

AtlantiCare

Healthcare you can believe in.

Hospital Based Same Day Joint Program

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AtlantiCare At a Glance



90+ Locations



5,500 Employees



971 Providers /
300+ Employed



37,325 ACO
Covered Lives



29,675 Discharges



337,000 APG
Outpatient Visits



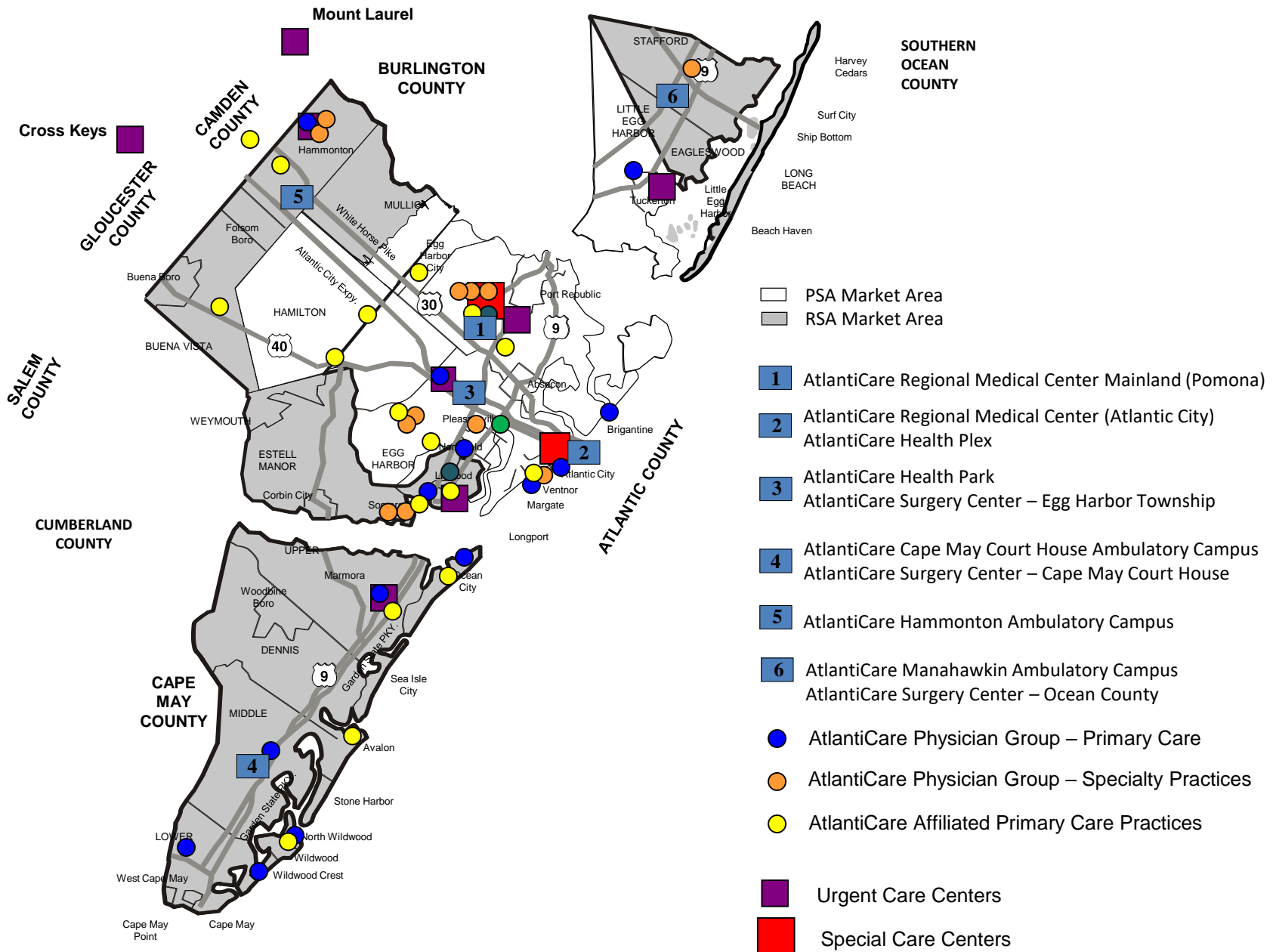
Baldrige Performance
Excellence Program

AA

Bond Rating

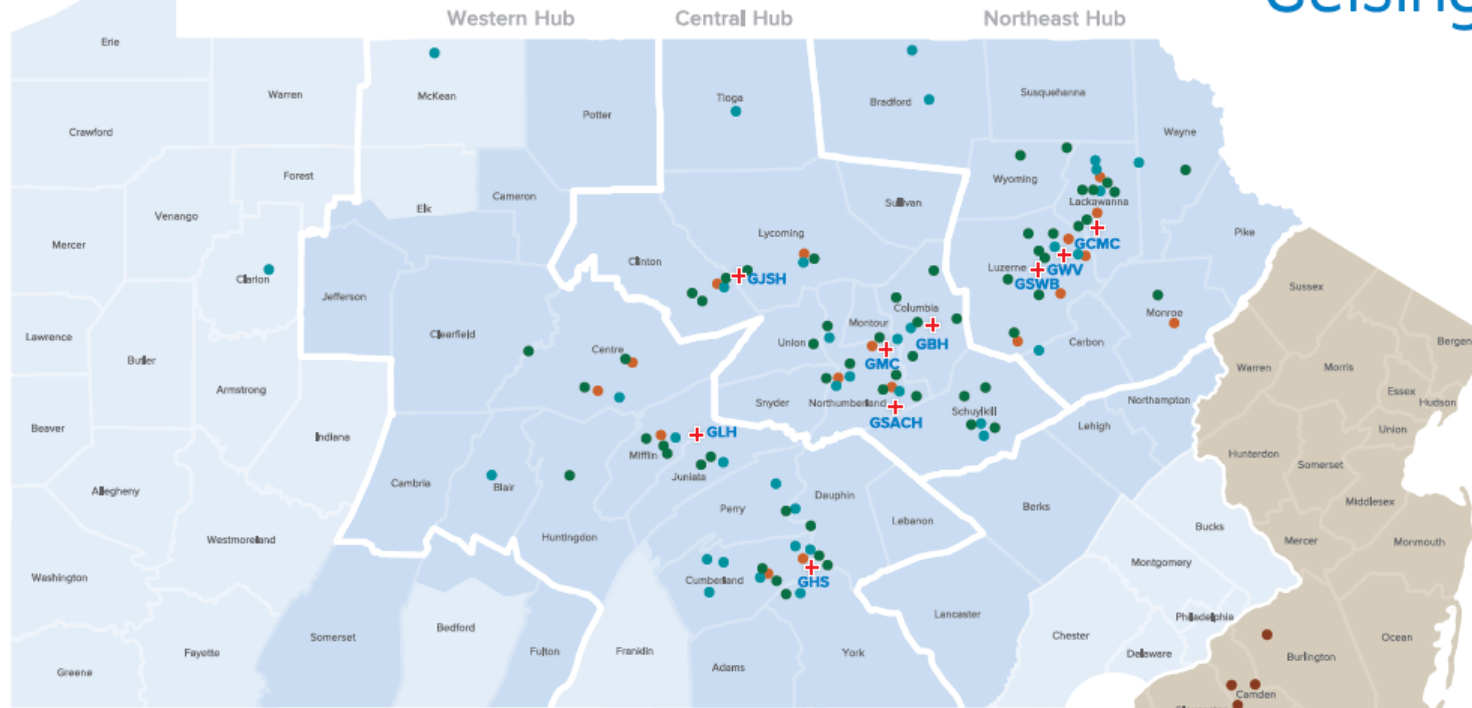
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Pennsylvania

Geisinger



- Pennsylvania primary care sites
- Pennsylvania specialty care sites
- Pennsylvania urgent care sites
- + Geisinger hospital sites
- New Jersey primary care sites
- New Jersey specialty care sites
- New Jersey urgent care sites
- + New Jersey hospital sites
- Geisinger Health Plan coverage area

- GBH** Geisinger Bloomsburg Hospital
- GCMC** Geisinger Community Medical Center
- GJSH** Geisinger Jersey Shore Hospital
- GLH** Geisinger Lewistown Hospital
- GMC** Geisinger Medical Center
- GSACH** Geisinger Shamokin Area Community Hospital*
- GSWB** Geisinger South Wilkes-Barre**
- GWV** Geisinger Wyoming Valley Medical Center
- GHS** Geisinger Holy Spirit

ARMC AtlantiCare Regional Medical Center,
a Member of Geisinger

*a campus of Geisinger Medical Center
**a campus of Geisinger Wyoming Valley Medical Center

New Jersey

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History of Joint Replacement at AtlantiCare

- Began to formalize the program late 90's
- Volume approximately 150 cases per year in 1999
- Current volume approximately 2500 cases per year
- Began analyzing publicly reported outcomes in 2008
- Designed multidisciplinary process to optimize patients
- Created the Center for Perioperative Medicine incorporating internal medicine practitioners and nurse navigators into the process in 2012



