

# **Achieving Optimization and Functional Outcomes for the Orthopedic Patient**

**Chris Vannello, Director of Quality  
Improvement, Rothman Institute**



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# Goals

- **Provide high quality care**
- **Improve clinical and functional outcomes**
- **Integrated care experience**
- **Reduce avoidable complications and readmissions**
- **Improve safety**
- **Eliminate waste and be more efficient**
- **Outcome based demand matching level of care**
- **Cost reduction**
- **Data driven decisions**



# Issues

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- **Payers are encouraging patients to make value driven choices**
- **Payers are selecting surgeons that they consider high value, low cost providers based on their outcomes**
- **Payment incentives focus on quality over quantity**

The National Research Council

**Joint Commission**  
on Accreditation of Healthcare Organizations

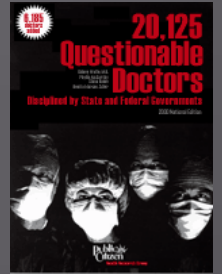
**SOLUCIENT**  
TOP HOSPITALS

**HEALTH GRADES**  
THE HEALTHCARE QUALITY DIVISION

Nursing Home Quality Initiative  
CMS Updates Hospitals on HCA



American Hospital Association McKesson  
**Quest for Quality Prize™**  
Honoring Leadership and Innovation  
in Patient Care Quality, Safety, and Commitment



**NAHQ**  
National Association  
for Healthcare Quality

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Healthcare Division

THE ROBERT WOOD JOHNSON FOUNDATION

*Improving Chronic Health Conditions*

**Quality Care**

**COMPARE YOUR CARE**  
Helping you take charge of your health care

**Baldrige National Quality Program** excellence

**NCQA** Measuring the Quality of America's Health Care

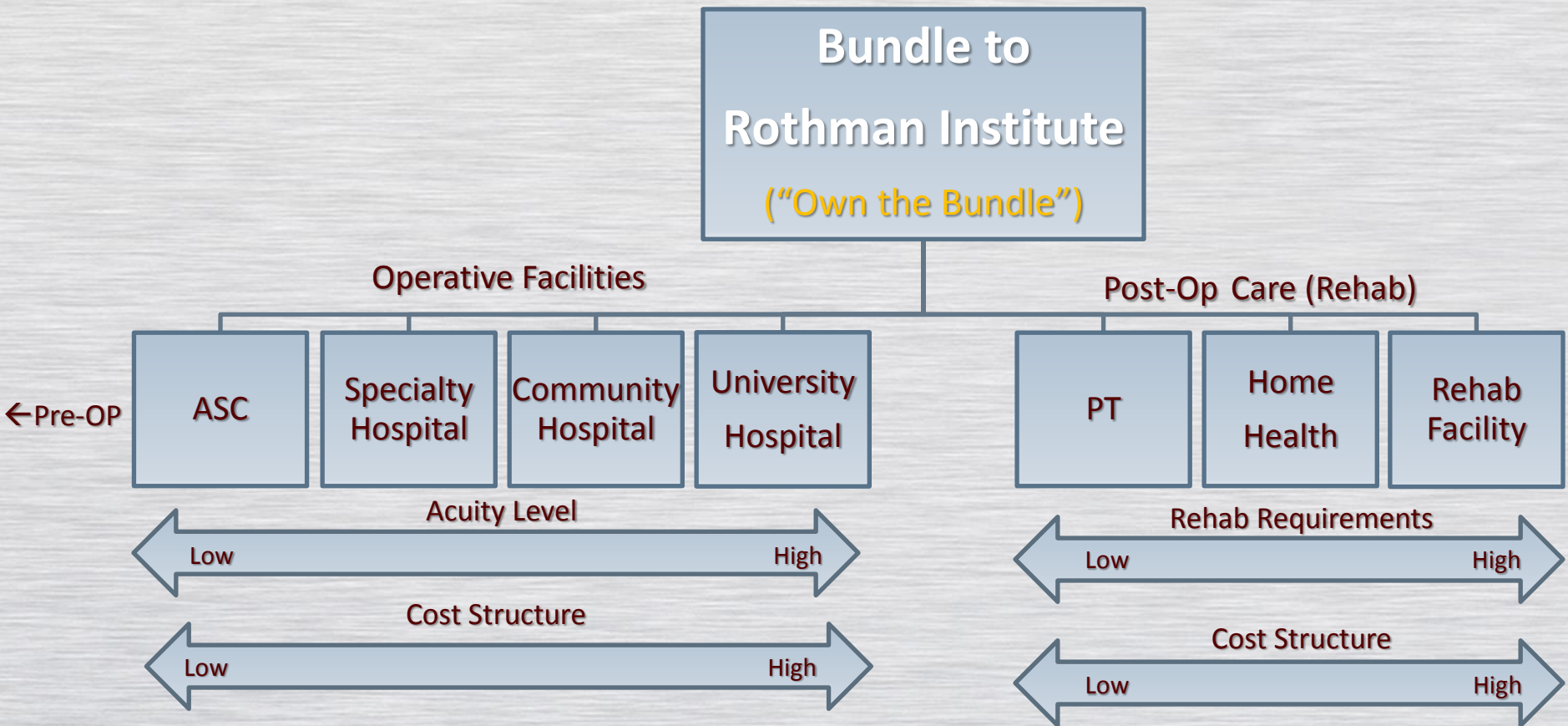
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for Patient Safety  
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# The Rothman Institute Overview

## BUNDLED PAYMENT: RI VISION – DEMAND MATCHING\*



\*

# Care Pathways

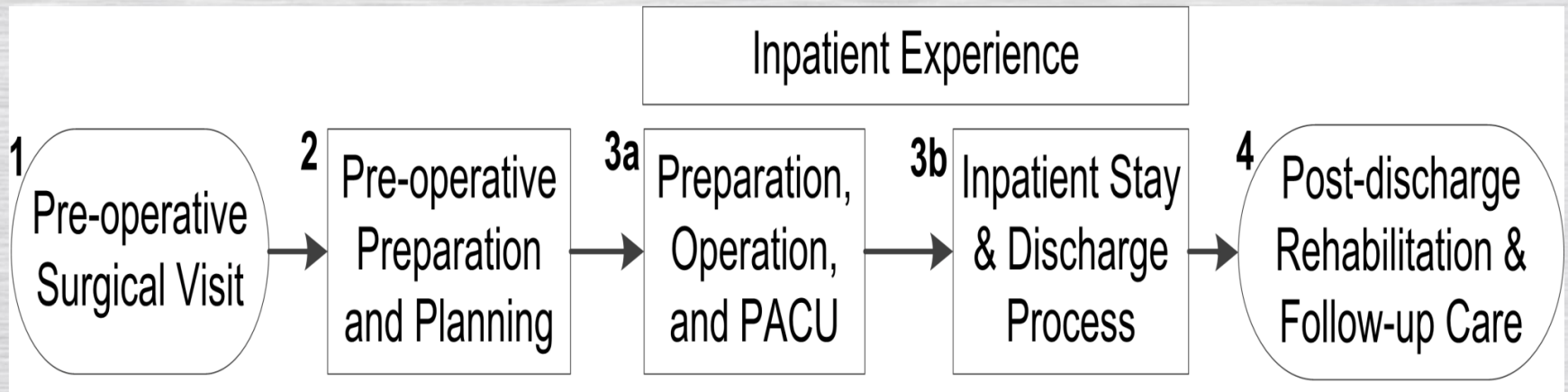
# Patient Care Pathways

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- **Develop High Level Processes**
- **Reduce Waste**
- **Avoid Common Pitfalls**
- **Metrics should be patient centered and process focused**

