A not-for-profit regional health system headquartered in Annapolis, Maryland, Anne Arundel Medical Center serves an area of more than one million people. AAMC is recognized for orthopedic care, emergency heart attack response and cancer care. A leader in women’s services, AAMC ranks second in Maryland for number of births annually and has a Level III neonatal intensive care unit.

Total licensed beds ............... 425*
Inpatient admissions........... 26,300
Joint replacements .............. 2,299
Births ............................... 5,500
Emergency visits ................ 97,000
Outpatient visits ............. 110,000+
Medical staff ..................... 1,100+
Employees ....................... 4,700+
Operating revenue ....... $695 million

*A includes 40-bed facility, Pathways, dedicated to substance use and mental health treatment

Awards:
Magnet® Recognition by the American Nurses Credentialing Center (ANCC)
Consumer Reports Top 10 Hospitals for Surgical Safety
Delmarva Foundation Excellence Award for Quality Improvement
Exemplar recognition for family presence awarded by the Institute for Patient- and Family-Centered Care (IPFCC)
Top 25 of the Nation’s Best Practices in Patient and Family Centered Care by the Caregiver Action Network
HealthStream Award for Highest Community Perception of Quality
Blue Distinction® Center for knee and hip replacement

AAMC Includes:
The state’s third busiest hospital (measured by inpatient discharges)
Outpatient locations in Bowie, Kent Island, Odenton, Pasadena and Waugh Chapel
A multi-specialty medical group in 55+ locations throughout the region
An accountable care organization (ACO) participating in the Medicare Shared Savings Program
A research institute with a simulation and innovation center.
Dear Colleague:

Welcome to the first Anne Arundel Medical Center (AAMC) Orthopedic Outcomes Report. This year’s report expands upon our flagship publication, The Center for Joint Replacement Outcomes Report, that you’ve received in previous years. The following pages provide an overview of the patient-reported outcomes, clinical measures, and operational and financial data we use to define the success of the orthopedic program at AAMC.

In this year’s report we highlight the breadth and depth of outcomes data being tracked across the Orthopedics service line. We are proud to present results from The Center for Joint Replacement, The Center for Spine Surgery, The Osteoporosis Screening and Treatment Program, and the Sports Medicine, Upper Extremity and Foot/Ankle Surgery Programs. While you will notice parallels between programs, the unique approaches employed to drive the highest quality, highest value care to patients will become apparent. By anchoring our approach to care in patient-centered outcomes data, we are able to empirically evaluate our results and continuously improve the quality of care we deliver.

This report highlights the many notable achievements of Orthopedics at AAMC. We believe that publishing these health care outcomes enhances our culture of continuous quality improvement, and increases the value of care delivered to patients. At AAMC we are dedicated to delivering the highest quality care and are proud to be a leader in presenting transparent results.

Building on the foundation of work presented in this year’s report we are proud to announce the launch of The Center for Orthopedic Outcomes at AAMC. The center presents an exciting opportunity to formalize our outcomes program, and is built around a dedicated manager of Orthopedic Outcomes. By centralizing resources, and collaborating with institutional programs such as the Department of Surgery Research and AAMC Research Institute, we are confident that 2017 marks the beginning of an exciting time for AAMC Orthopedics.

Respectfully,

Jeff Gelfand
Medical Director of Orthopedics

Note: Unless otherwise noted, all data in this year’s report is presented on a fiscal year (July–June) basis.
2,299 joint procedures performed in 2017, the most in Maryland

6,000+ patient-reported outcomes captured

7 YEARS in a row as the busiest joint replacement program in Maryland

69% patients discharged within 1 day of surgery

10th busiest joint replacement program in the country for Medicare beneficiaries

20% more procedures performed than any other program in Maryland over the last five years

22% shorter average length of stay than the Maryland hospital average in FY 2017

Top 10 U.S. Hospitals with Medicare “DRG-Payment” Hip and Knee Replacement Procedures 2016

