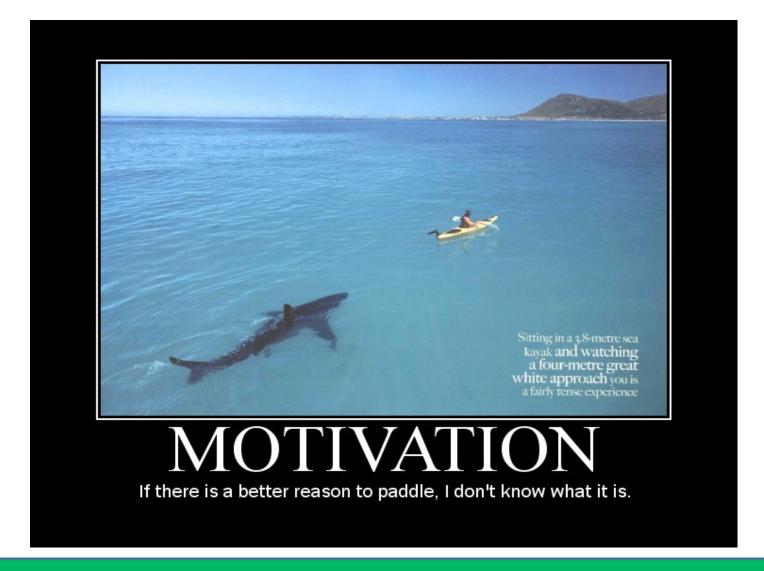




Appropriateness, communication, trust,
patient centeredness

National Patient Safety Foundation®

Unique time for engagement

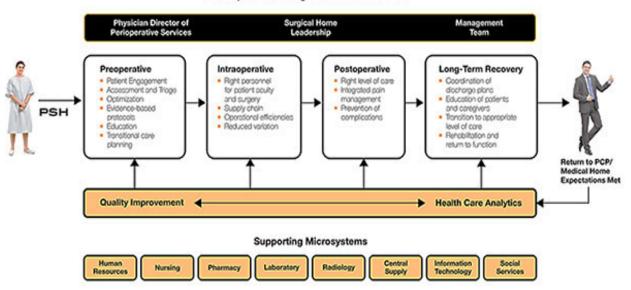


What is the current state of the Surgical Home nationally and at your institution?



Perioperative Surgical Home Overview

Perioperative Surgical Home Overview*



In the PSH model, the patient's experience of care is coordinated by a director of perioperative services, additional surgical home leadership and supportive personnel, which constitutes an interdisciplinary team. The expected metrics include improved operational efficiencies, decreased resource utilization, a reduction in length of stay and readmission, and a decrease in complications and mortality – resulting in a better patient experience of care.

"Figure developed by Daniel J. Cola, M.D.

With the PSH model, the patient's experience of care is coordinated by a Director of Perioperative Services, additional Surgical Home Leadership, and supportive personnel which constitute an interdisciplinary team. The expected metrics includes improved operational efficiencies, decreased resource utilization, a reduction in length of stay and readmission, and a decrease in complications and mortality-resulting in a better patient experience of care.