# Patient Care Pathways

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# Standardized Patient Care Pathways and Protocols

## Pre-op

- Labs
- H & P
- Pre-op Rehab
- EKG
- CXR
- Medical Clearance

## OR

- Prep-Patient/Surgeon Scrub
- Positioning
- Equipment
- Implants
- Tourniquet Use and Times

## Post-op

- Orthotics
- X-rays
- Rehab
- Follow up-Functional Score/Pain Management
- Post Discharge Disposition

# Completed Pathways

## 31 Completed

<p><b>Sports Medicine</b></p> <p><b>Knee:</b>            ACL repair            Chondroplasty            Knee arthroscopy with meniscus repair(medial or lateral)</p> <p><b>Shoulder:</b>            Shoulder arthroscopy; decompression of subacromial space            Shoulder arthroscopy; rotator cuff repair            Shoulder arthroscopy; surgical debridement; extensive            Shoulder arthroscopy; surgical debridement; limited            Shoulder arthroscopy; capsulorrhaphy</p>	<p><b>Spine</b>            AP lumbar fusion            AC decompression fusion            Posterior lumbar decompression fusion            P/C decompression fusion            Microdisectomy</p>
	<p><b>Joint</b>            Total knee replacement            Total hip replacement            Revisions            Bilaterals</p>
<p><b>Foot and Ankle</b>            Bunionectomy            Correction of hammertoe            Osteotomy            Tendon transfer</p>	<p><b>Hand and wrist</b>            Carpal tunnel release            Trigger finger                      Digital radial fracture            Wrist arthroscopy            Cubital tunnel syndrome</p>
<p><b>Should and Elbow</b>            Total Shoulder            RCR            Arthroscopic shoulder capsulorrhaphy            ORIF Humerus            ORIF Clavicle</p>	



# Perioperative Clinics



# Perioperative Medicine Clinic

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This new model coordinates the patient experience through the Surgical Continuum with numerous value-added enhancements to workflow, quality, safety, and cost.

# The Cost of Quality...An Orthopedic Case Study

- 57 year old male, presents for total knee replacement
- Appears healthy, but actually has ETOH history
- Surgery goes fine but 24 hours post-op:
- Develops DT's
- Aspiration pneumonia
- PE
- Stroke
- 22 days in ICU
- Survived, and went to LTAC

**CHARGES-** what the hospital billed  
**\$497,000**

**HOSPITAL ACTUAL COSTS**  
**\$312,000 (give or take)**

**HOSPITAL WAS PAID-** under current rules  
**\$71,000**

**What you'll be paid under Bundled Payments**  
**\$13,211**

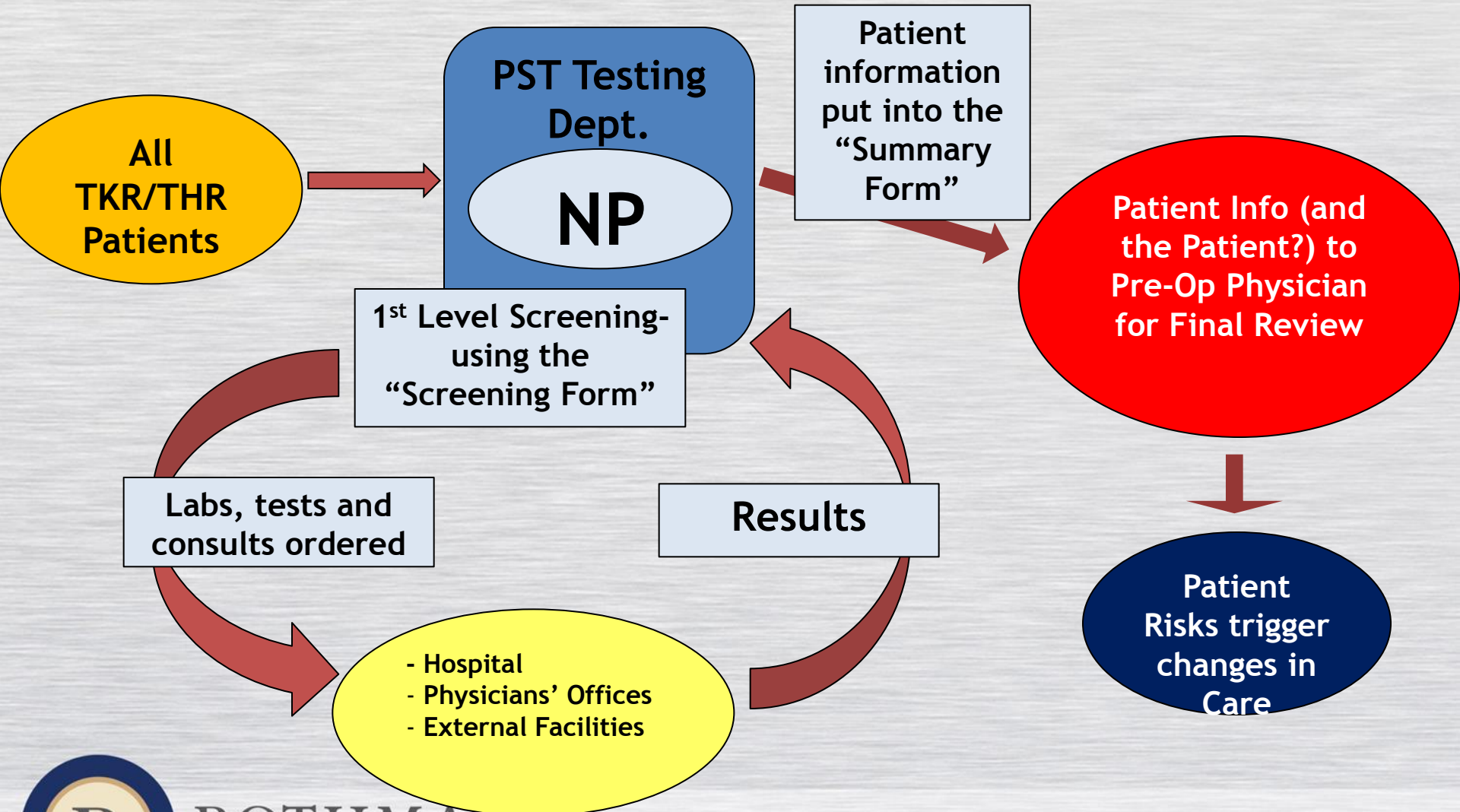
# Pre-Op Risk Screening Tool

- 14 pages
- Evidence-Based
- Covers Cardiac, Pulmonary, Renal, Pain History, Anesthesia History, Patient Meds, GI, Delirium Risk, Skin Risk, Urinary Retention Risk, etc.

