

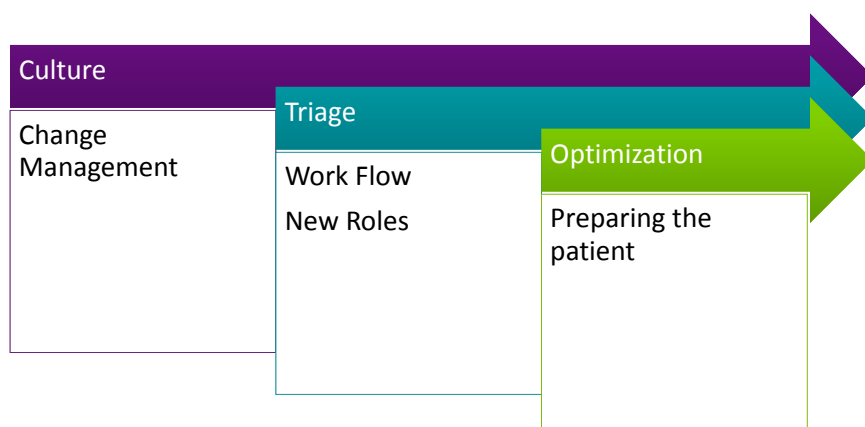
# Implementation of a PSH Model in a Preoperative Clinic

Les Garson, MD  
Department of Anesthesiology & Perioperative Care  
June 27, 2015



UC Irvine Health

## Key points for a PSH Pre-Op Clinic...



## What is a typical 'Preoperative Clinic' ?

- ✓ Provide 'Clearance' for surgery
- ✓ Focused on 'getting the patient' into the O.R.
- ✓ Batteries of tests
- ✓ No escalation of care or management based on any sort of Triage system
- ✓ Low 'same day' cancellation rates as 'the gold standard'



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## Consultations from colleagues...



"Cleared for surgery  
Non smoker,  
Illegible note..."

Insufficient  
information



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## The Perioperative Surgical Home

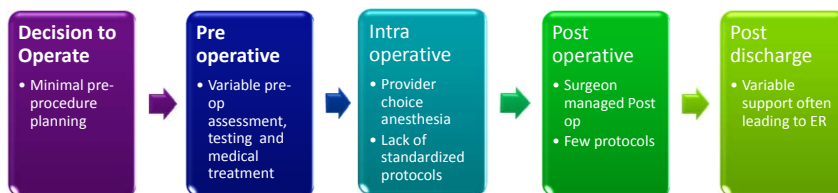
# PSH ??