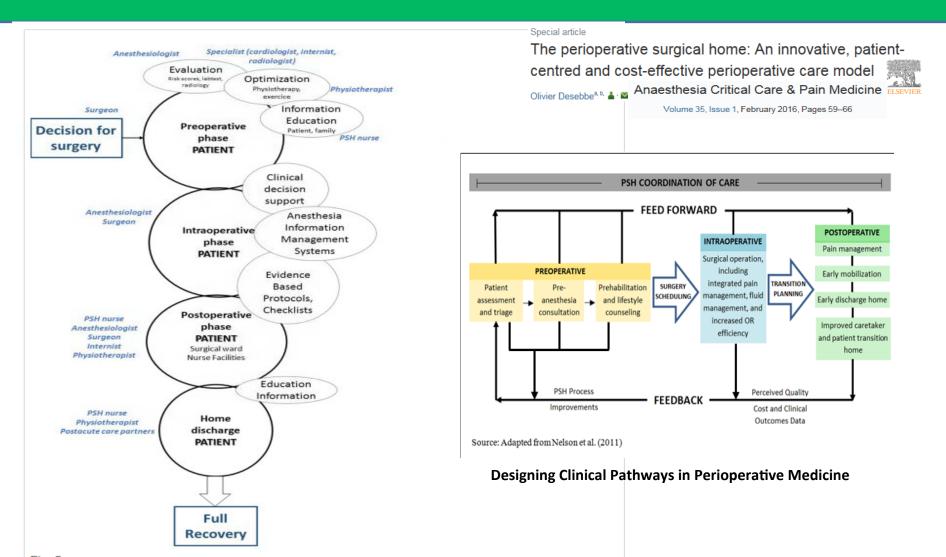


Fig. 2.

The perioperative surgical home model of care. The perioperative surgical home (PSH) is a patient-centred, institution-led, interdisciplinary and team-based system of coordinated care that guides the patient through the entire surgical continuum, from the surgical decision to full recovery; the PSH is provided by a preoperative assessment to generate a ranked and seamless continuity of care. Care providers revolve around the patient; performance measures analyse patient evolution and provide a quality improvement process.



Home

Learning Collaborative -

PSH Summit ▼

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Resources -

About PSH -

First Learning Collaborative (06/2014)

- 44 leading health care organizations from across the country to <u>define</u>, <u>pilot</u> and <u>evaluate</u> the extent to which the Perioperative Surgical Home model improves clinical outcomes, cost of care and patient experience.
- ➤ Members of collaborative engaged in the following over first 18 months:

Four national meetings
30 educational webinars
Numerous committee calls, webinars and activities
Real-time sharing data through a dedicated online community

- > Participants launched variety of PSH projects within their organizations
- > Participated in a Dedicated Partner program; continue on to the 2nd Collaborative

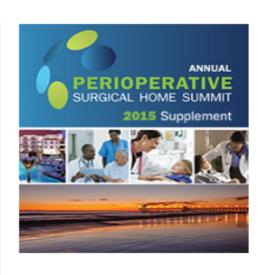
Second Learning Collaborative (04/2016)

PSH Learning Collaborative 2.0 Resource Kit

- · All about the PSH Learning Collaborative
- Participant letter
- PSH Learning Collaborative Member Map
- · ASA & Premier press release

PSH Learning Collaborative 2.0 applications due March 15.

Apply today



2015 Supplement

DOWNLOAD: Annual PSH Summit 2015 Supplement [pdf]

Jointly provided by:







> PSH Learning Collaborative Members





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Case Studies on the Perioperative Surgical Home and Related Concepts

Perioperative Surgical Home: Methodology for Coordinating Pediatric Anesthesia Care



JIII KIIkelly, MD Clinical Director, Division of Pediatric Anesthesiology Medical Director, Pediatric Perioperative Services

Jill Kinch, MSN, MMHC, APRN, CPNP-PC/AC, Assistant Director Advanced Practice Nursing

Clinical Anesthesiology

MAY 22, 2015

Comments From Readers on Advent Of the Perioperative Surgical Home

nesthesiology News recently published a series of articles highlighting potential benefits of the perioperative surgical home (PSH), in which anesthesiologists are charged with the oversight of care throughout a patient's hospital stay. Whereas some feel this is a logical step to improving clinical care, others disagree with the concept of the "perioperativist."

We have compiled below some of the comments we received on anesthesiologynews.com and via email (with some comments slightly edited for clarity). Where do you stand on this topic? We encourage you to join the conversation.

The PSH Saves Money

The American Society of Anesthesiologists (ASA) launched the PSH model to address increasing concerns about costs and outcomes associated with surgery. This patient-focused, multidisciplinary approach has anesthesiologists guiding the perioperative clinical process and overseeing patient care from the moment a procedure is booked to as many as 30 days postoperatively. Researchers cited a study showing that the PSH model can reduce total perdiem costs for total knee arthroplasty (TKA) and total hip arthroplasty (THA); specifically, from literature-reported benchmarks of \$17,588 for TKA and \$16,267 for THA down to \$10,042 and \$9,952, respectively. (See "Perioperative Surgical Home Promotes Perioperativists"; February 2015, page 8.)