Atlanticare- State Rankings 2010

Quality	
	Rank in New Jersey
Joints	34/45
Spine	19/20
Overall	18/30

Volume	
	Rank in New Jersey
TKR	3/42
THR	3/42
Hip Fx	10/42
Spine	27/27
Spine Fusion	21/21

2010 Star Report

Orthopedics	In-Hospital Complications
Total Knee Replacement	★
Total Hip Replacement	★★★
Hip Fracture	★★★★★
Spine- General	★
Spine Fusion	★★★

★ - Poor

★★★ - Average

★★★★★ - Great

Released to the Public: October 14, 2009



Why Such Low Ratings?

Preventable medical complications:

- Acute Renal Failure
- Heart Attack
- Pneumonia
- Delirium
- GI problems
- Urinary Retention



Center for Perioperative Medicine (CPM)

- Focused on quality patient care and reducing complications for the elective surgical patient
- Medical model, Patient centered
- Standardized assessment/Algorithm
- Risk stratification process
- “Optimization” of patients vs. “Clearance”
- Reduced complications
- Reduced LOS
- Reduced same day cancellations



Center for Perioperative Medicine (CPM) Staffing

- 3 Hospitalist (internal medicine) physicians
- 2 APN/PA providers
- 6 RN concierge (including one TL)
 - 40 phone calls daily (8-10 calls per RN)
- 3 Medical Assistants
- 1 Registration person
- 3 Administrative associates
- 1 Clinical Manager



Center for Perioperative Medicine (CPM) Overview

- RN Concierge calls patient shortly after surgery scheduled
- Phone interview/assessment, “Trigger Form”
- “Quick Pass” visit vs. “Comprehensive” visit scheduled
- PA/APN and/or Physician assessment
- Labs and studies reviewed
- Communication to surgeon and PCP/specialists (phone and via EMR)
- Completed chart, including summary form and “At Risk” guidelines , is sent to Same Day Surgery (SDS)



Trigger Form

OSA Screening

(bolded = phone screen)