Cardiac Risk Assessment	Consult(s) Consults	Items To Order To Consider
<input type="checkbox"/> Coronary revascularization in past 5 years		
<input type="checkbox"/> Stable, No recurrent signs/symptoms	∅	B-Blockers
<input type="checkbox"/> Recurrent signs/symptoms	Cards/Anesth	∅
<input type="checkbox"/> Coronary Angiography in last 2 years		
<input type="checkbox"/> Favorable & No new signs/symptoms	∅	∅
<input type="checkbox"/> Unfavorable or new signs/symptoms	Cards/Anesth	∅
<input type="checkbox"/> Stress Test in last 2 years		
<input type="checkbox"/> Favorable & No new signs/symptoms	∅	∅
<input type="checkbox"/> Unfavorable or new signs/symptoms	Cards/Anesth	∅
<u>Intermediate Clinical Predictors</u>		
<input type="checkbox"/> Angina- Mild		B-Blockers
<input type="checkbox"/> Prior MI (> 6 months)		B-Blockers
<input type="checkbox"/> CHF- Compensated (Class I, II)		B-Blockers
<input type="checkbox"/> Diabetes Mellitus		B-Blockers
<input type="checkbox"/> Renal Insufficiency		
<input type="checkbox"/> If None of the Above	∅	∅
<input type="checkbox"/> If Any of the Above and MET < 4	Cards/Hold Surgery	∅
<input type="checkbox"/> If Any of the Above and MET > 4 and Primary	POP	EKG
<input type="checkbox"/> If Any of the Above and MET > 4 and Revision	Cards/Hold Surgery	∅
<u>Minor Clinical Predictors</u>		
<input type="checkbox"/> Advanced Age (75+)		B-Blockers?
<input type="checkbox"/> Prior Abnormal EKG		
<input type="checkbox"/> Abnormal Rhythm		
<input type="checkbox"/> Low Functional Capacity (MET < 4)		
<input type="checkbox"/> History of Stroke		B-Blockers
<input type="checkbox"/> Uncontrolled Hypertension		B-Blockers?
<input type="checkbox"/> If None of the Above and MET > 4	∅	∅
<input type="checkbox"/> If None of the Above and MET < 4	POP	CXR



Preoperative Assessment Process for  
Very Good Ortho Hospital





# Post-Op Care

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**Focus on:**

**Pain Management**

**VTE prophylaxis**

**Wound management**

**Education, education, education!!!**



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# Patient Navigator

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**Manages the entire episode of care**

**30 days pre-op to 90 days post-op**

Navigator

Patient

Multidisciplinary  
Team

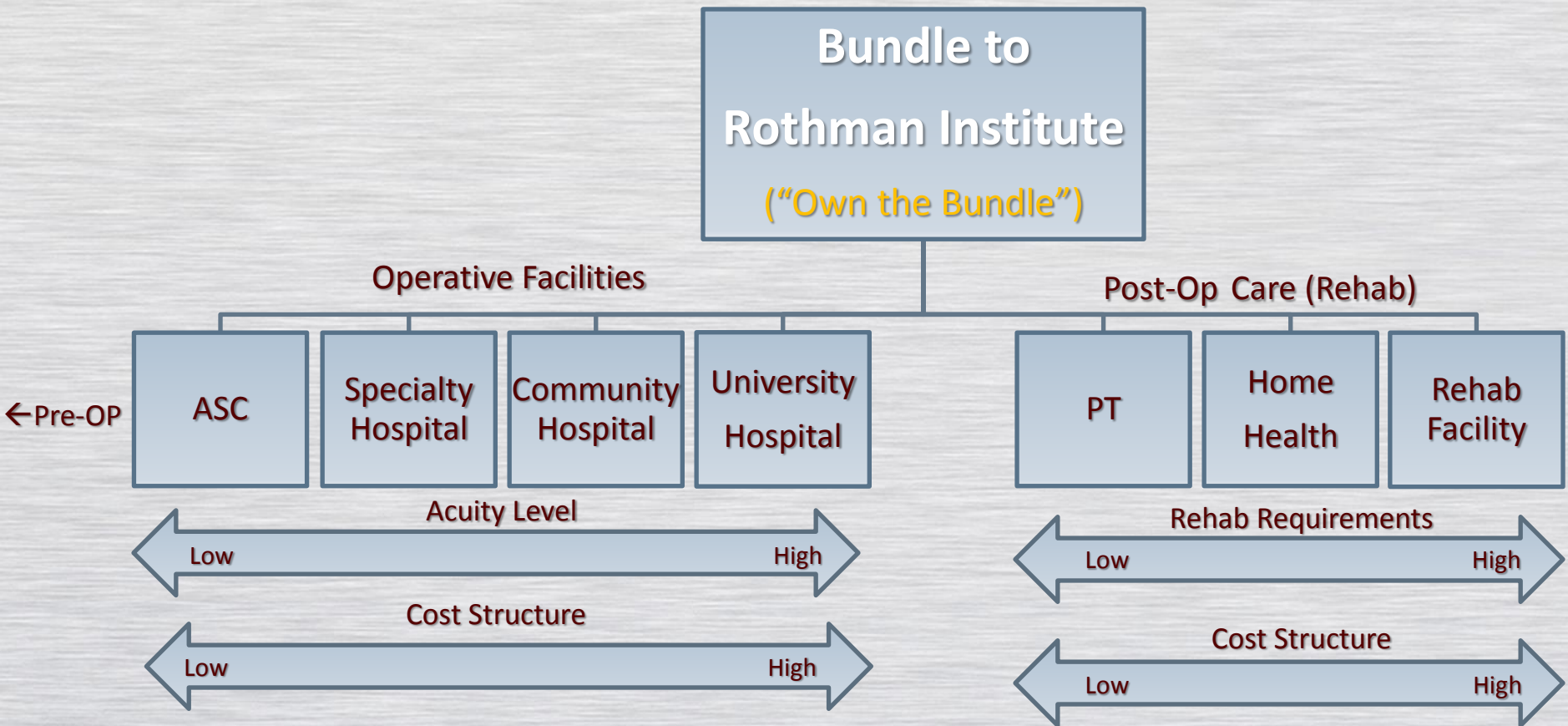
Consistent contact point  
Medication self management  
Surgeon follow up  
Nutrition  
Home Safety  
Awareness of red flags  
Lack of transportation  
Technology knowledge



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# The Rothman Institute Overview

## BUNDLED PAYMENT: RI VISION – DEMAND MATCHING\*



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# Post Discharge- Next Steps

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## Based on Patient's:

- Pre-op/post-op functional status
- Home Safety/Social Disposition
- Health/Co-Morbidities

Rothman Resources only  
(follow-up call, Force  
Therapeutics, postop visit in 2  
wks)

Home PT only 1-4 visits

Home Nursing & Home  
PT

Inpatient Rehab Facility

Skilled Nursing Facility



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# Outcome Measurement

# OBERD

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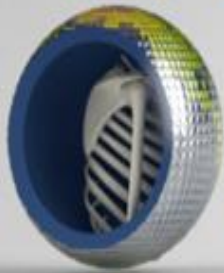
- **Outcomes Based Electronic Research Database**
  - Outcomes-based
  - Interactive with patients
  - Integrates with electronic medical record system

# OBERD

## Specialties

Currently supporting over 140 instruments, OBERD comes equipped to enhance your research from day one.