THE NEED FOR THE PERIOPERATIVE SURGICAL HOME

The PSH is system for **organizing & coordinating care** that is patient-centered, **physician-led and team based**. PSH care extends from the decision for surgery until completion of recovery.

Main components of the PSH are:

- ✓ Engaged physician leadership,
- ✓ patient optimization for surgery
- ✓ timely scheduling
- ✓ evidence-informed care pathways
- ✓ expert surgical & anesthetic care
- √ facilitated prehabilitation/ rehabilitation
- ✓ measurement of patient-centered outcomes
- ✓ continuous performance improvement
- ✓ facilitated return to primary care

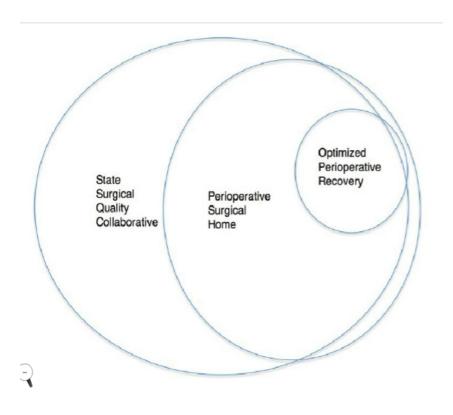




Perioperative Surgical Home Elements						
Preoperative Key Elements	Intraoperative Key Elements	Postoperative Key Elements				
 Admission through a centralized preoperative area/clinic Early preadmission assessments Centralized systems to gather health and other information about patients before hospital admission Preoperative innovations such as "prehabilitation" programs for targeted patients A triage system to identify which patients need to attend a preadmission clinic or program 	 Integrated pain management Fast-track surgery and discharge home Precise fluid management OR delay reduction techniques Increased OR efficiency through improved OR flow Scheduling initiatives to reduce cancellations and increase efficiency 	 Integrated pain management Early postoperative mobilization by physical therapy and integrated acute-care and rehabilitation care Improved coordination of care from postoperative to discharge home Improved discharge protocol Increased patient and caretaker education concerning post-discharge care 				
Use of a multidisciplinary team based clinical care processed within the hospital to coordinate complex preparation of patients before surgery	 ❖ Early Patient & Family engagement ❖ Shared Decision making & appropriate patient selection ❖ Cross Continuum Team Collaboration & Integration ❖ Health Information Exchange & Shared Care Plans 					

THE FUTURE OF SURGICAL CARE IN THE U.S.:

State Surgical Quality Collaboratives, Optimized Perioperative Care, and the Perioperative Surgical Home



The Historical Perspective of Optimized Perioperative Care and the PSH

As described elsewhere in this issue of the ASA NEWSLETTER, optimized perioperative care (OPC), also referred to as enhanced postoperative recovery, or enhanced recovery after surgery (ERAS®), is based upon standardized, evidence-based, interdisciplinary perioperative care pathways including, but not limited to:

- preoperative preparation of the patient with medical optimization
- physical preconditioning
- nutritional supplementation
- intraoperative management involving goal-directed fluid therapy
- transfusion protocols
- minimal use of opioids, NG tubes and drains
- postoperative interdisciplinary care, including:
 - pain and symptom management facilitating postoperative alimentation and mobilization for accelerated convalescence
 - focused, transitional care for 30-90 days post-discharge with structured handoff back to a patient-centered medical home or primary care physician.