Loud snoring	1
Neck circumference: Male 17" or > and Females 16" or > (if neck circumference not available, then BMI > 35)	1
Awakening with headaches	1
Witnessed apnea or awakening with choking/gasping	2
Morning or daytime sleepiness, especially if this interferes with ability to keep alert in situations where you should keep alert (driving, work, meetings)	2
Mallampati class 4 oropharynx	1 (on exam)
Tonsillar hypertrophy (nearly touching)	2 (on exam)
Prior diagnosis of sleep apnea which is not treated (i.e. consistently using the CPAP or with proven effective alternate treatment)	2

Circle Positives & Total Score _____

(2 or more indicates need for evaluation - sleep study)

Pulmonary Assessment

- No Abnormalities
- Pulmonary Consult

Tests/Studies

- PFT's
- CXR
- Sleep Study
- ABG
- Echocardiogram



“At Risk” Guidelines

- Guidelines help drive the care at each stage;
- Color Coded
- Evidence based
- Alert for providers
- Risk stratified order sets post op

AtlantiCare
Delirium Risk Patient

Pre-operative Guidelines:

1. Chart flagged as "Delirium Risk"
2. Gentle pre-op hydrate
3. Avoid Atropine, Scopolamine, Barbiturates, and Benzodiazepines

Intra-operative Guidelines:

AtlantiCare
Urinary Retention Risk Patient

Pre-operative Guidelines:

1. Patient's chart is flagged as "Urinary Retention Risk"
2. Review urinary symptoms and optimize current symptom control.

AtlantiCare
Renal Risk Patient

Pre-operative Guidelines:

1. Chart flagged as "Renal Risk"

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Pulmonary Risk Patient

Pre-operative Guidelines:

➤ Pre Admission Testing

1. Chart flagged as "Pulmonary Risk".
2. Patient instructed on smoking cessation and handout given (if appropriate).
3. If patient has Obstructive Sleep Apnea (OSA), instruct them to bring CPAP mask to hospital and know setting.
4. Instruct patient to optimize inhaler use before admission (if appropriate).

➤ Operating Room Holding Area

1. Albuterol nebulizer in pre-op holding area (if ordered by the physician)
2. O₂ via humidified nasal cannula to keep oxygen saturation > 92%.

Intra-operative Guidelines:

1. Avoid hypoxia, hypocapnia, hypo perfusion, hypotensive anesthesia.
2. Continuous oxygen and blood pressure monitoring.
3. Consider intra-operative nebulizers.
4. Avoid general anesthesia if possible.
5. Consider aspiration precautions.



Outcomes

- Reduced complications
- Decreased length of stay
- Increased reimbursements
- Increase quality of care
- Patient satisfaction



“We are not cancelling surgery.....We are cancelling complications by postponing surgeries”



Preoperative Risk Stratification Reduces the Incidence of Perioperative Complications After Total Knee Arthroplasty

Kristen E. Radcliff, MD,* Fabio R. Orozco, MD,* Daniel Quinones, BS,†
Daniel Rhoades, BS,† Gursukhman S. Sidhu, MBBS,* and Alvin C. Ong, MD*