Shoulder  
and  
Elbow



Joints  
(Hip & Knee)



Hand  
and  
Wrist



Foot  
and  
Ankle



Spine



Sports  
Medicine



Trauma



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# Quality Outcome Instruments

## ■ **Generic**

- *VR 12*
- *SF 12 Version 1*
- *SF 36 Version 1*
- *EQ-5D*
- *MFA and SMFA*

## ■ **Shoulder/Elbow**

- *ASES*
- *Constant*
- *DASH*
- *Penn*
- *Rowe*
- *SST*
- *UCLA*

## ■ **Foot/Ankle**

- *AOFAS*
- *FAAM*
- *SMFA*

## ■ **Hand/Wrist**

- *DASH*
- *PRWE*
- *Quick DASH*

## ■ **Joints**

- *Harris Hip Score*
- *HOOS*
- *Knee Society Score*
- *KOOS*
- *Lysholm*
- *Oxford Hip Score*

## • **Spine**

- *Back Pain Index*
- *Modified ODI*
- *Neck Disability Index*
- *Oswestry Disability Index*
- *SRS 22*

## • **Sport Medicine**

- *Cincinnati*
- *IKDC*
- *KJOC*
- *Kujala*
- *Marx*
- *Tegner-Lysholm*
- *WOSI*



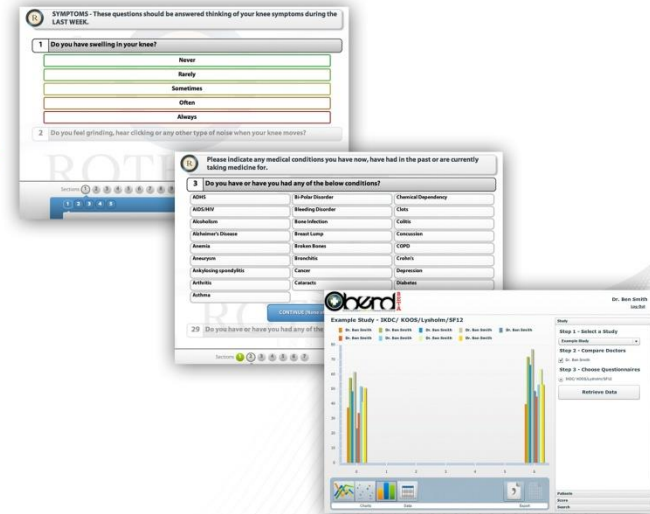


# Outcomes System Components

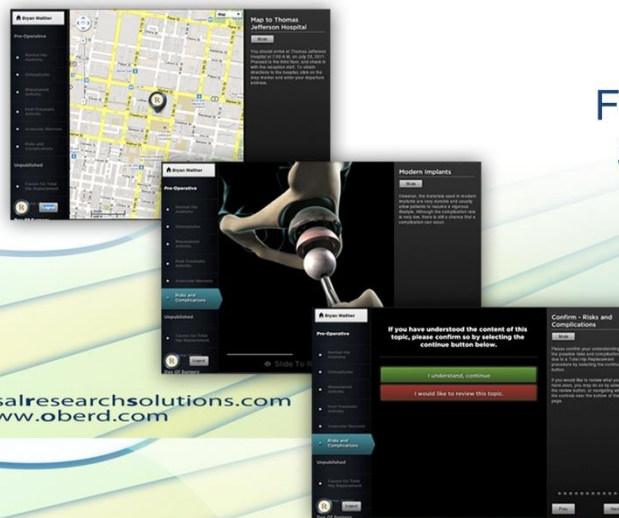
Patient Portal



Intakes & Outcomes



Patient Education



Patient Feedback System

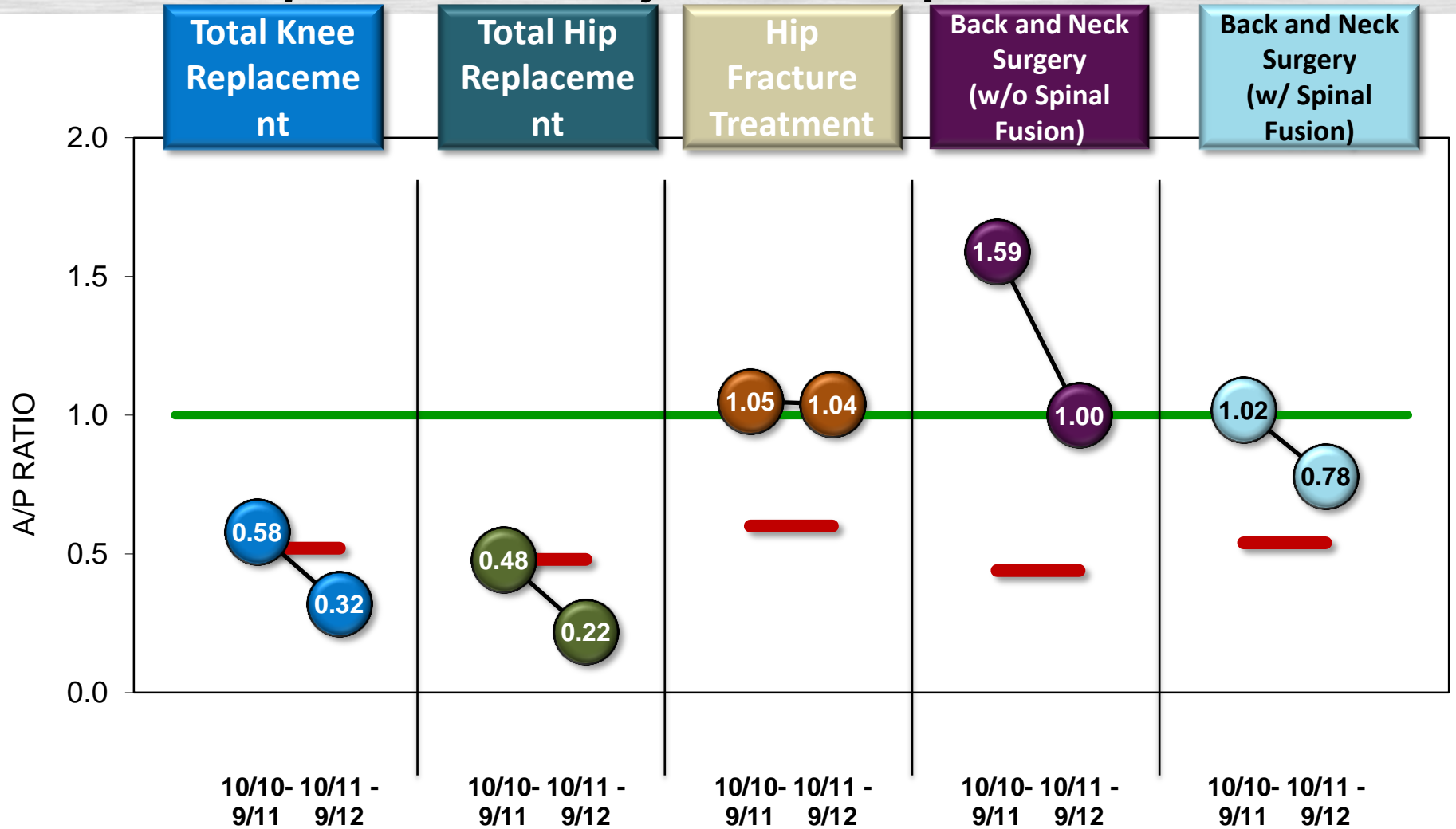


# Healthgrades Engagement

# Healthgrades

- **We needed**
  - **To quantify our outcomes**
  - **Data from all payers**
  - **Data from all sites**
  
- **Data integrity is paramount**
- **Cannot go back and fix must look forward**
- **Be a part of the process defining outcomes**