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### Traditional



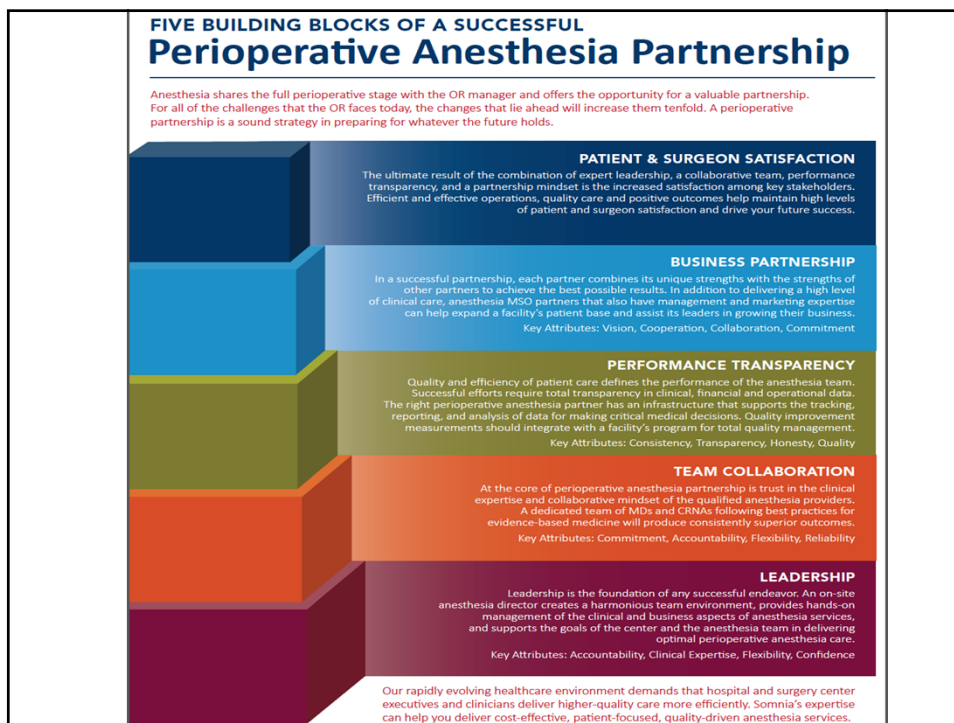
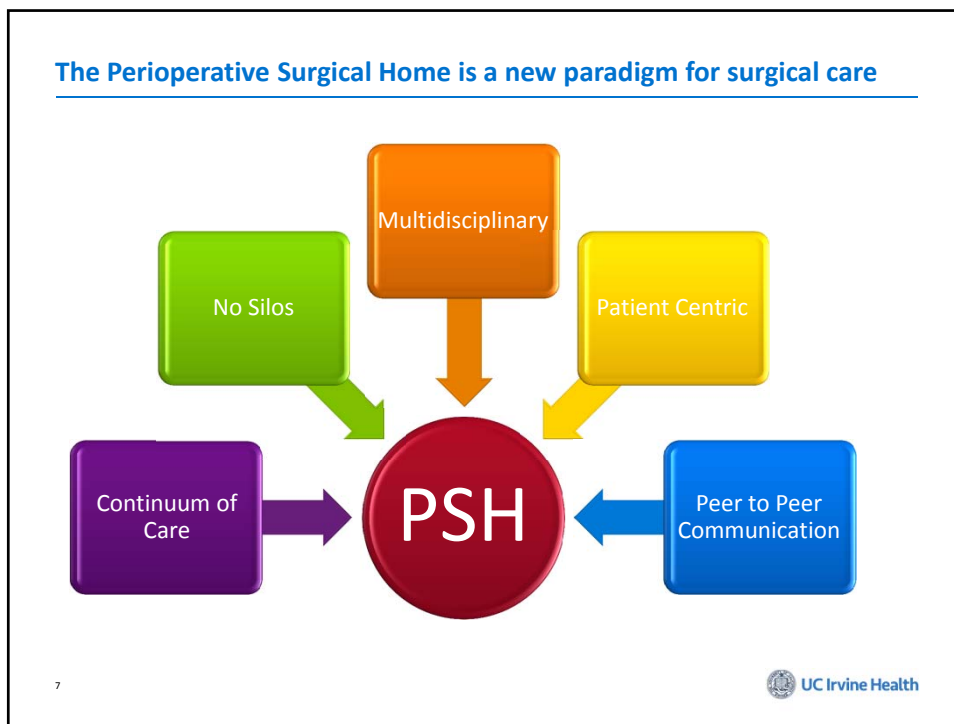
### Perioperative Surgical Home

Seamlessly Integrated, protocolized care at each phase of care



Shared Decision Making,  
Patient Centered Care





## Preoperative Period



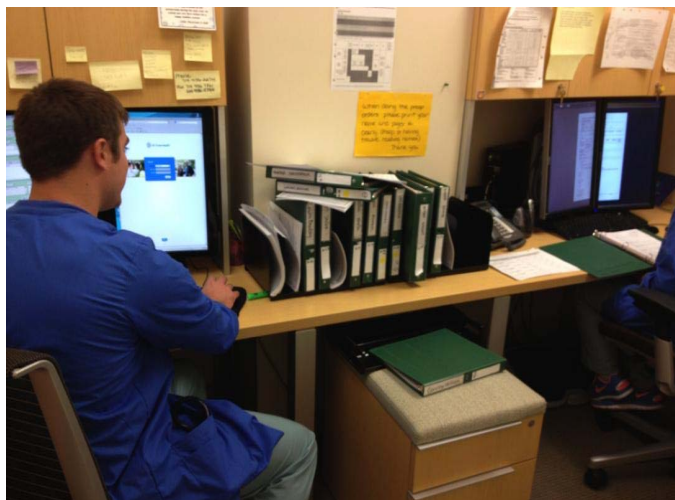
Prehabilitation	Patient Self Assessment Tool	Using AIMS to Determine Risk	Risk Calculator
<ul style="list-style-type: none"> <li>• Smoking cessation</li> <li>• Coaching</li> <li>• Fitness</li> <li>• Diabetes control</li> <li>• HTN control</li> <li>• Compliance to Medication</li> </ul>	<ul style="list-style-type: none"> <li>• Patient engagement</li> <li>• Decreased cost</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical Pathways</li> <li>• Best evidence</li> </ul>	<ul style="list-style-type: none"> <li>• Used to inform patients</li> <li>• Shared decisions making</li> </ul>