Peri-Op Protocols Enhancing Recovery After Colorectal Surgery

ERAS protocols

Validated in Colorectal surgery

SEPTEMBER 2014 | VOLUME: 40:9

Preoperative

- Formal patient education & prehabilitation
- Eliminating bowel preparation
- ***Clear fluids up to two hrs before surgery
- Utilization of Regional TEA or TAP blocks preop

Intraoperative JSLS 2014;18:265-272

- Goal Directed Fluid Management
- Goal Directed Ventilator Management
- Shortened operative time
- Reduced blood loss aids recovery

Postoperative Ann Surg 2000;232:51-57

- Opioid sparing modalities
- Avoidance of NG tubes & Urethral catheters
- Early feeding, mobilization, d/c

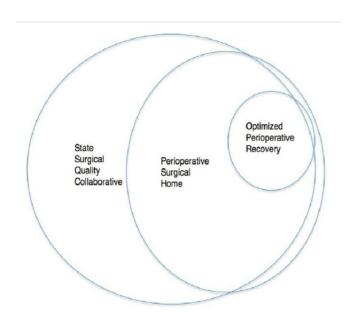
Perioperative Surgical Home

Current State (Local)

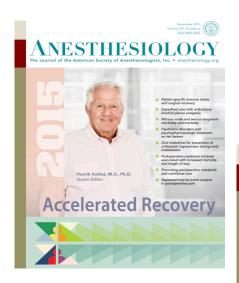
PERIOPERATIVE SURGICAL HOME

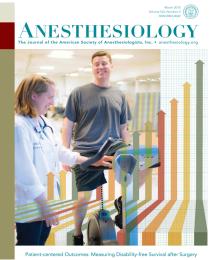
Optimized Perioperative Care:

Why Is Change So Difficult? And What Can We Do To Overcome Barriers?



Wake Forest Baptist Medical Center

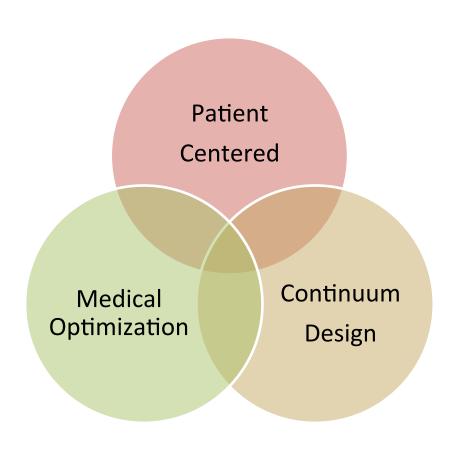




Enhanced recovery after surgery (ERAS®), "fast-track surgery," or optimized perioperative care (OPC) is an evidence-based perioperative clinical pathway developed to accelerate functional recovery of surgical patients.¹

Ideal Vision

Continuum Redesign for Surgical Patients @ WFBH



<u>Patient Centered</u> – Services are brought to our patients, aggregated in the preoperative visit, and coordinated from decision for surgery through day of surgery

Medical Optimization— Development of perioperative care pathways and prehabilitation programs for managing comorbid conditions prior to surgery

<u>Continuum Design</u>—Designed to support and educate patients through transitions in care environments, early identification of patient and family goals and needs throughout the continuum of care

Implementation

Surgical Quality Continuum

Quality -> Value



Quality Metrics

- Surgical Quality Report
 - Adverse Events
 - Length of Stay
 - Mortality
 - Readmissions
 - Inpatient Experience
- Outpatient Experience
- Commitment to Excellence
- Medical Director Goals



Safety

- Wake Wings
- OR Safety & Regulatory Committee



Surgical Navigation Center

- Validate Case Posting
- Ensure Administrative \ Payor Rules are Met (inpatient-only)
- Financial Counseling
- Care Coordination Assessment
- Pre-Anesthesia Consult
- Pre-operative Medical Management
- OR Scheduling
- QC for All Processes



Costs

- Supply Costs
- Utilization



Retrospective

- Peer Review
- Adverse Events
- Etc...