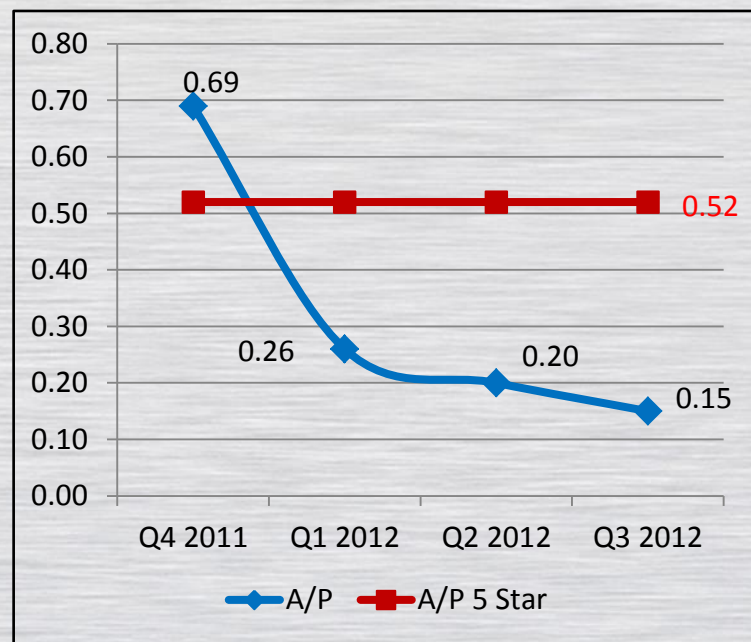
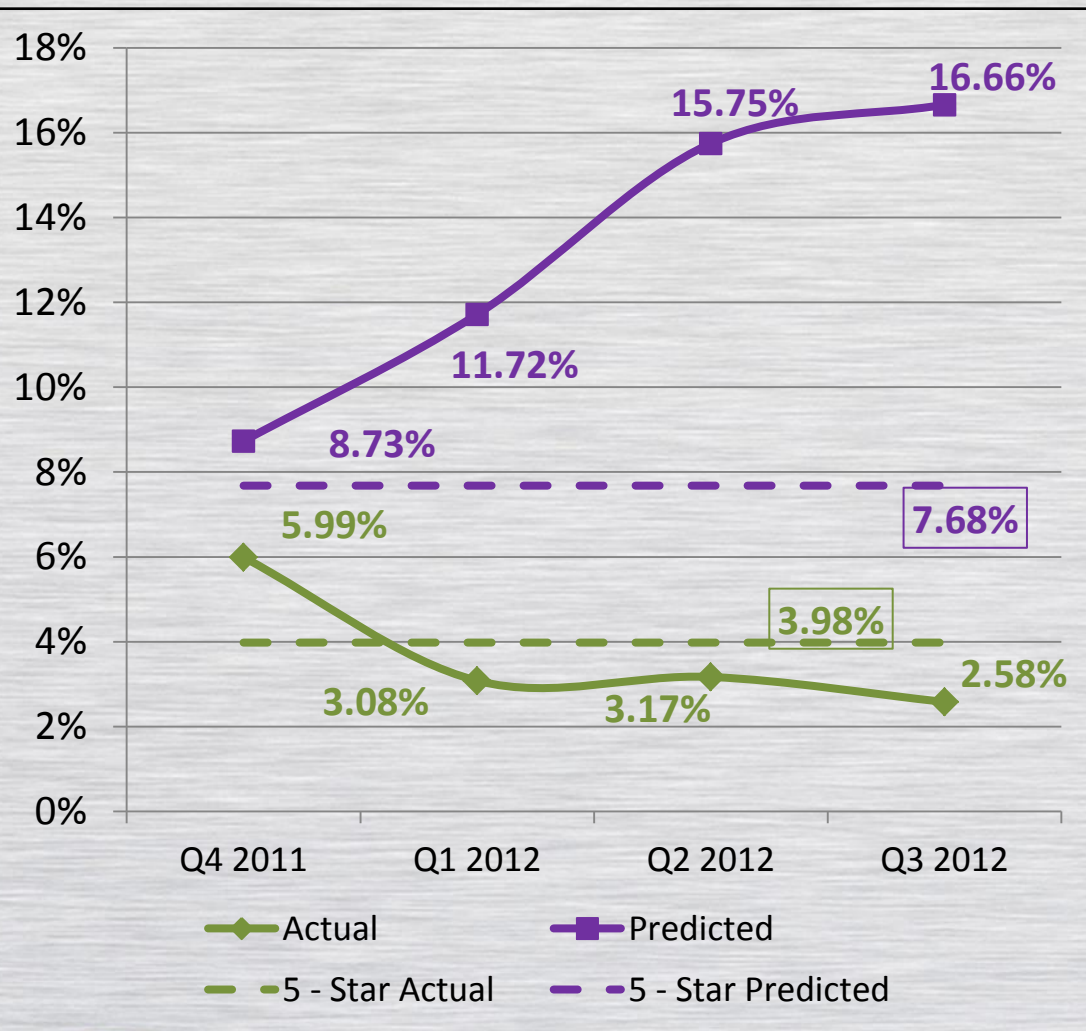
# Orthopedics Risk-adjusted Complications Ratios



# TKR – TJUH

## Actual vs. Predicted Complication Trends & Comparison – All Payer Data

Volume		Complications	
Q4 2011	217	Q4 2011	13
Q1 2012	227	Q1 2012	7
Q2 2012	252	Q2 2012	8
Q3 2012	194	Q3 2012	5



# Total Knee Replacement- Complication Summary (July 2012 - Sept 2012)

	Total Knees (N=194)	
Renal	2	Acute Renal Failure
Delirium	1	
Genitourinary	1	UTI
GI	1	C. Diff
Pulmonary	1	Pneumonia

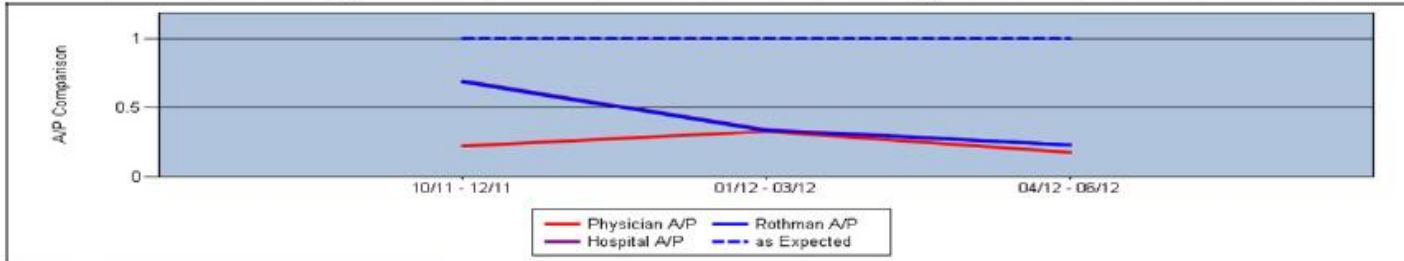


Total Knee Replacement - 1st Surgery

HOSPITAL	Q4 2011	Q1 2012	Q2 2012	Q4 2011 - Q2 2012
<b>Thomas Jefferson University</b>				
Cases(n)	217	227	252	696
Patients with Complications	13	9	9	31
Actual Complication Rate	5.99%	3.96%	3.57%	4.45%
Predicted Complication Rate	8.73%	11.72%	15.75%	12.25%
A/P Ratio	0.69	0.34	0.23	0.36
Average Total Charges	\$56,968.00	\$56,711.00	\$57,033.00	\$56,907.52
Average Length of Stay	2.62	2.69	2.58	2.63