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## In the old days (2 years ago)...

- Physicians performing data entry
- Parallel Systems of paper and EMR



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Urvine Health

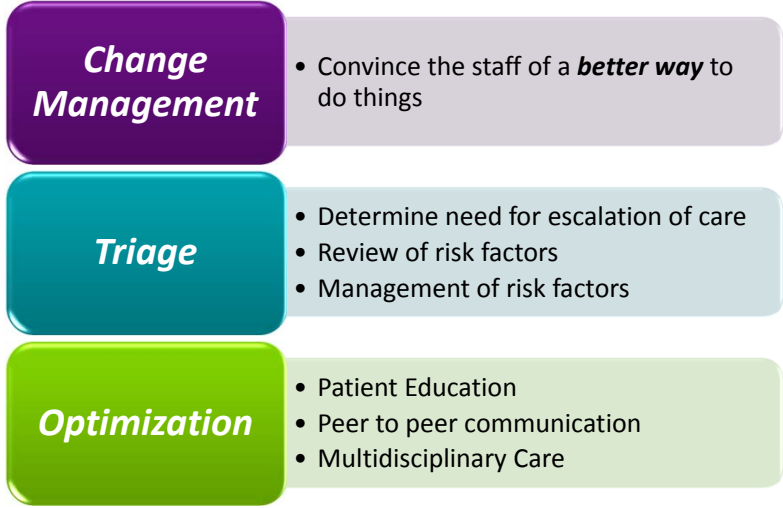
### Old evidence...

Preoperative Testing Indications	BMP	CBC	CXR	ECG	Blood Glucose	LFTs	PFTs	PT/PTT	Thrombocytopenia	Diabetes	PFTs	Sleep Study
	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)	12)
LOW-RISK SITUATIONS	NONE											
Minor Surgical Procedures (5)	NONE											
Ambulatory Surgery in ASA 1 Patients	NONE											
CARDIOVASCULAR DISEASE												
Coronary Disease	X	X	X									
Congestive Heart Failure	X	X	X									
Ischemic Heart Disease	X	X	X									
HEPATIC DISEASE												
Severe Liver Disease (6)	X	X			X		X					
METABOLIC AND ENDOCRINE DISEASE												
Diabetes Mellitus (2)	X	X	X	X								
RENAL DISEASE												
Renal Insufficiency (Cr > 2) (7)	X	X	X									
REPRODUCTIVE STATUS												
Females of Childbearing Age (4)							X					
DRUG THERAPY												
Chemotherapy (within last 2 months)	X											
Coumadin or Heparin therapy	X						X					
Diuretic or ACE Inhibitor therapy	X											
Steroid therapy (cortisone, dexamethasone)					X							
Digoxin or Phenytoin therapy	X									X		
SURGICAL PROCEDURE												
Cardiac or Thoracic surgery	X	X	X	X						X		
Major Surgical Procedure (5)	X	X								X		
Major Vascular Surgery	X	X	X							X		
Pulmonary Resection	X	X	X	X						X	X	X
SUSPECTED OBSTRUCTIVE SLEEP APNEA												X

BMP = basic metabolic panel      CBC = complete blood count  
 LFTs = liver function tests      CXR = chest x-ray  
 PFTs = pulmonary function tests  
 PT/PTT = prothrombin time/partial thromboplastin time

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### A New Model of Care



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## Change Management



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### The 8-Step Process of Successful Change

#### SET THE STAGE

- 1. Create a Sense of Urgency.**  
Help others see the need for change and the importance of acting immediately.
- 2. Pull Together the Guiding Team.**  
Make sure there is a powerful group guiding the change—one with leadership skills, bias for action, credibility, communications ability, authority, analytical skills.