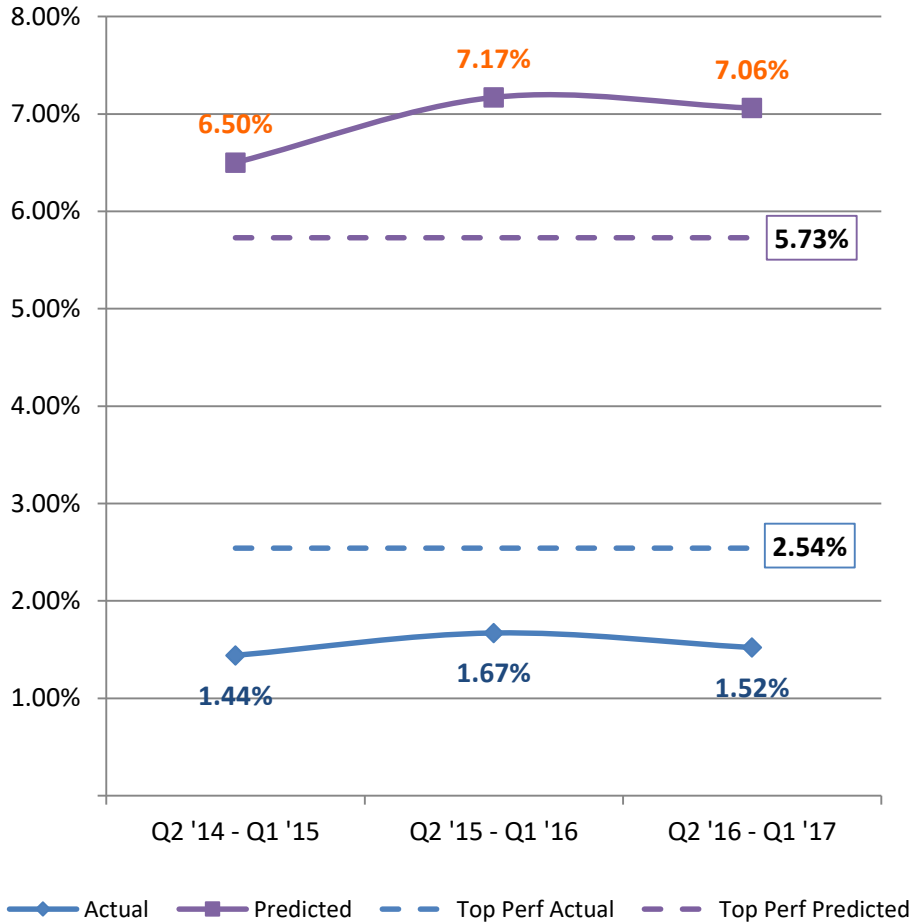


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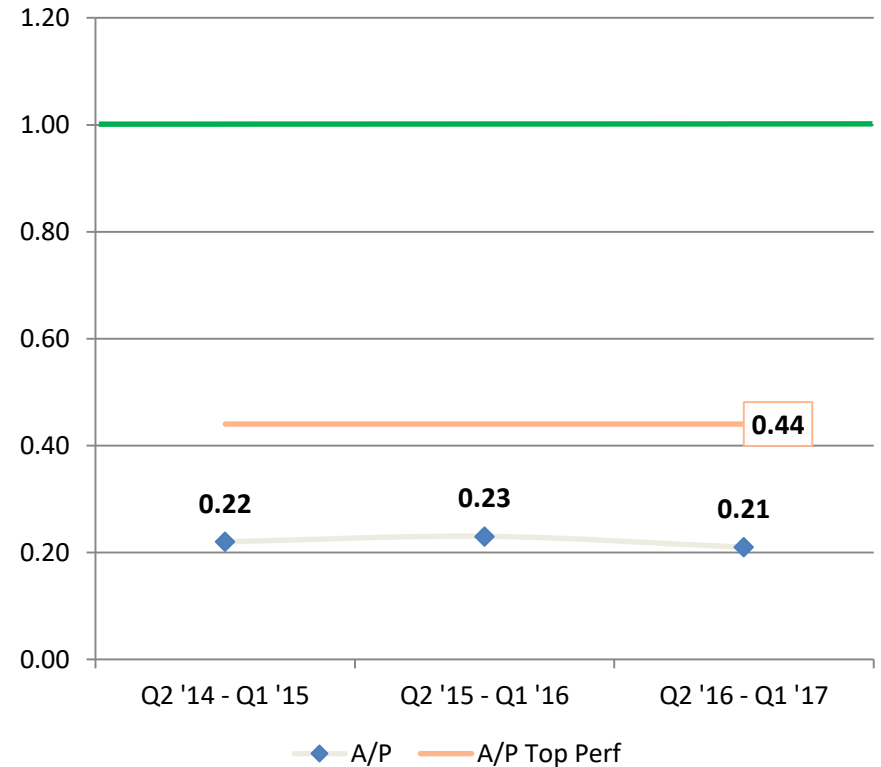


Total Knee Replacement - AtlantiCare Regional Medical Center - Atlantic City Actual vs. Predicted Complication Trends & Comparison - Annual

2014 Q2 - 2017 Q1 Client – All Payer

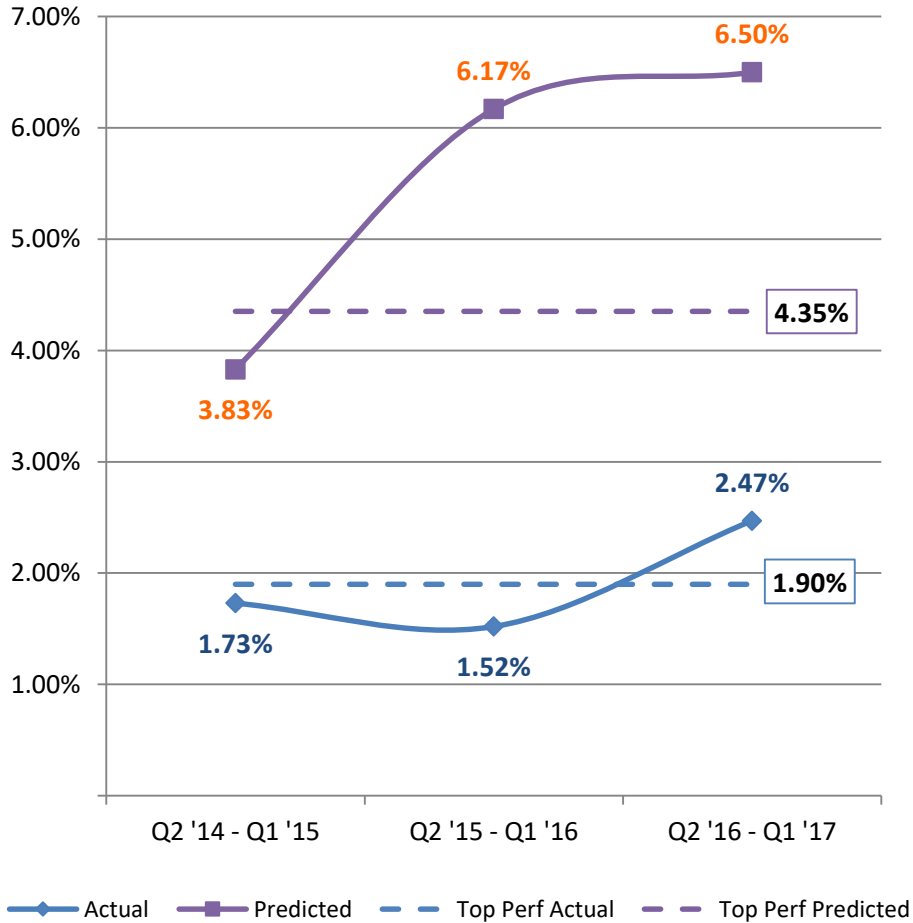


Year	Volume	Complications
Q2 '14 - Q1 '15	1181	17
Q2 '15 - Q1 '16	1255	21
Q2 '16 - Q1 '17	1318	20