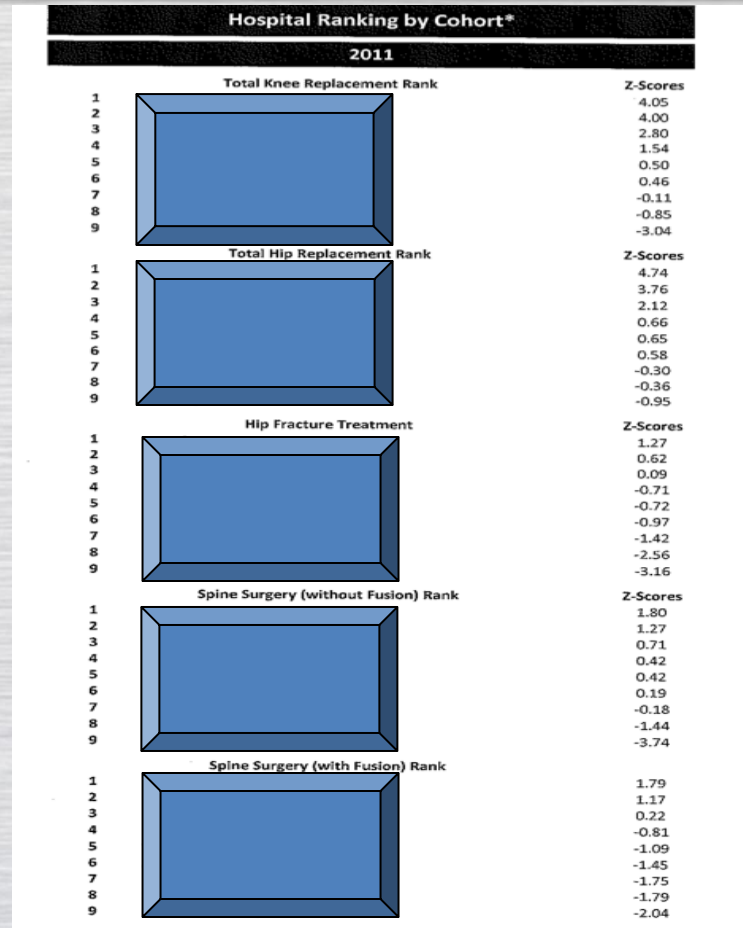
GROUP	Q4 2011	Q1 2012	Q2 2012	Q4 2011 - Q2 2012
<b>Rothman Institute within Thomas Jefferson University</b>				
Cases(n)	217	227	251	695
Patients with Complications	13	9	9	31
Actual Complication Rate	5.99%	3.96%	3.59%	4.46%
Predicted Complication Rate	8.73%	11.72%	15.77%	12.25%
A/P Ratio	0.69	0.34	0.23	0.36
Average Total Charges	\$56,968.00	\$56,711.00	\$57,058.00	\$56,916.65
Average Length of Stay	2.62	2.69	2.58	2.63

PHYSICIAN	Q4 2011	Q1 2012	Q2 2012	Q4 2011 - Q2 2012
<b>DR. I</b>				
Cases(n)	50	46	67	163
Patients with Complications	1	2	2	5
Actual Complication Rate	2.00%	4.35%	2.99%	3.07%
Predicted Complication Rate	9.21%	13.00%	16.60%	13.32%
A/P Ratio	0.22	0.33	0.18	0.23
Average Total Charges	\$50,690.00	\$49,864.00	\$50,077.00	\$50,204.72
Average Length of Stay	2.28	2.46	2.27	2.33



Risks			
Diagnosis	National Prevalence	Hospital Prevalence	Physician Prevalence
hd147 DIAB W NEUROVASCULAR	0.90%	2.59%	2.45%
250.60 DM2/NOS W NEUR MANIF NSU	0.82%	2.59%	2.45%
278.01 MORBID OBESITY	5.62%	8.19%	7.36%
hd155 CHRONIC ANEMIA	1.32%	1.15%	0.61%
280.9 IRON DEF ANEMIA NOS	0.52%	1.01%	0.61%
327.23 OBSTRUCTIVE SLEEP APNEA	5.13%	9.91%	6.13%
hd106 NON-MALIGNANT RENAL DISEASE W/O	2.57%	2.59%	4.29%
403.90 HTN CKD NOS I-W/NOS	2.51%	2.59%	4.29%
414.01 COR AS-NATIVE VESSEL	8.23%	10.63%	16.56%
hd115 PULMONARY HYPERTENSION	0.45%	0.43%	0.61%
416.8 CHR PULMON HEART DIS NEC	0.42%	0.43%	0.61%
424.1 AORTIC VALVE DISORDER	0.92%	0.57%	1.23%

# Hospital Comparison







# Physician Comparison



## Physician Ranking by Cohort\*

2011

Rank	Physician Name	Total Knee Replacement
1		All
2		Allegiance Regional Medical Center
3		Thomas Jefferson University
4		Allegiance Regional Medical Center
5		Thomas Jefferson University
6		Thomas Jefferson University
7		Rothman Specialty Hospital
8		Bryn Mawr Hospital
9		Thomas Jefferson University
10		Rothman Specialty Hospital
11		Wheatly Hospital
12		Rothman Specialty Hospital
13		Lankenau Hospital
14		Thomas Jefferson University
15		Benedict Memorial Hospital
16		Allegiance Regional Medical Center
17		Rothman Specialty Hospital
18		Wheatly Hospital
19		Lankenau Hospital
20		Rothman Specialty Hospital
21		Bryn Mawr Hospital
22		Wheatly Hospital
23		Thomas Jefferson University
24		BIBF Memorial Hospital
25		Thomas Jefferson University
<b>Total Hip Replacement</b>		
1		All
2		Thomas Jefferson University
3		Thomas Jefferson University
4		Rothman Specialty Hospital
5		Thomas Jefferson University
6		Lankenau Hospital
7		Allegiance Regional Medical Center
8		Thomas Jefferson University
9		Rothman Specialty Hospital
10		Rothman Specialty Hospital
11		Rothman Specialty Hospital
12		Thomas Jefferson University
13		Rothman Specialty Hospital
14		Thomas Jefferson University
15		BIBF Memorial Hospital
16		Bryn Mawr Hospital
17		Wheatly Hospital
18		Allegiance Regional Medical Center
19		Thomas Jefferson University
20		Lankenau Hospital
21		Allegiance Regional Medical Center
22		Benedict Memorial Hospital
<b>Hip Fracture Treatment</b>		
1		All
2		Allegiance Regional Medical Center
3		Thomas Jefferson University
4		Allegiance Regional Medical Center
5		Bryn Mawr Hospital
<b>Spine Surgery (without Fusion)</b>		
1		All
2		Rothman Specialty Hospital
3		Wheatly Hospital
4		Benedict Memorial Hospital
5		Thomas Jefferson University
6		Allegiance Regional Medical Center
7		Rothman Specialty Hospital
8		Allegiance Regional Medical Center
9		Thomas Jefferson University
10		Thomas Jefferson University
11		Thomas Jefferson University
<b>Spine Surgery (with Fusion)</b>		
1		All
2		Rothman Specialty Hospital
3		Thomas Jefferson University
4		Thomas Jefferson University
5		Thomas Jefferson University
6		Wheatly Hospital
7		Thomas Jefferson University
8		Thomas Jefferson University
9		Thomas Jefferson University
10		Allegiance Regional Medical Center
11		Benedict Memorial Hospital
12		Allegiance Regional Medical Center

\*For additional information, please contact the physician listed for the entire year of 2011.