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>City</th>
<th>Cases 2016</th>
<th># in 10 yr “Top 10”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital for Special Surgery (330270)</td>
<td>New York, N.Y.</td>
<td>4,732</td>
<td>10</td>
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<tr>
<td>New England Baptist Hospital (220088)</td>
<td>Boston, Mass.</td>
<td>2,479</td>
<td>10</td>
</tr>
<tr>
<td>Mayo Clinic Hospital 1 (240010)</td>
<td>Rochester, Minn.</td>
<td>1,876</td>
<td>10</td>
</tr>
<tr>
<td>William Beaumont Hospital (230130)</td>
<td>Royal Oak, Mich.</td>
<td>1,618</td>
<td>10</td>
</tr>
<tr>
<td>Swedish Medical Center (500027)</td>
<td>Seattle, Wash.</td>
<td>1,513</td>
<td>4</td>
</tr>
<tr>
<td>Hoag Orthopedic Institute (050769)</td>
<td>Irvine, Calif.</td>
<td>1,469</td>
<td>1</td>
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<tr>
<td>Morristown Medical Center (310015)</td>
<td>Morristown, NJ</td>
<td>1,396</td>
<td>1</td>
</tr>
<tr>
<td>McBride Orthopedic Hospital (370222)</td>
<td>Oklahoma City, OK</td>
<td>1,350</td>
<td>1</td>
</tr>
<tr>
<td>St. Francis Hospital &amp; Med Ctr (070002)</td>
<td>Hartford, CT</td>
<td>1,332</td>
<td>1</td>
</tr>
<tr>
<td>Anne Arundel Medical Center (210023)</td>
<td>Annapolis, MD</td>
<td>1,299</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Optum Payer Solutions Consulting
Includes cases assigned to DRGs 469-470, 461-462, 466-469.
1 Mayo Clinic Hospital includes cases from St. Mary’s and Rochester Methodist
The Center for Joint Replacement at AAMC is a national model for knee and hip replacement, and it’s the most sought-after program in Maryland. We draw patients from around the country and remain committed to continually advancing our mission of delivering high-quality, low-cost care.
The Multidisciplinary Rapid Recovery Protocol provides the highest level of care for our patients in the most efficient manner. In place since 2013, it combines evidence-based medicine, clinical outcomes measurement and lean methodologies. Based on the success of the protocol, we're proud to now offer same-day discharges for appropriate patients.
Host joint patient reunions.

Prevent readmissions and emergency room visits through contact with dedicated joint navigators.

Transfer the patient efficiently from post-anesthesia care unit to floor.

Provide same-day PT/OT evaluation, where appropriate.

Establish contact between dedicated joint navigator and patient to discuss a target one or same-day discharge to rehab and any other special circumstances.

Establish contact between dedicated joint navigator and patient.

Refer patient to pre-op physical therapy or PT360, our home therapy program.

FOLLOWING DISCHARGE

DAY OF SURGERY
The Center for Joint Replacement at AAMC is Maryland’s highest-volume joint replacement program for seven consecutive years.

The Center for Joint Replacement at AAMC maintains a 6 percent annual growth rate over the past five years, double the total growth rate of joint replacement surgery in Maryland.
AAMC performed 20 percent more joint replacements than the second busiest program in the state over the past five years.

AAMC performed more than 2,299 joint replacements in FY17, 19 percent more than the second busiest program in the state.

AAMC performed 819 total hip replacements in FY17, 3 percent more than the second busiest program in the state.

AAMC performed 1,349 total knee replacements in FY17, 14 percent more than the second busiest program in the state.
Length of Stay

Our high volume, paired with an average length of stay (ALOS) .58 days shorter than the Maryland hospital average, prevents 1,330 patient days in the hospital: a tangible benefit to our community and the Maryland health care system.

**Average Length of Stay: 5-Year Trend**

AAMC has reduced its ALOS for joint replacement patients by 29 percent since 2013 and had a 22 percent shorter ALOS than the Maryland hospital average in 2017.

**Primary Total Hip Replacement Average Length of Stay: 5-Year Trend**

AAMC has reduced its ALOS for primary total hip replacement patients by 27 percent since 2013 and had an 18 percent shorter ALOS than the Maryland hospital average in 2017.

**Primary Total Knee Replacement Average Length of Stay: 5-Year Trend**

AAMC has reduced its ALOS for primary total knee replacement patients by 31 percent since 2013, and had a 13 percent shorter ALOS than the Maryland hospital average in 2017.
Each month the multidisciplinary Center for Joint Replacement team gathers at its Joint Pathway meeting to evaluate empirical data and opportunities for improvement. Using this performance improvement methodology, AAMC has been able to improve its proportion of 1-day stays to 69 percent in 2017 and has implemented same-day discharges in 3 percent of carefully selected patients.
In 2016, AAMC began participating in the American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP). The ACS-NSQIP is the first nationally validated, risk-adjusted, outcomes-based program to measure and improve the quality of surgical care. The program employs a prospective, peer-controlled, validated database to quantify 30-day risk-adjusted surgical outcomes. This allows valid comparison of outcomes among all hospitals in the program, 680 as of the CY2016 Semi-Annual Report. In 2016, The Center for Joint Replacement received an exemplary designation (top 10 percent nationally) in six measures: Total Knee Replacement: VTE and Renal Failure; Total Hip Replacement: SSI, Sepsis, Return to OR and Readmission.