Prospective Design & Documentation

- **HCC Optimization**
- **PSI** Minimization
- Care Pathway Development (perioperative segments of pathway)















Value

Drive Quality Goals Maintain Registries

Reduce surgical errors Design for safety Ensure safe working environment TJC Compliance

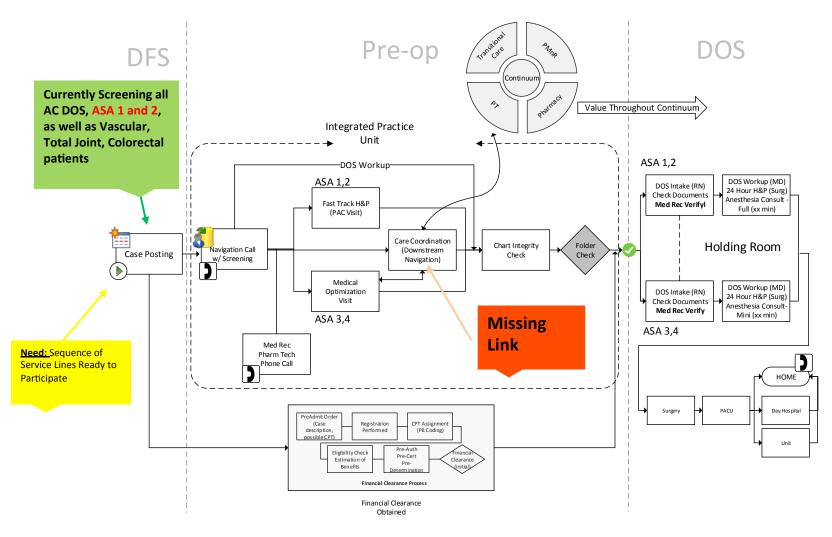
Process Owner - Surgery Scheduling Process Owner – Medical Clearance High Efficient Delivery Vehicle Operational Excellence Patient Experience

Intraoperative Supply Costs Case Time Standardization Utilization

Peer Review Physician Education Systems Improvement Maximize Reimbursement Minimize Penalties Evidence Based Care

WFBH Surgical Navigation Center Process Map

Perioperative Integrated Practice Unit



WFBH Surgical Navigation Center

Initial Challenges

> Recruitment

➤ Information Technology Enablers - Required rebuild of IT template to maximize capture of risk factors (aligned with NSQIP), development of a risk registry for all surgical patients, and navigator assessment and communication tools.

Current Challenges:

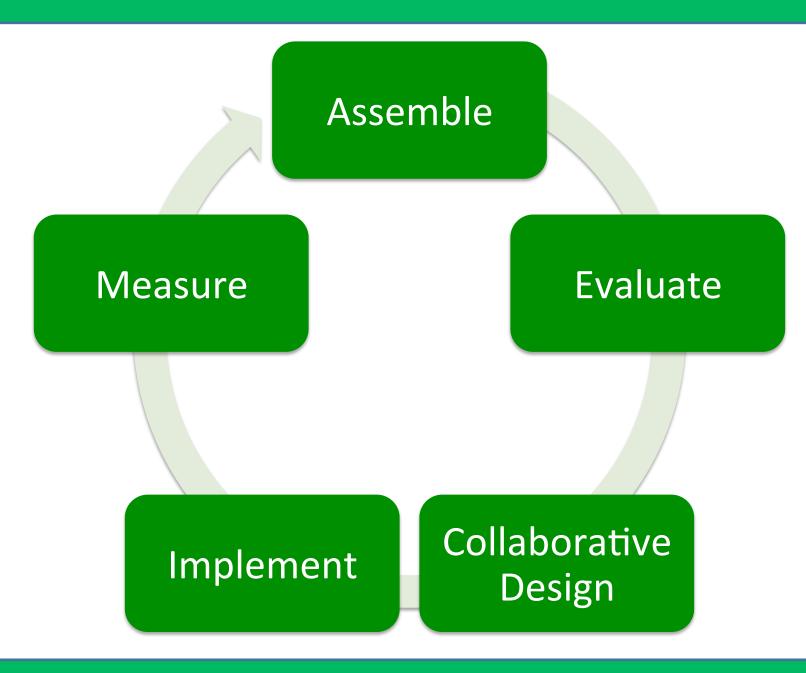
> Service line onboarding

SNC onboarding process has been streamlined and up to three service lines can be in the
process of onboarding at a time. Our greatest challenge at this point is obtaining the
commitment and thoughtful sequencing of service lines to ensure that we meet our goal
of onboarding all elective surgery cases by the end of FY16 to maximize program benefit

> Care Coordination

Coordination of care across the continuum is a core programmatic element of the SNC.
 Engaging our whole patient, including their social risk factors is a key component to successfully preparing a patient for surgery and recovery. Requires social work/nursing coordinator within SNC

How does a health care system approach implementation of a Surgical Home model?

