

DECREASING HOSPITAL LENGTH OF STAY AND TRANSITIONING TO OUTPATIENT JOINT PRACTICE

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OBJECTIVES

Understanding Economic Pressures

Understanding Physiology

Patient factors/Individualization

Optimal Outcome = Team & Education

Create a Process and Treatment Map to help Guide Care



MULTIPLE COST CENTERS

ORIGINS OF THE PROGRAM

Goals

Help the patient return to functional state

Value= Improvement/Cost



COST

- Global Hospital Fee \$25,000-\$35,000
- Inpatient +/- \$900/day
- SNF +/- \$500/day
- 1 visit outpatient \$100-\$200
- 1 visit HHPT \$150

Outpatient Joint Replacement

Dr. Matt Bernard

GOALS

1. Better Care
2. Lower Cost
3. Early return to life and work
4. Success in changing medical environment

Patient Introduction



Non-operative Care

- Sustainable for years
- Lower risk profile
- Activity Modification
- Oral NSAIDS
- Injections
 - Corticoids
 - Viscosupplementation
- Bracing
- Physical Therapy
- RTC - 3 months - sooner if failed by
- AAOS CPG & Calculator

Office Visit

History, Physical, and X-rays
Treatment Options

Identify the Surgical Candidate

- Risk Stratification
 - Medical/ cardiac Clearance
 - Social Situation
 - Pre-op Functional Score
 - Harris Hip Score
 - Knee Society Score
 - ASA Class 3-4
- <http://riskcalculator.facs.org/>

Pre-Operative Workup

- Risks vs. Benefits Education
- Pre-op Medical Optimization
- HHPT in home visit
- Discuss Perioperative options & predetermined options and techniques
- Financial Counseling/ Liaison to determine cost burden of these decisions on the patient given their insurance
- Conceptual Pre-Screen for complications vs. manage complications

Surgical Options - UKA/TKA/THA

Choices For:	Amnesia	Nausea	Blood Management	Technique	DVT Prophylaxis
General	• Propofol	• Pre-emptive	• Tranexamic Acid	• TKA - Patient specific instrumentation	• Low-dose to Aspirin
Spinal	• Spinal	• Toradol	• Fenestration Drain	• THA - Miniposterior approach	• Mechanical SCDs with aspirin
Pain Control	• Epidural (TKA/THA)		• +/- Toumiquet for TKA	• Waterproof dressing (TKA/THA)	
	• Femoral Nerve Block (TKA)			• No Staples	
			NSAID	• 12 ^{hr} meds	Narcotics
			• Celebrex	• MS Contin	• 4 ^{hr} meds
				• OxyContin SR	• Oxycodone
					• Hydrocodone

Fast Track Home

4.6 Hours

- All RX & DME Setup Pre-Op
- HHPT Same day in home
- Close communication with Surgeon & Office
- Early Ambulation in comfortable setting
- Comfort of your bed, your shower, your bathroom, and your remote control
- Self-directed pain management

Fast Track +1 Night

1 Night

- Similar prearrangements for HHPT vs. Outpatient PT
- RX/DME Prearranged
- Allows for POD #1 Evaluation by MD/PT for medical/physical comorbidities that prevent safe at home care
- Guards against readmission on borderline candidates

Traditional In-Patient

2.3 Days

- Hospital Directed Case Management
- Inpatient PT or Sling/Health South
- Skilled Nursing Facility
- Allows for prolonged monitoring/intervention of medical comorbidities/complications (anemia, cardiac disease, diabetes, sleep apnea)
- Nursing directed pain control including access to IV narcotics
- In hospital 2x per day PT

Follow Up

- Constant Contact
- Phone Communication 24/7
- Follow up visits @ 2wks/6wks/3mos if necessary
- Education/Education/Education
- Pain management & Appropriate Refills
- Intervene when necessary (readmit to hospital/office visit)
- Early ambulation and pain control lead to earlier return to work/le

Surveillance

- Data Collection
- Quality Management
- Critical Measures (readmit rate, in-hospital functional scores- Harris Hip score/Knee Society Score)
- Financial Benchmarks (Hospital Costs/Patient Costs/Payor Costs/Employer Costs)

Future

- Bundled Care
- Competitive Hospital Rate
- Direct to Payor Negotiations



PATIENT IDENTIFICATION

- 
- Risk Stratification
 - Medical/Cardiac Clearance
 - Social Situation
 - Pre-op Functional Score
 - Harris Hip Score
 - Knee Society Score
 - ASA Class SF-36