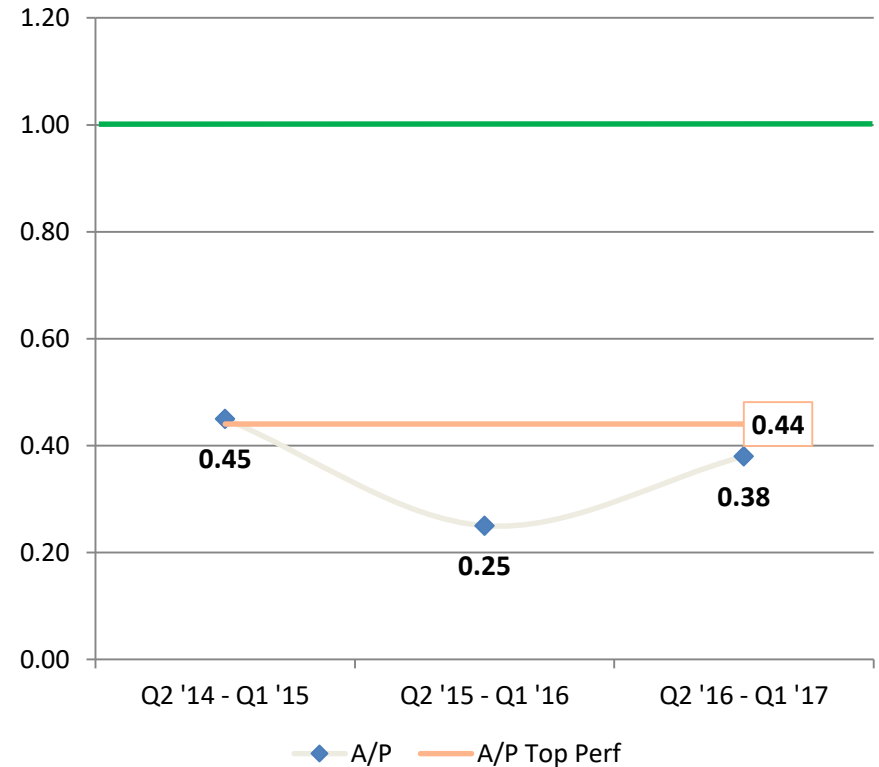


Total Hip Replacement - AtlantiCare Regional Medical Center - Atlantic City Actual vs. Predicted Complication Trends & Comparison - Annual

2014 Q2 - 2017 Q1 Client – All Payer

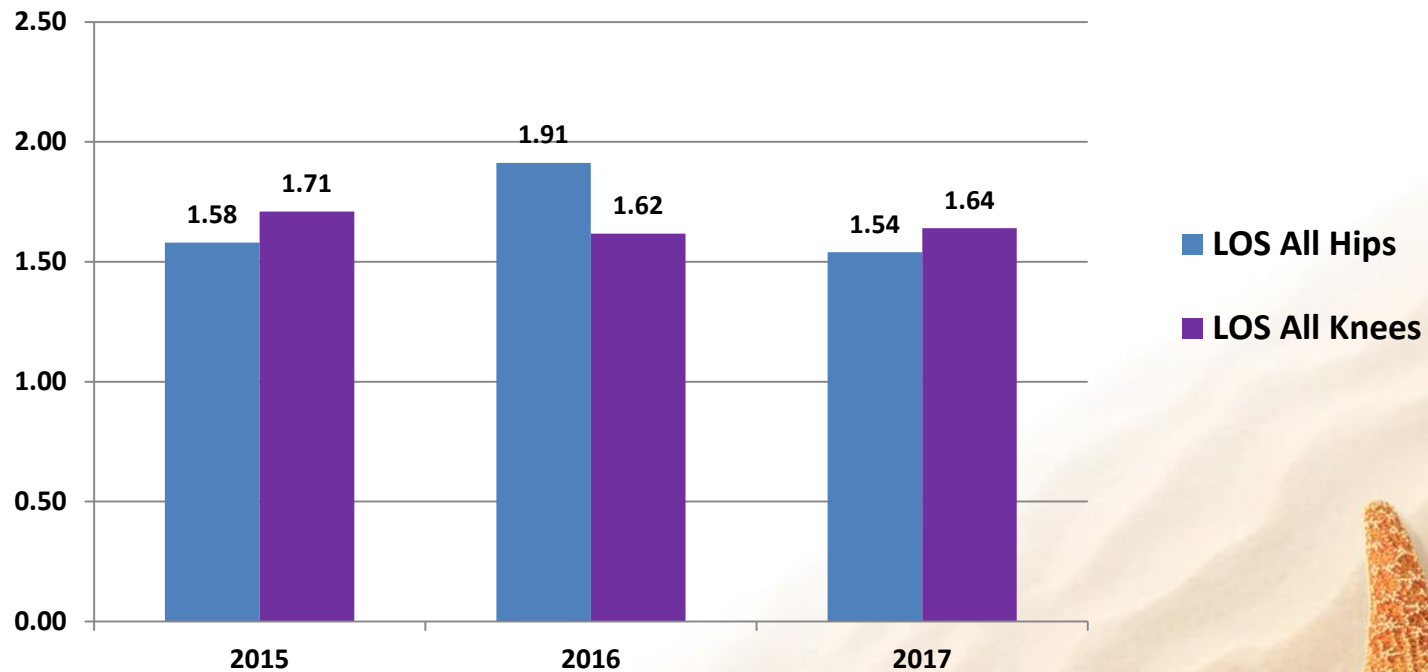


Year	Volume	Complications
Q2 '14 - Q1 '15	577	10
Q2 '15 - Q1 '16	593	9
Q2 '16 - Q1 '17	608	15