	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	5 ↑	3	5	3	3 ↑
<b>2012</b>	3	3	5	3	1
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	3 ↓	3	3	3	3
<b>2012</b>	5	3	3	3	3
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	3	3	5 ↑		
<b>2012</b>	3	3	3		
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	3	3	3	3	3
<b>2012</b>	3	3	3	3	3
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	3	5 ↑	3	3	3
<b>2012</b>	3	3	3	3	3
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	5 ↑	3	1 ↓	1	3
<b>2012</b>	3	3	3	1	3
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	5	5			
<b>2012</b>					
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	5	5	1	3 ↓	1
<b>2012</b>	5	5	1	5	1
	<b>TKR</b>	<b>THR</b>	<b>Hip Fracture</b>	<b>Spine with fusion</b>	<b>Spine without fusion</b>
<b>2013</b>	1 ↓	1 ↓	1 ↓	3	3
<b>2012</b>	3	3	3	3	3



## Joint Replacement Quality Outcomes Dashboard

Thomas Jefferson University Hospital

Measure	Source	Description	Frequency	Goal	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	YTD 12
<b>Quality</b>																	
SCIP Measure Overall Compliance		Percentage of patients receiving 100% of recommended SCIP measures	Monthly	100%													
SCIP- Appropriate Antibiotics		Percentage of patients receiving SCIP appropriate antibiotics	Monthly	100%													
<b>Infection Prevention</b>																	
TKR infection rate																	
THR infection rate																	
<b>Outcomes</b>																	
TKR risk adjusted complication rate	HG	observed/expected	Quarterly	0.50													
THR risk adjusted complication rate	HG	observed/expected	Quarterly	0.44													
TKR: 30 day Readmission Rate		% of pts readmitted within 30 days	Quarterly	3.3%													
THR: 30 day Readmission Rate		% of pts readmitted within 30 days	Quarterly	3.3%													
<b>LOS</b>																	
<b>Patient Satisfaction</b>																	
Recommend the hospital		HCAHPS	Monthly	83%													
Communciation with Doctors		HCAHPS	Monthly	90%													

### Rothman Institute

## Joint Replacement Quality Outcomes Dashboard

Measure	Source	Description	Frequency	Goal	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	YTD 12
<b>Quality</b>																	
SCIP Measure Overall Compliance		Percentage of patients receiving 100% of recommended SCIP measures	Monthly	100%													
SCIP- Appropriate Antibiotics		Percentage of patients receiving SCIP appropriate antibiotics	Monthly	100%													
<b>Infection Prevention</b>																	
TKR infection rate																	
THR infection rate																	
<b>Outcomes</b>																	
TKR risk adjusted complication rate	HG	observed/expected	Quarterly	0.50													
THR risk adjusted complication rate	HG	observed/expected	Quarterly	0.44													
TKR: 30 day Readmission Rate		% of pts readmitted within 30 days	Quarterly	3.3%													
THR: 30 day Readmission Rate		% of pts readmitted within 30 days	Quarterly	3.3%													
<b>LOS</b>																	
<b>Patient Satisfaction</b>																	
Recommend the hospital		HCAHPS	Monthly	83%													
Communciation with Doctors		HCAHPS	Monthly	90%													



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# What did we discover?

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- **Documentation errors**
  - **Failure to document pre-existing conditions**
  - **Failure to explain abnormal labs**
  - **Careless documentation**
  - **Coding inaccuracy**

**Actual opportunities for improving care!**



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# MUST HAVE

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- Perioperative Clinic
- Perioperative Physician
- Comprehensive Pre-op assessment
- Coders on the orthopedic units
- Orthopedic Service Line Coordinators
- Clinical Definitions and protocols
- Complication Review
- Complication Review Committee

# Quality Initiatives

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- Pre-Operative Medical Evaluation
- Pre-Operative Patient Education (Ortho Camp)
- Medical Co-Management- Peri-Op B-Blockers, Glucose Management, Etc.
- Pain Protocols
- Discharge Planning
- Delirium Prevention
- Renal/Urinary/Catheter Management
- DVT/PE Prophylaxis
- Anesthetic Technique
- Pulmonary/Respiratory Optimization/O2 Therapy
- Cardiac Monitoring
- Antibiotic Usage/Infection Control

# Identify Problem Areas

---

- Inconsistent (or incomplete) Pre Op Evaluations
- Poor Communication Between Providers, Anesthesia and Surgeons
- Lack of Patient Education/Expectations
- No Standard Process to Identify/Prevent Recurrent Complications
- Coding Language

# Establish Mandatory Process

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- Surgeon Participation
- Centralized Medical Evaluation Facility
- Dedicated Sub-Specialty Groups
- System Based Guidelines (i.e. abnormal labs/studies)
- Standardized Patient Education
- Joint Class



# Patient/Disease Specific Protocols

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- “Trigger Form”: Identifiers to Guide Pre-Op Care
- Specialist Guided Recommendations
  - i.e. Fluids for renal patients and specialized induction for delirium risk patient
- Specific Post Op Order Sets: Initiated in Recovery Room through Hospital Course
  - I.e. Telemetry for OSA patient and meds/Foley management for retention risk patient
- Educate Staff

# Self Evaluation

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- **Complication Log**
  - Provides “real time” assessment
- **Quarterly Team Review**
  - Discuss every complication and readmission
- **“Tweak” / Create Triggers / Make Changes**
- **Reinforce/ Re-educate**