<http://riskcalculator.facs.org/>

NSQUIP RISK CALCULATOR

Procedure 27447 - Arthroplasty, knee, condyle and plateau; medial AND lateral compartments with or without patella resurfacing (total knee arthroplasty) Clear


Begin by entering the procedure name or CPT code. One or more procedures will appear below the procedure box. You will need to click on the desired procedure to properly select it. You may also search using two words (or two partial words) by placing a 'v' in between, for example: "cholecystectomy + cholangiography"

[Reset All Selections](#)


Are there other potential appropriate treatment options? Other Surgical Options Other Non-operative options None

*Please enter as much of the following information as you can to receive the best risk estimates.
A rough estimate will still be generated if you cannot provide all of the information below.*

Age Group Under 65 years	Diabetes Oral
Sex Female	Hypertension requiring medication Yes
Functional Status Independent	Congestive Heart Failure in 30 days prior to surgery No
Emergency Case No	Dyspnea No
ASA Class Healthy patient	Current Smoker within 1 Year No
Steroid use for chronic condition No	History of Severe COPD No
Ascites within 30 days prior to surgery No	Dialysis No
Systemic Sepsis within 48 hours prior to surgery None	Acute Renal Failure No
Ventilator Dependent No	BMI Calculation: Height: 65 in / 165 cm Weight: lb / kg
Disseminated Cancer No	



Surgical Risk Calculator



Home
About
FAQ
ACS Website
ACS NSQIP Website

Procedure: 27447 - Arthroplasty, knee, condyle and plateau; medial AND lateral compartments with or without patella resurfacing (total knee arthroplasty) [Change Patient Risk Factors](#)


Risk Factors: Diabetes (Oral), HTN, Over Weight

Note: Your Risk has been rounded to one decimal point.

Outcomes	Your Risk	Average Risk	Chance of Outcome
Serious Complication	1.3%	3.0%	Below Average
Any Complication	1.9%	3.9%	Below Average
Pneumonia	0.0%	0.2%	Below Average
Cardiac Complication	0.0%	0.2%	Below Average
Surgical Site Infection	0.6%	1.0%	Below Average
Urinary Tract Infection	0.3%	0.6%	Below Average
Venous Thromboembolism	0.5%	0.5%	Below Average
Renal Failure	0.0%	0.1%	Below Average
Readmission	1.2%	2.7%	Below Average
Return to OR	0.5%	0.9%	Below Average
Death	0.0%	0.1%	Below Average
Discharge to Nursing or Rehab Facility	2.0%	9.5%	Below Average
Sepsis	0.0%	0.2%	Below Average

Predicted Length of Hospital Stay: 1.5 days

How to Interpret the Graph Above:



Your Risk: Average Patient Risk

Surgeon Adjustment of Risks

This will need to be used infrequently, but surgeons may adjust the estimated risks if they feel the calculated risks are underestimated. This should only be done if the reason for the increased risks was NOT already entered into the risk calculator.

1 - No adjustment necessary

Back
Continue

Step 3 of 4

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PRE-OP PLANNING

Pre-Operative Workup

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- HHPT in home visit
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INTRA OPERATIVE

Surgical Options : UKA/TKA/THA

Choices For:

Prescribed
Meds

Technique

- TKA - Patient specific instrumentation
- THA - Miniposterior approach

Implants

- Journey II BCS with Verilast (TKA)
- SMF with Verilast (THA)
- Synergy with Verilast (THA)

Blood Management

- Tranexamic Acid
- Reinfusion Drain +/- tourniquet for TKA

DVT Prophylaxis

- Lovenox to Aspirin
- Mechanical SCDs with aspirin

Aquacell

- Waterproof dressing (TKA/THA)
- No Staples - All Sutures on inside
- Shower is OK day of surgery



Anesthesia

- General
- Spinal

Pain Control

- Exparel (TKA/THA)
- Femoral Nerve Block (TKA)