These highlights of our performance are presented as odds ratios. This reports the estimated odds of an event happening at AAMC compared to the estimated odds of that event happening in all hospitals in the ACS-NSQIP database. A number of 1.0 means the hospital is performing as expected. A number less than 1.0 means the hospital is performing better than expected. A number greater than 1.0 means the hospital is performing worse than expected.
The Center for Joint Replacement measures patient-reported outcomes (PROMs) using industry-leading methodologies to understand the value of surgery from the patients’ perspective. AAMC began capturing PROMs in 2010. Since then we’ve captured outcomes for more than 6,000 patients. This gives us the unique ability to analyze trends across a large sample size and longitudinally for individual patients. Using the multidisciplinary rapid recovery protocol, we’re able to significantly improve quality of life and physical function for hip and knee replacement patients, while minimizing their time in the hospital.

From preoperative to one-year postoperative, patients undergoing joint replacement at AAMC experienced dramatic improvements in Harris Hip Score (132 percent), Knee Society Score (154 percent) and Knee Function Score (92 percent).
Cost of Care

The Center for Joint Replacement strives to deliver high-quality, low-cost care that maximizes the value to patients and the health care system. We’re proud to maintain an average charge per case below the state average for five consecutive years.
Patients' likelihood to recommend the Center for Joint Replacement at AAMC has remained in the top five percent of the nation for seven consecutive years.

In 2017, 88 percent of patients who came to the Center for Joint Replacement at AAMC rated their overall hospital experience as either a 9- or 10-out-of-10, putting us in the top five percent nationally.
Research is a core element of the continuous quality improvement process at the Center for Joint Replacement. The dedicated research team at the center includes clinical research coordinators, data analysts and a research fellow. As a high-volume center, we feel it’s our duty to conduct high-quality research and disseminate our results. We’re proud to present the following research activity from the past year.

**SCIENTIFIC FORUM PRESENTATIONS**


**PUBLISHED MANUSCRIPTS**


**PUBLISHED ABSTRACTS**


1,098 spine procedures performed in 2017, the third busiest spine program in Maryland.

20% higher patient satisfaction scores than the national average for spine centers.

40% shorter length of stay than the Maryland average for inpatient spine surgery.
Our multidisciplinary team approach drives our ability to deliver the highest quality care tailored to each patient’s needs. A variety of programs have been implemented through our Spine Pathway.

**SPINE SURGEONS**

**PRE-OP CLASSES:** Offers day and evening classes weekly to accommodate patient schedules.

**PHYSICAL AND OCCUPATIONAL THERAPY**

**DEDICATED NURSING AND OR TEAMS**

**INPATIENT AND OUTPATIENT NURSE NAVIGATORS**

**MULTI-MODAL PAIN MANAGEMENT:** Uses both opioid and non-opioid medications to control pain (i.e. Tylenol, NSAIDs, muscle relaxers, etc.).

**PHARMACISTS**

**GROUP THERAPY:** Provides emotional support and encouragement, with a special focus on non-pharmacologic methods of pain control.

**HOSPITALIST AND PHYSICIAN ASSISTANTS**

**EARLY MOBILIZATION:** Gets patients out of bed the day of surgery and ready for group therapy early the following morning.

**PT360 VISITS:** Offers home physical therapy pre- and/or post-surgery to help patients prepare their home environment for surgery and increase safety after discharge.
FY 2017 Spine Surgery Volume: Top 10 Maryland Hospitals

FY 2017 Average Length of Stay (Days): Inpatient Spine Surgery
Patient Outcomes

We capture patient-reported outcomes measures for patients treated by spine surgeons at AAMC Orthopedics. These tools allow providers to track the impact of surgical intervention over time from the patient’s perspective. We use PROMs both in research and clinical practice to evaluate each patient’s quality of life. On average, patients undergoing lumbar spine surgery lowered their disability score by more than 60 percent. Lower scores means a patient is less disabled.

### Lumbar Spine Surgery Patient Reported Outcomes: Oswestry Disability Index

Note: A lower score on the Oswestry Disability Index (ODI) denotes a lower level of disability, and a better functional outcome for patients.

### AAMC Center for Spine Surgery Patient Satisfaction Scores

Spine surgery patient satisfaction scores have risen by 23 percent since 2015 and significantly exceed the 73 percent average for spine centers nationally.
AAMC recognizes the importance of delivering high-quality, low-cost care. The Center for Spine Surgery has decreased its average charge per inpatient case by 20 percent since FY 2012, while the average Maryland hospital charge has increased by 21 percent.

The average charge for inpatient spine surgery at AAMC in FY 2017 was 37 percent below the Maryland average, the lowest of the top 10 high volume spine centers in the state.