#### DECIDE WHAT TO DO

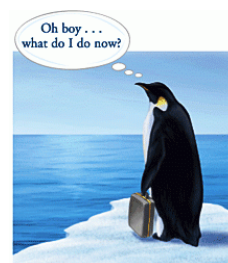
- 3. Develop the Change Vision and Strategy.**  
Clarify how the future will be different from the past, and how you can make that future a reality.

#### MAKE IT HAPPEN

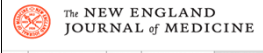
- 4. Communicate for Understanding and Buy-in.**  
Make sure as many others as possible understand and accept the vision and the strategy.
- 5. Empower Others to Act.**  
Remove as many barriers as possible so that those who want to make the vision a reality can do so.
- 6. Produce Short-Term Wins.**  
Create some visible, unambiguous successes as soon as possible.
- 7. Don't Let Up.**  
Press harder and faster after the first successes. Be relentless with instituting change after change until the vision becomes a reality.

#### MAKE IT STICK

- 8. Create a New Culture.**  
Hold on to the new ways of behaving, and make sure they succeed, until they become a part of the very culture of the group.



# How difficult change is...



**The Value of Routine Preoperative Medical Testing before Cataract Surgery**

**2009**

**2015**

**Preoperative testing before cataract surgery occurred frequently and was more strongly associated with provider practice patterns than patient characteristics!**

**Lochrane brief**

**Preoperative Testing for Patients Undergoing Cataract Surgery**

**Clinical Question**

**Evidence-Based Answer**

**Practice Pointers**

**2009**

**2015**

**Preoperative testing before cataract surgery occurred frequently and was more strongly associated with provider practice patterns than patient characteristics!**

# Triage





## Triage of Charts

	AICD/PM Interrogation	A/Q Negative	A/Q Bold Font	A/Q Bold Font and Hx Difficult Airway
<b>** Cataracts **</b>	Within 12 months	DataEntry Only	DataEntry Only	DataEntry Only
<b>*Minor Surgery* OR 2<sup>nd</sup> Procedure within 6 Months</b>	Within 12 months	DataEntry Only	DataEntry and Phone Interview	DataEntry, Phone Interview and CPC Visit or Telemedicine
<b>*Major Surgery*</b>	Within 6 months	Data Entry and Phone Interview	DataEntry, Phone Interview, Consult (if needed; Hospitalist, Cardiologist, or other Specialist)	DataEntry, Phone Interview, Consult (if needed) and CPC Visit or Telemedicine
<b>Pediatric Patients</b>	N/A	DataEntry and Phone Interview	DataEntry and Phone Interview	DataEntry, Phone Interview and CPC Visit or Telemedicine

\*See Appendix A

\*\*See GHEI/OSS Ophthalmology Protocol

## Cascade of Evaluation and Responsibility

	Educational /Triage	Outpatient Orthopedic Procedures	Laminectomy /Discectomy	Anterior/ Posterior Cervical Fusion	Simple Lumbar Fusion	Complex Thoracic/ Lumbar Fusion
ASA 1-2	MA	MA	NP	NP	NP	NP
ASA 3	MA	NP	NP	NP	NP	NP
ASA 4	MA	NP	NP	NP	MD	MD