Inflammation

- CELEBREX**
- Resume Home NSAID

Nausea

- Phenergan®
- Zofran®

Muscle Spasms

- Flexeril®
- Robaxin®

Narcotics

12° meds

- MS Contin®
- OXYCONTIN** SR

4° meds

- Oxycodone
- Hydrocodone

Constipation

- Stool Softener
- Laxative

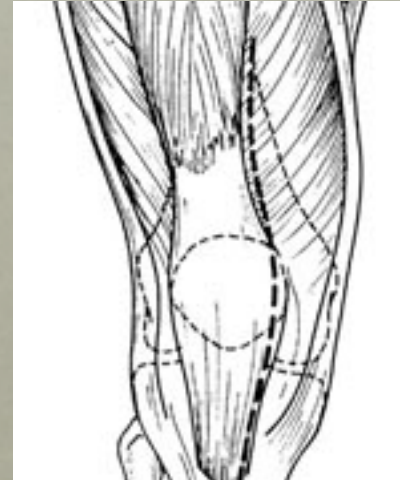
DISCHARGE PLANNING



POST OP TKA/THA

What have we done?

- Cut through several Layers
- Created controlled fracture
- Altered/Restored joint mechanics
- Set off the inflammatory cascade
- Hurt the Patient



RECOVERY

- Pain
- Inflammation
- Social factors
 - Support system
 - Mental Health
- Motivation
- Mental Health

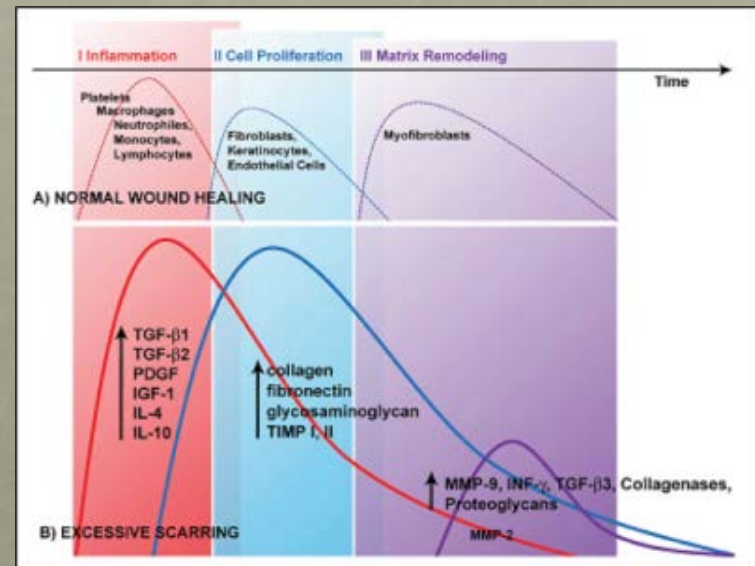
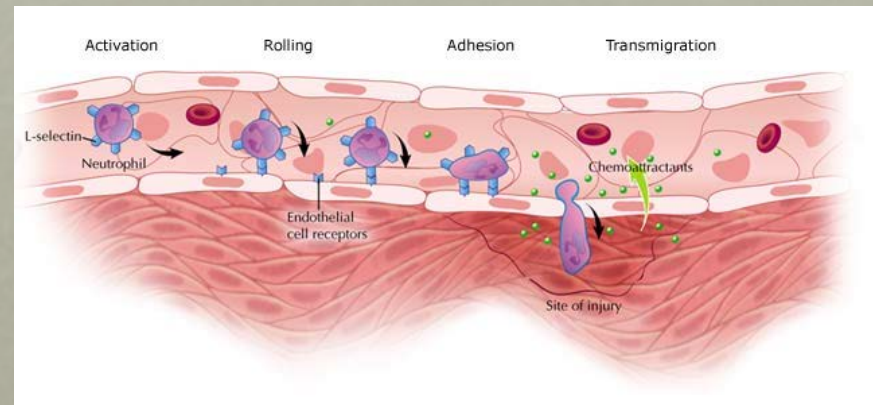
COACH/COUNSELOR/ADVOCATE/THERAPIST

- Mental state
- Motivation
- Wound
- Progress



UNDERSTANDING INFLAMMATION

- 0-2 weeks
- 2-6 weeks
- 6 weeks & beyond



OPTIMAL OUTCOMES

- Healthy & Happy patient
- Educated & Integrated team
- Low cost/High quality care



PROGRAM MATURATION

- 2014 Chattanooga area 1st outpatient total joint
- 2018 Chattanooga area 1st surgery center total joint
- 2022 70% hospital and surgery center outpatient rate
- 2023? 99% surgery center based joint practice



THANK YOU