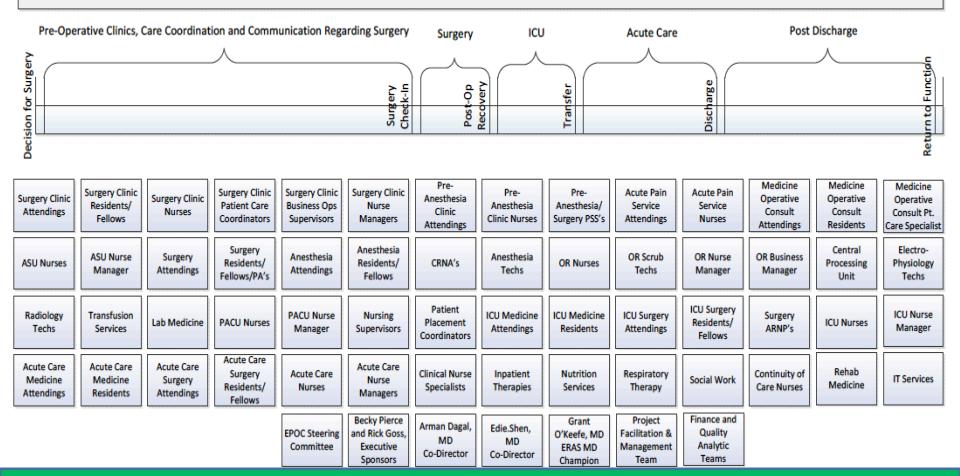


ENHANCED PERI OPERATIVE CARE PROGRAM

Scope: Continuity of care from the time of decision for surgery through to patients' post-operative return to function. Pilot program focus is on spine elective surgery patients, with intent to spread across all elective surgery

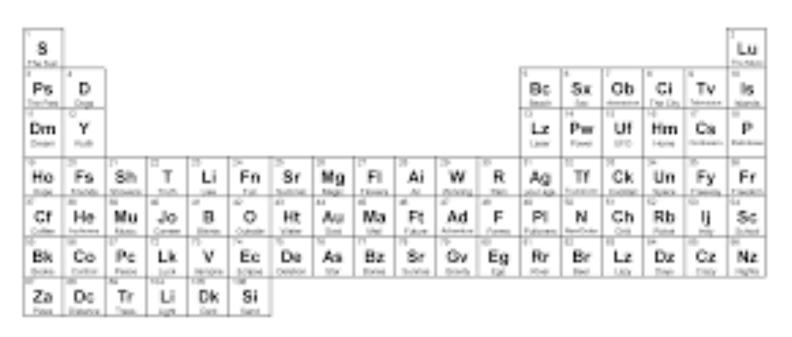
Aim: Improve patient satisfaction and outcomes. Reduce cost of care, length of stay and complications.

Function: Co-Medical Directors will set strategy for interdisciplinary team involvement in the innovation and implementation of efficient & effective (patient, work and information) flows. Will guide and educate clinicians on pathway implementation processes and resources; assuring that work interconnects with other Harborview initiatives and creates no redundancies. Will spread concepts across Harborview, with intention of becoming the reference program for UW Medicine and community.



- What elements are necessary to make the Surgical Home model successful?
- Who are the key stakeholders?

Which elements are necessary?