**Preop testing is triaged as well...**

### Preoperative Testing Grid

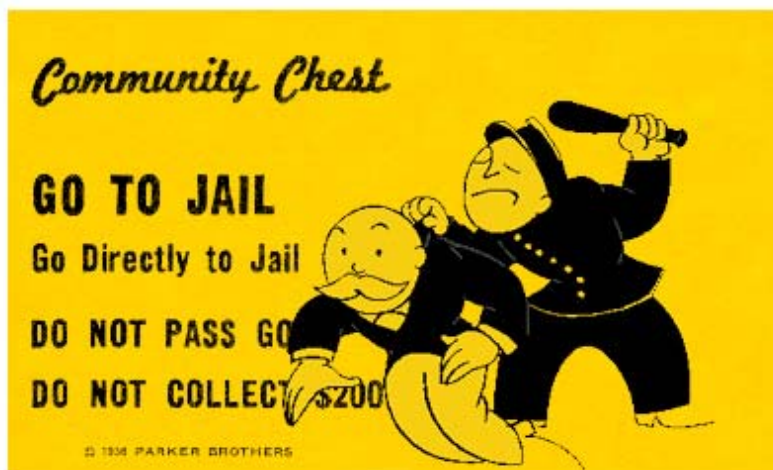
**Bleeding Questionnaire:**

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

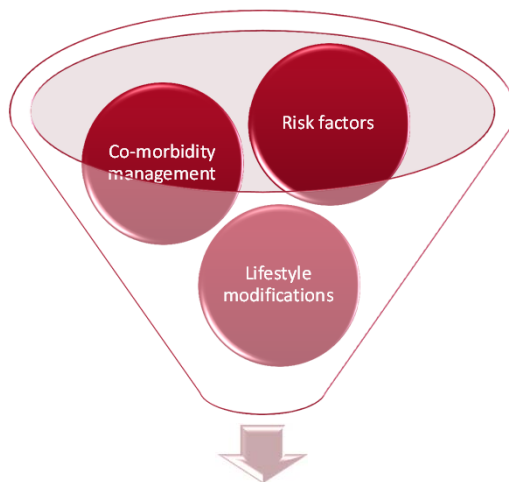
Note: If a patient is actively taking an antiplatelet drug (NSAIDs, ASA) up until the time of surgery, this may increase the risk of bleeding regardless of results of coagulation studies.

	Urine Preg Test	PT/PTT/INR	CBC	Type & Screen	BMP	HgA1C	EKG	CXR	Other Disease/ Procedure Specific Studies
Minor Surgery	Low Bleeding Risk	<input type="checkbox"/> *(Consider if positive bleeding questionnaire)					<input type="checkbox"/> M, F>60		Abnormal lung exam
	High Bleeding Risk	<input type="checkbox"/>	<input type="checkbox"/>						
Major Surgery	Low Bleeding Risk	<input type="checkbox"/> *(Consider if positive bleeding questionnaire)	<input type="checkbox"/> *(Consider if positive bleeding questionnaire)				<input type="checkbox"/> M>50, F>60		Active Pulmonary process
	High Bleeding Risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Diabetes, Hx. of Renal Failure, HTN, Patient on Diuretics					<input type="checkbox"/> (**)	Yes (only for Diabetics & Major surgery)			Cardio-thoracic, Vascular thoracic surgery
Reproductive Age	<input type="checkbox"/>								See Appendix A

### Triaging... Is our 'Do Not Pass Go' card



## Optimization



The new way of preparing **high risk** patients

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## Risk factors for....



Delirium



Pulmonary Complications



Renal Complications

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## Protocols

### Cardiac Management

- -ACC/AHA 2014 Guidelines
- - BMS/DES protocols
- - Pacemaker/AICD evaluation and management

### Diabetes Management

- -Perioperative glucose management
- -HgA1C

### Perioperative Evaluation of the Geriatric Patient

- - Organ based preoperative risk assessment
- - Nutritional assessment
- - Functional assessment
- - Neuropsychological assessment

### Shared Decision Making

- American College of Surgeons National Surgical Quality Improvement Program® (ACS NSQIP®)

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## Optimization



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## PSH OPTIMIZATION CHECKLIST