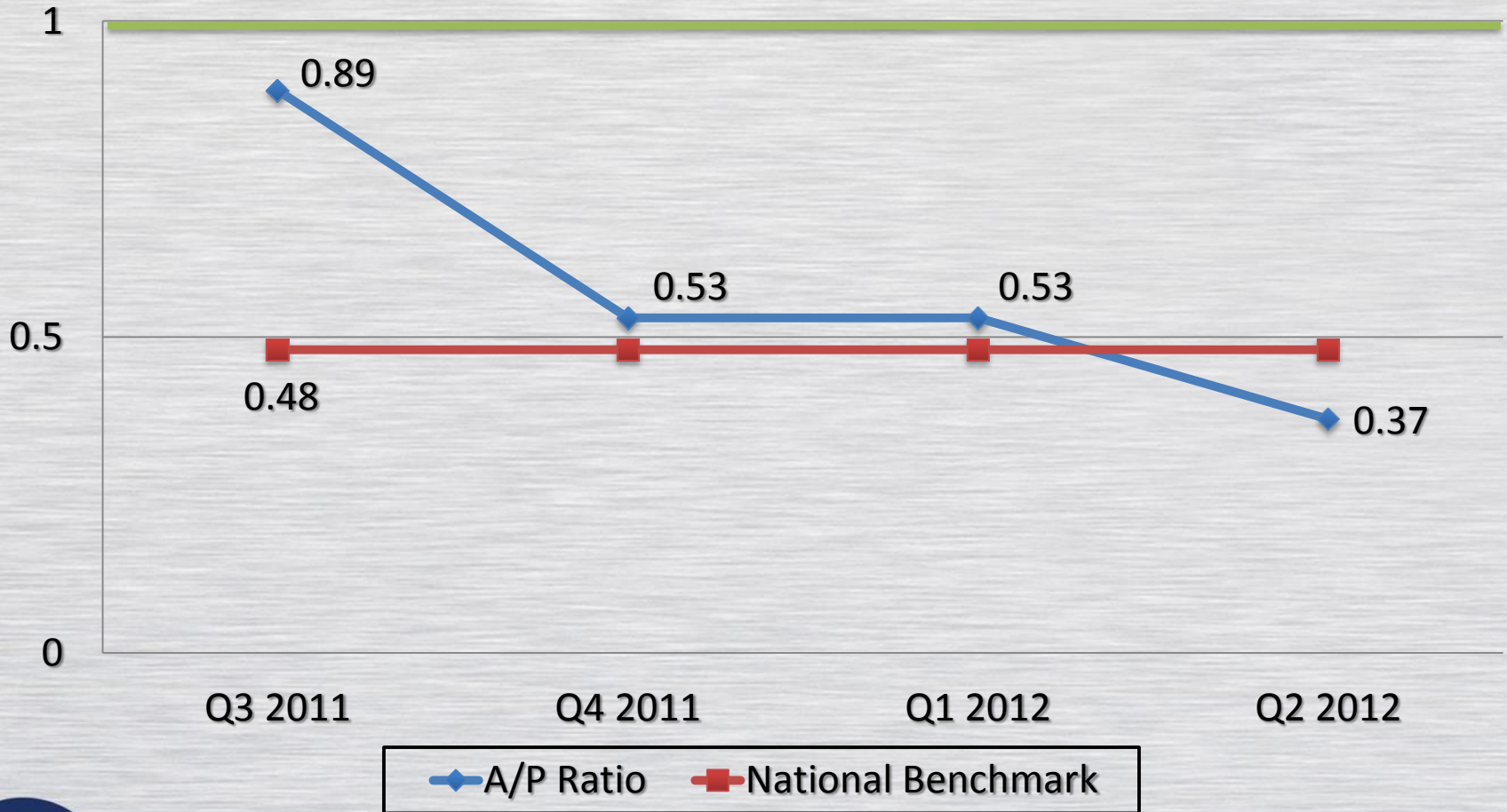
# Orthopedic Quality Teams

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**We need a unified and consistent approach to determining quality initiatives and data review**

- **Specialty dashboards**
- **100% complication review**
- **Discussion of quality initiatives**

# Total Hip Replacement Risk Adjusted Major Complications



**ROTHMAN**  
INSTITUTE



# CONTRIBUTING ENTITIES

OBERD

HEALTH  
GRADES

EHR

BILLING

**BUSINESS INTELLIGENCE**  
ANALYZE  
LINK

INTEGRATED  
REPORT CARD

INSURANCE  
COMPANIES

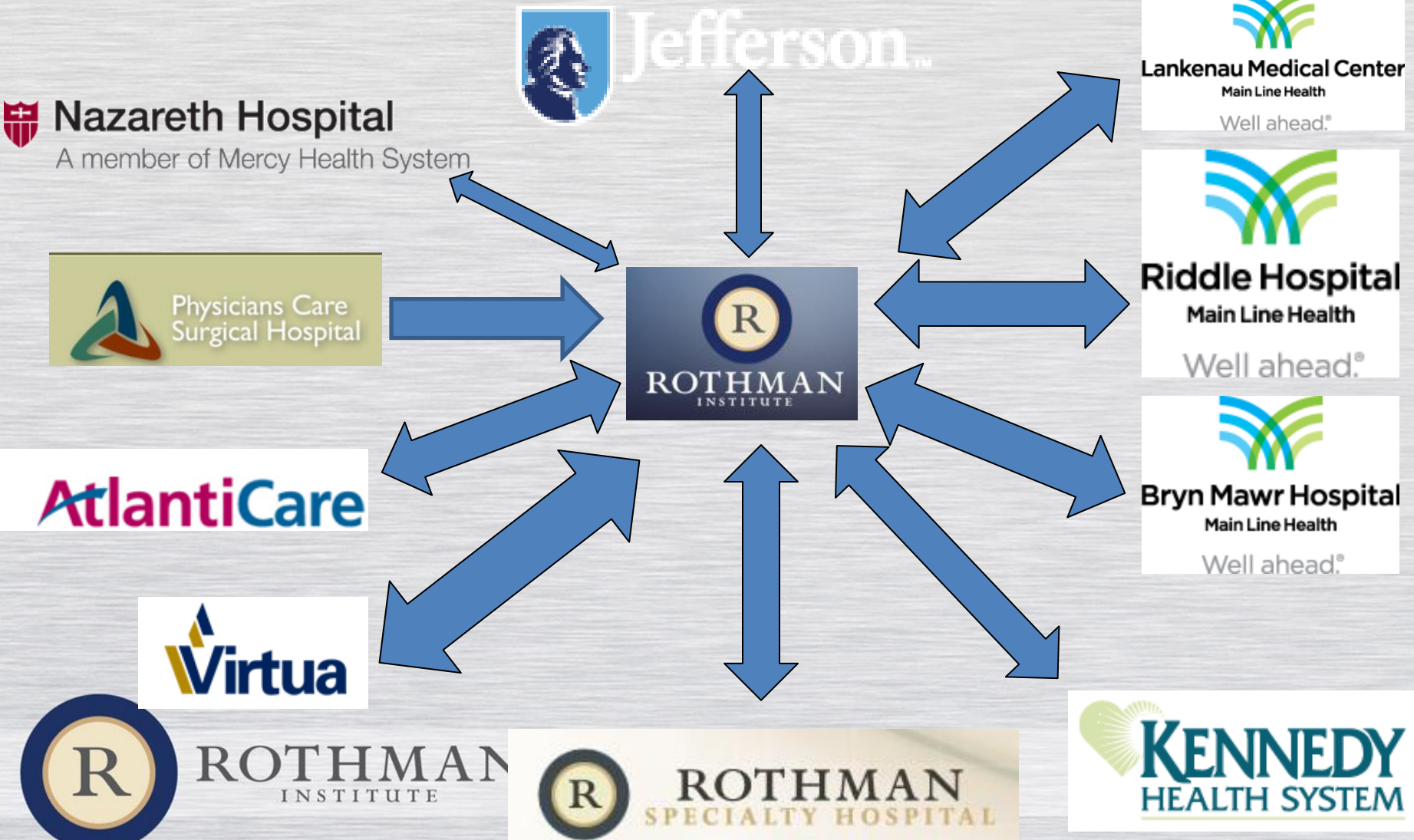
ACO

RESEARCH/  
PUBLICATIONS

COLLABORATIVE  
GROUP

# Co-Management Agreements





# Conclusions

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- **Changes are going to be made**
- **Policy makers will dictate changes based on measures they see as important**
- **We can help guide change based on measures that physicians and patients see as important**



# Conclusions

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- **Do not focus only on cutting costs—not great for patient**
- **Do not focus only on improving quality—too expensive, spending to improve quality can be limitless**
- **Focus on getting highest quality for least cost over time**
  - **Changes should be patient-centered**

# Conclusions

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- **Measure those outcomes that are most important to the patient**
  - **Pain**
  - **Function**
  - **Return to work or previous activity**



# Conclusions

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- **Requires**
  - **Comparative effectiveness research**
    - Determine which procedures work/have value
    - Minimize influence of industry/bias
  - **Transparency**
    - Who is doing what?
    - How are the patients doing?
    - Reporting results/complications
    - Quality and cost data available to all stakeholders, including patients
  - **Leadership to implement changes**



# Do You Want To Be...

**Leading?**

**Following?**



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