	Gh Cheata	Do	Kr	Di	Su	Pa	Sk Park	X	Fe	S	Lv		
N N	Dy		No	Lf	B lowly	Sn.	Hiv	Rw	Rp	Fo.	SI	Oc	Sb busing

Shared Decision Making

Risk assessment and patient empowerment

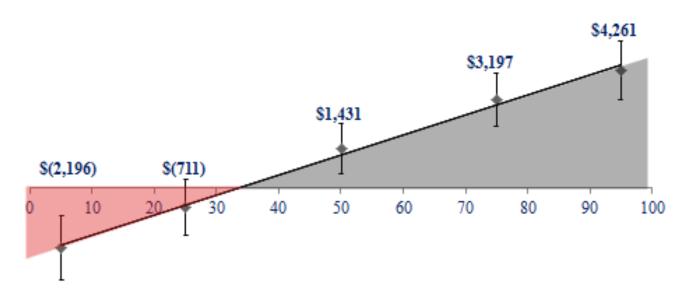


Patient Training



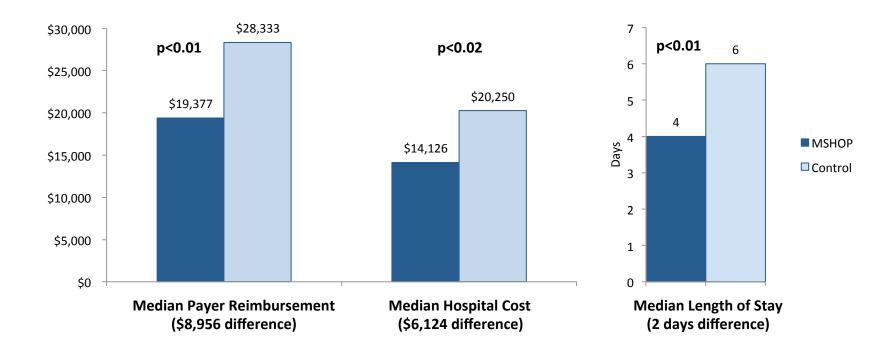
Patient Reported Outcomes Collect patient-specific recovery data

Adjusted Hospital Margin

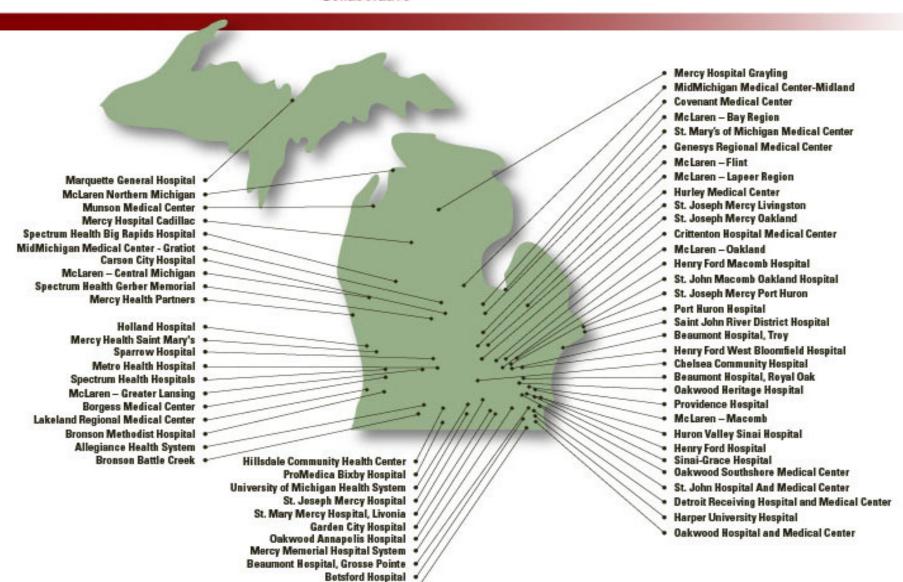


Percentile of Lean Psoas Area

Phase 3 Data - MSHOP







Henry Ford Wyandotte Hospital

 What are the challenges to the success of a Surgical home model?