- ! Nutrition!
- \_\_ Clear Liquids After Midnight until 12 hours before coming in for surgery!
- \_\_ Nutrition Questionnaire for all Major surgery/Complex procedures!
- \_\_ BMI Recorded!
- ! Medication Reconciliation!
- ! Patient Education!
- \_\_ Education Booklet provided to patient!
- \_\_ EMMI Video!
- \_\_ UCI Education Class!
- ! Anemia Management!
- \_\_ Not necessary if Preop Hb > 12 mg/dl!
- \_\_ Refer to PCP for adjunctive management for referral to UCI Hematology/Infusion Center!
- ! Respiratory!
- \_\_ Evaluated for Pulmonary risk Triggers!
- \_\_ Incentive Spirometry Equipment Dispensed!
- \_\_ Smoking Cessation Instruction!
- ! Evaluated for Renal Risk Triggers!
- ! Evaluated for Delirium Triggers!
- ! Diabetes Status!
- \_\_ HgA1C checked!
- ! Pre- and re- habilitation
- \_\_ Walking Exercise Program Recommended
- \_\_ Physical Therapist (PT) techniques with mobility, walking, and transfer training and special positioning precautions if appropriate
- \_\_ Occupational Therapist (OT) proper techniques in dressing, grooming, toilet/tub transfers and activities of daily living (ADL) modifications if appropriate
- ! MRSA Status
- \_\_ Nasal Swab obtained
- ! Opiate Use
- \_\_ Naive
- \_\_ Chronic, if yes, communication with Pain specialist
- ! DVT prophylaxis/Anticoagulant Status
- ! Discharge planning
- \_\_ Patient will be going:
  - \_\_ Home
  - \_\_ Skilled Nursing Facility
  - \_\_ Other
- \_\_ Identification of Best Pharmacy
- \_\_ Identification of Best SNF for patient in network
- \_\_ Identification of best number to reach patient at post operatively
- \_\_ Home Health Needs Assessed
- \_\_ Durable Medical Equipment Needs (eg.. walker, crutches, cane, bedside commode)
- ! Language Barrier Considerations
- \_\_ Not applicable
- ! Identification of patient's home environment/support system during perioperative process
- \_\_ Family Member
- \_\_ Other
- ! Transitions in Care
- \_\_ Identification of PCP (phone number & Fax Number)
- \_\_ Identification of Pain Provider (phone number & Fax Number)

### e-PAT

Department of Anesthesiology & Perioperative Care, UC Irvine | May 1, 2015

Name	Date of Birth	MRN	Survey Date	Approved By	Viewed By
[REDACTED]	8/8/1999	2379208	3/12/2015 9:26:16 AM	eaicala	eaicala
Bigtest, Howard	11/1/1955	123456	3/14/2015 10:55:13 AM	hschwid	lgarson
[REDACTED]	11/13/1968	12312312	3/6/2015 2:09:52 PM	cseilas	cseilas
[REDACTED]	9/14/1937	1240333	2/12/2015 9:02:59 AM	eaicala	eaicala
[REDACTED]	10/22/1946	0673254	3/18/2015 3:01:22 PM	eaicala	eaicala
[REDACTED]	10/30/1959	1292444	3/25/2015 3:06:28 PM	eaicala	eaicala
TestPatient	2/26/1984	1234567	3/24/2015 9:52:51 PM	cseilas	cseilas
[REDACTED]	11/30/1964	2370146	2/18/2015 3:33:16 PM	eaicala	eaicala
[REDACTED]	11/9/1983	1111111	3/16/2015 11:27:17 AM	gloverm	jgilliam
[REDACTED]	11/9/1983	22334455	2/26/2015 1:44:07 PM	gloverm	gloverm

E-PAT Viewer app displays the list of preoperative evaluations. The icon on the right shows one of four states: “Ready for Data Entry”, “Data Entry Completed”, “Needs Phone Call”, “Phone Call Completed”.

### Other ... Non traditional aspects of care

Patient  
expectation  
management

Patient  
engagement

DME  
confirmation

PT/OT  
‘Pre-hab’ and  
Re-hab

## Operational aspects of a PreOp clinic transitioning to a PSH Model

### Workflow

- Who does what?
- New roles?

### New responsibilities

- Surgical clinics? Preoperative Clinic?

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## OUR expectations are different..

*Clearance* is not enough anymore...

Patients are expected to be **PREPARED** for surgery, recovery, and to return to as close to baseline Preoperative function as quickly as possible



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