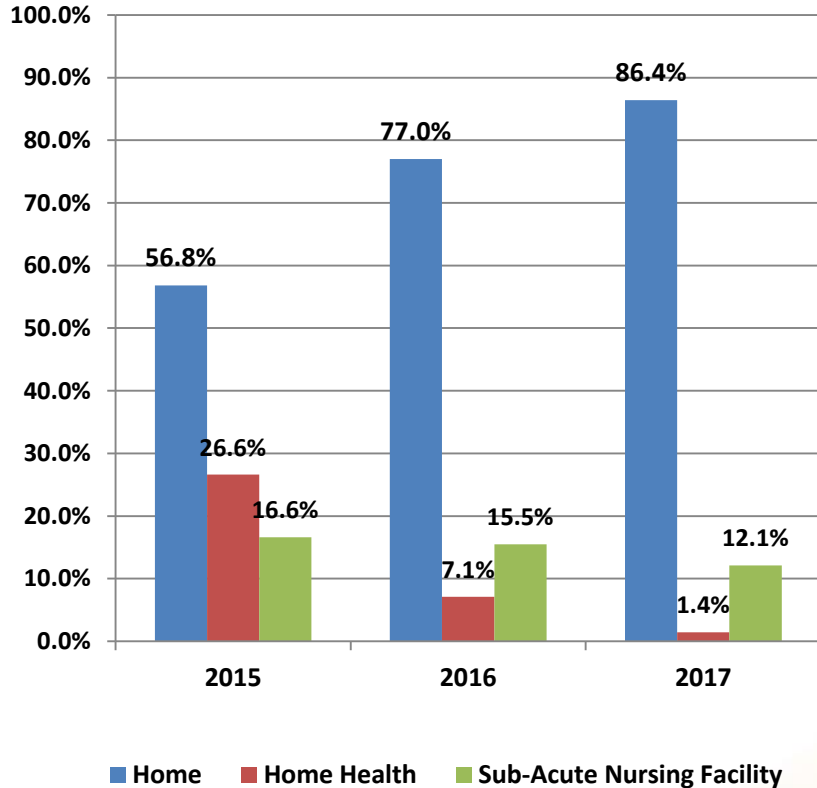
Our results

Length of Stay

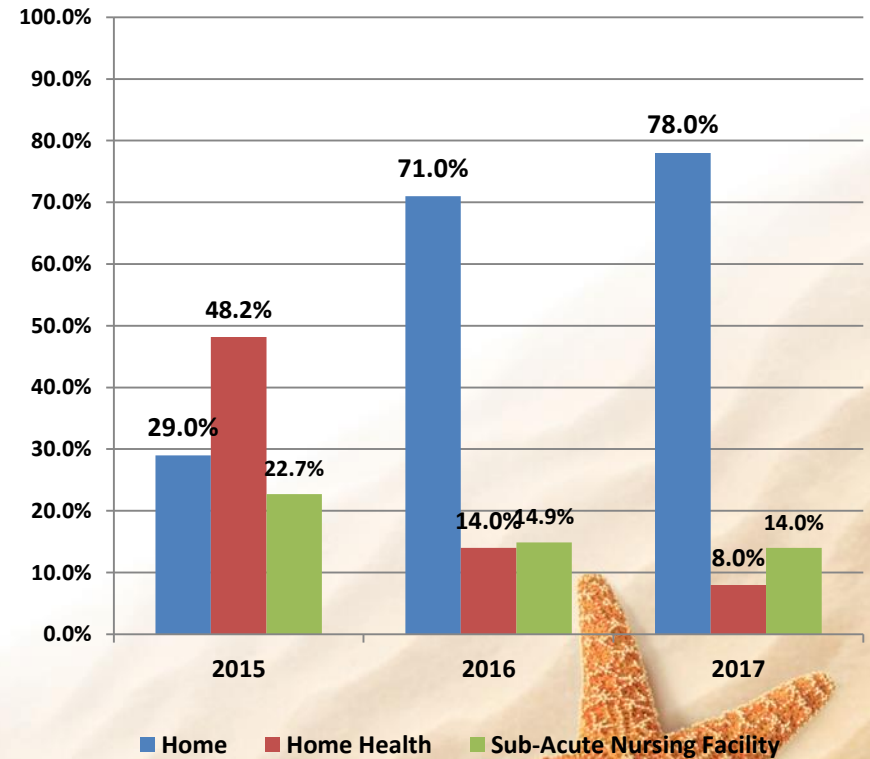


Discharge Disposition

Hips

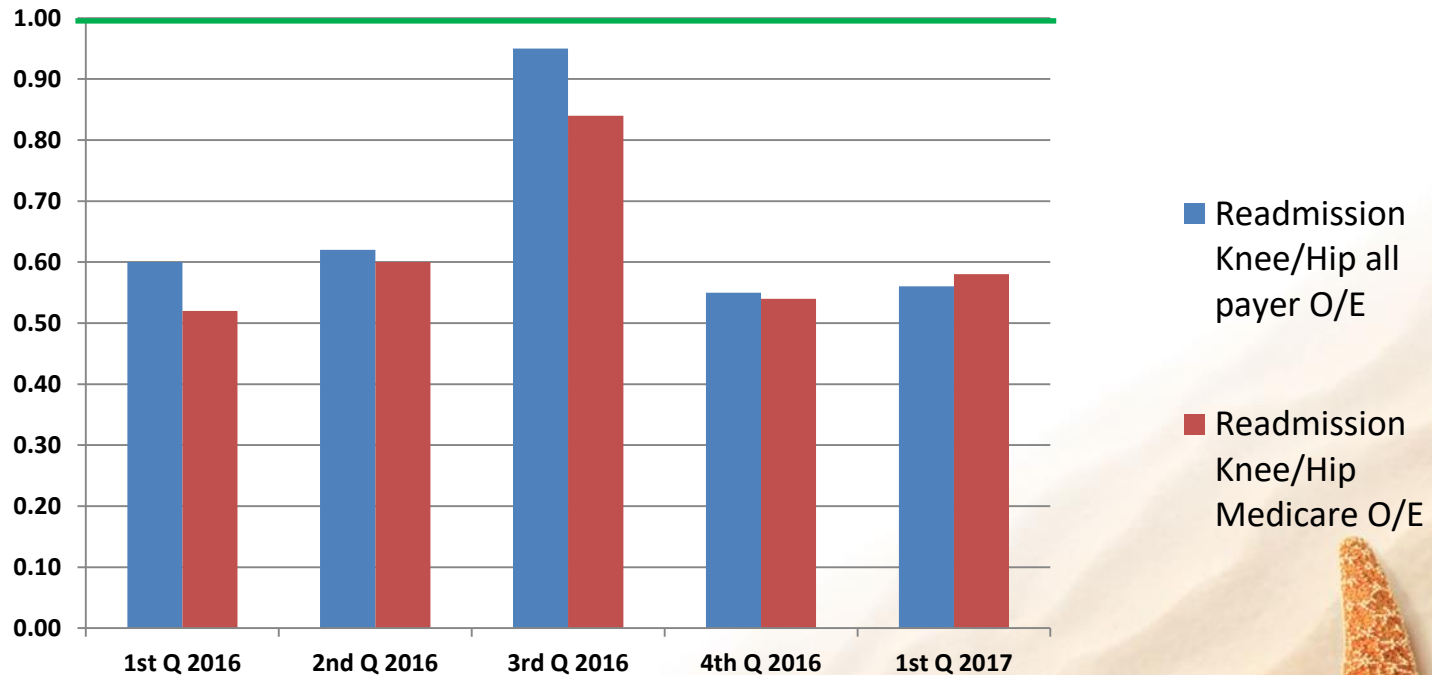


Knees



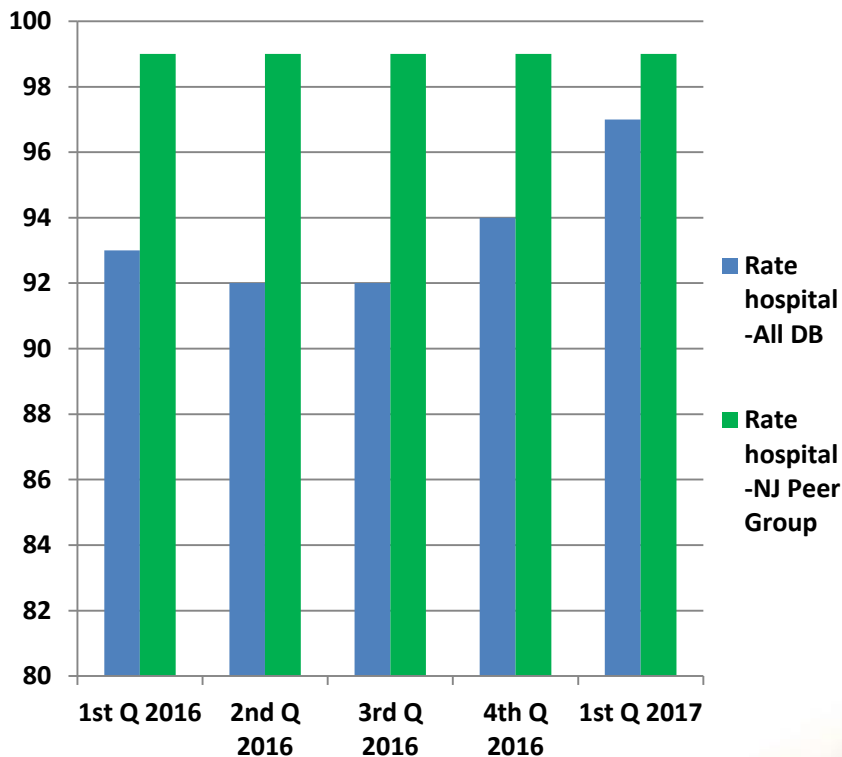
Readmissions

Readmission Data Q1 2016 - Q 1 2017

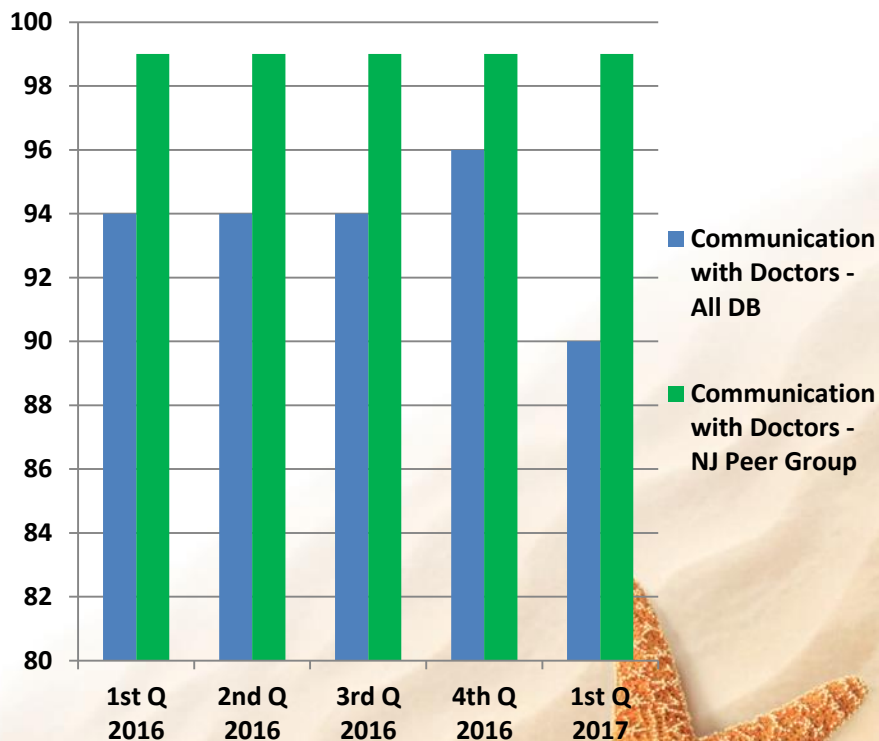


Customer Satisfaction

Rate Hospital



Communication with Doctors



Our Results

AtlantiCare Regional Medical Center New Jersey Rankings

Cohort	Quality Rank
Joints	3/44
Spinal Surgery	20/24
Ortho Overall	4/30

Cohort	Volume Rank
TKR	3/44
THR	3/44
Hip Fx	11/44
B&N	20/27
FUS	9/27



2017 Star Report

Orthopedics



Total Knee Replacement



Total Hip Replacement



Hip Fracture Treatment



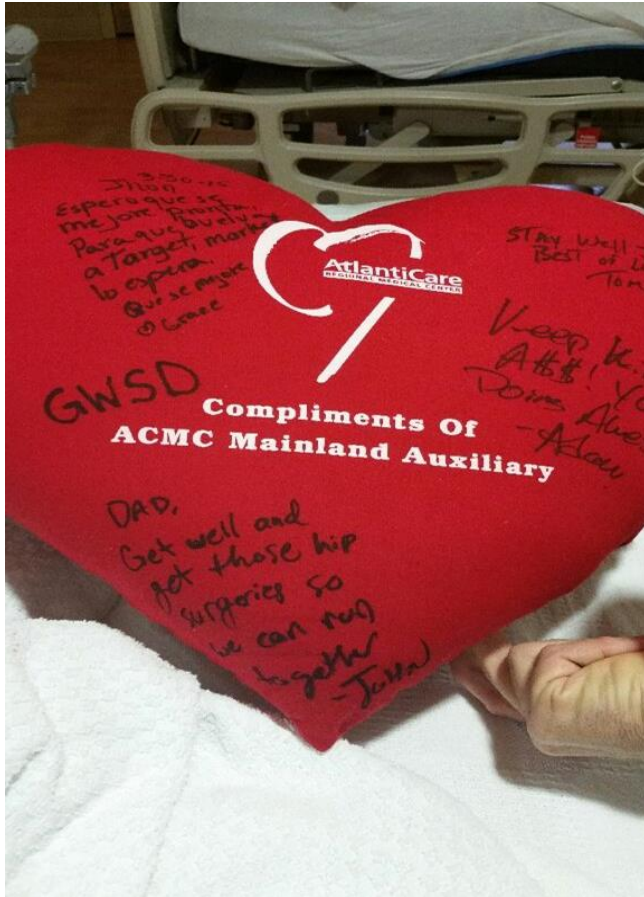
Back Surgery



Spinal Fusion Surgery



Lives Saved List



- CPM identified 53 patients (2015- 2017) who received potential life saving interventions such as stents, CABG, and TAVR (all performed here at AtlantiCare).