Getting Started Implementation



SELECTING A STRATEGIC APPROACH



GETTING INVOLVED & CONNECTED



Continuous Process **Improvement**

Implement **Evaluate** Assess

Success of a Value-based Clinical Pathway depends upon a careful implementation strategy

Key Elements should include:

- 1. Multidisciplinary involvement
- Communication across teams: realigning to a single goal of value
- 3. Real time access to best practice & newer evidence
- 4. Patients involvement in their own care
- 5. Incentives aligned to Value Agenda
- Full transparency
- 7. Supportive Leadership that demands a culture of continual learning

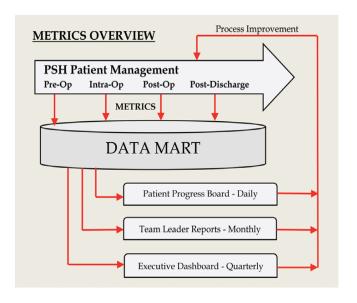
 National Academy of Sciences, IOM Wash DC: The National Academies Press 2013

Best Care at lower cost: The Path to Continuously Learning Health Care in America

#Periop2016

Success of a Value-based Clinical Pathway depends upon Performance Metrics

- ✓ Clinical Process Measures
- ✓ Safety Outcome Measures
- ✓ Patient Centered Outcomes
- ✓ Internal Efficiency Process Measures
- ✓ Economic Outcome Measures



"In order to be successful, <u>metrics</u> must be used to demonstrate to the hospital & third party payers the benefit of this innovative clinical framework"

Schwid et al. ASA Newsletter Oct 2014 Volume 78

Performance Metrics

Table 1: Clinical Process Measures Domain – Examples						
Pre-Op	Intra-Op	Post-Op	Post-Discharge			
Patient name	Cancellation within 24 hours of planned procedure	Timing of antibiotic discontinuation	Date discharge summary completed			
Patient contact info	Date of surgery	Surgical site issues	Date primary care provider is contacted			
Primary care provider contact info	Anesthesia team members	Lowest post-op hemoglobin level	Date of 2- to 3-day post-discharge phone call			
Surgeon	Type of anesthesia	Post-op transfusion	Date of surgical follow-up visit			
Date of surgical evaluation	Actual procedure	Hemoglobin at time of discharge	Date of 30-day follow-up phone call			
Date of planned procedure	Thromboembolism prophylaxis	Post-op pain management methods	Post-discharge pain scores			
Planned procedure	Prophylactic antibiotic agent and timing	Post-op pain scores	Post-discharge complications			
Date of anesthesia evaluation	Patient warming used	PONV scores	Readmission			
Patient age, weight, height, BMI	Total fluids administered	Meets ambulation benchmarks	Reason for readmission			
Pre-op pain scores	Blood loss	Meets nutritional benchmarks	Mortality			
Opiate tolerance	Blood products administered	In-hospital complications or issues				
Coexisting diseases		Return to O.R.				
Preop hemoglobin level	Transfer to floor/tele/ICU	Discharge date				
ASA Class						
Risk index for PONV						
Risk index for post-op pulmonary issues						
Risk index for post-op acute renal failure						
Risk index for post-op delirium						
Pre-op anemia therapy						
Nutrition education						
Physical therapy education	The DCI .		and Farmania O Patient Co			

The PSH: Clinical Safety, Internal Efficiency, and Economic & Patient Centered Metrics", Schwid et al. Oct 2014 Volume 78

Performance Metrics

Data collected from multiple sources

- » Patient scheduling
- » Preoperative Assessment
- » Order sets
- » Drug administration records
- » Nursing flow sheets
- » Anesthesia records
- » Inpatient & outpatient progress notes
- » Patient feedback forms
- » Ideally directly from Electronic record

Schwid et al. ASA Newsletter Oct 2014 Volume 78

Perioperative Surgical Home

- I. Coordination of care
- II. Active participation of <u>all</u> stakeholders
- III. Establishing institution specific Evidence Based Protocols
- IV. Intraoperative management (enhanced recovery protocols, Surgery, Nursing)
- V. Immediate postop management (PONV, Pain Control)
- VI. Information Technology clear documentation of effort
- Protocols will vary significantly across institutions will depend on the surgical services & local environment
- Successful models will include components of Enhanced Recovery & coordinated postoperative management



Additional Questions

- What is the future of the surgical home model?
- How do you think surgical, anesthesiology and medical societies will be able to collaborate to produce an effective model?
- How will reimbursement models (bundled care vs. fee for service) affect the future of the surgical home?