Our Journey-Same Day Joints

- Surgery at 7am, discharge by 5pm.
- Plan to move to ASC in 2 years
- Schedule patient as SDS, authorize outpatient
- Brief stay on Orthopedic unit
- Over 35 successful joint replacements
- All discharged to home, no post acute services



Patient Selection Criteria

- Primary TKA/THA only
- ASA 1 or 2
- Age <65
- BMI <30
- Hemoglobin
 - >13 (males)
 - >12.0 Females
- Well controlled DM, dyslipidemia, Asthma
- Patient must be able tolerate ASA for anti-coagulation prophylaxis
- Patient must be motivated and active prior to surgery
- Ideal home situation

Contraindicated in patients with :

- Cardiac stents, valves
- Hypertension (multiple medications)
- DM (uncontrolled or newly diagnosed)
- CAD/CHF
- OSA/COPD
- CKD
- Liver disease
- History of VTE (PE, DVT)
- Urinary issues (incontinence, retention, BPH)
- Neurological disorders (Parkinson's, dementia, stroke, TIA, spinal issues)
- Psych disorders (major depression, bipolar, schizophrenia)
- Chronic steroids
- Drug abuse
- Hematologic issues
- History of falls/osteoporotic fractures



Anesthesia Considerations

Pre-Op

- Celebrex 200mg
- Oxycontin 10 mg
- Gabapentin 300 mg
- Tylenol 1000mg

Intra-op

- Short acting spinal
- IV Hydration 1-2 Liters
- Decadron & Zofran
- TXA
- Adductor blocks (knees)
- Periarticular injections
(by surgeon)

Post-op

- Fentanyl/morphine
- Toradol
- Zofran
- Rx for Oxycodone,
Tramadol, Zofran



Patient Expectations

- Starts with the surgeon
- Same message at each touch point
- Preoperative Joint Class
- RN navigator
- Discharge instructions
- Follow up phone calls



Opportunities

- Pain control/Reduction in opioid use
- Readmissions
- ED/ Urgent Care
- PCP follow up
- Post discharge follow up phone calls
- Spread best practices to Joint program overall



Questions?