The Center for Spine Surgery consistently measures a wide variety of clinical outcomes to guide our quality improvement efforts. In 2016, the center ranked in the top 10 percent of the country in postoperative pneumonia and sepsis rates. We also earned the “Exemplary” designation from the ACS-NSQIP program in these categories.
The Center for Spine Surgery undertakes a wide variety of research projects including:

**CLINICAL TRIALS:**

Pfizer STRIVE (Staphylococcus aureus Surgical Inpatient Vaccine Efficacy) trial. The purpose is to evaluate the safety and efficacy of the vaccine to determine if it prevents postoperative invasive S. aureus infections in patients undergoing elective spinal surgery.

**NATIONAL PRESENTATIONS:**


**SUBMITTED MANUSCRIPTS:**


**INSTITUTIONAL PRESENTATIONS:**

Turcotte J., Andersen, K., Grover, J., Patton C. The impact of risk-score based interventions on 30-day readmissions and ED visits following spine surgery. Poster presented at: Anne Arundel Medical Center Quality Improvement Showcase; May, 2017; Annapolis, MD.


“Immediately after the surgery, I felt so much better,” says Hope. “It was amazing. I felt like I had my old leg back. I was basically pain free. I’m so glad I decided to have surgery.”

– Hope Lomvardias, spine surgery patient

“It was the best thing I could have done, I’m so glad they do this here.”

– Joan MacLean, iFuse patient
Defining Sports Medicine: A wide variety of procedures are encompassed by the term sports medicine. At AAMC we have defined this service as using the following CPT codes across three procedure categories:

- Outpatient Shoulder Surgery: 2982, 29826, 29807, 23430, 23472, 29806
- Outpatient Hip Surgery: 29916, 29915, 29914, 29862
- Outpatient Knee Surgery: 29881, 29888, 29882, 29877, 29867

All data is based on the HSCRC hospital data set.

**We performed the most hip arthroscopies in the state of Maryland each year for the past three years.**

MORE THAN 100 hip arthroscopies in a year, the only program to do so

25% of all hip arthroscopies in Maryland are performed at AAMC

**We performed the most outpatient knee surgeries in the state of Maryland for the past three years.**

MORE THAN 1,000 outpatient knee surgeries in a year, the only program to do so

142% more outpatient knee surgeries than the second busiest program in 2017

**We’re Maryland’s highest-volume outpatient shoulder surgery program for two of the past three years.**

14% of all outpatient shoulder surgeries in Maryland are performed at AAMC

18% more outpatient shoulder surgeries than the second busiest program in Maryland in 2017
Our Sports Medicine program has maintained its leadership position as the highest volume program in Maryland over the past three years. We perform 67 percent more surgeries than the second busiest program in the state. In 2017, AAMC was Maryland’s highest volume center in hip arthroscopy, outpatient knee surgery and outpatient shoulder surgery.
Patient Outcomes

**Hip Arthroscopy**
Patients undergoing labral repair at AAMC experienced a 25 point improvement in M-HHS over one year.

**Knee Surgery: ACL Repair**
Patients undergoing ACL surgery at AAMC have a 99.5 percent WOMAC functional score at one year, better than the national average of <95 percent.

**Knee Surgery: ACL Repair**
SANE knee scores nearly doubled from preop to one year postop for AAMC patients, again outperforming national benchmarks.

**Shoulder Surgery**
Patients undergoing shoulder surgery at AAMC experienced results consistently superior to national averages, with ASES scores improving by >30 points.
The Sports Medicine team is involved in volunteer community sports coverage at all levels from the weekend warrior to Olympic teams. We are very proud to be selected by the following teams to provide their medical coverage:

Daniel Redziniak, MD
Chesapeake Bayhawks Professional Lacrosse Team, Bowie State, Anne Arundel Community College, Severna Park High School

Benjamin Petre, MD
USA Olympic Ski Team, USA Olympic Snowboard Team, Baltimore Orioles, Bowie Baysox AA Orioles affiliate, Annapolis High School

Peter Ove, MD
Bowie State, DeMatha Catholic High School

Christina Morganti, MD
Anne Arundel Community College

The Sports Medicine team is dedicated to providing educational opportunities to both providers and the community. Highlights of our 2017 educational activities include:

YIPS: Youth Injury Prevention Seminar. This annual conference put on by Dr. Christina Morganti aims to educate and update coaches, athletic trainers, parents, physical therapists, midlevel providers and other physicians on the most relevant injury prevention topics and techniques. Recent conferences have focused on topics such as concussion, the opioid crisis and what it means for injured youth, prevention of ACL tears, footwear and playing surface, etc.

Emerging Concepts in Orthopedic Surgery: Put on by Dr. Daniel Redziniak and Dr. Jeff Gelfand, this one-day course is targeted toward orthopedic surgeons, primary care providers, physical therapists, and other allied professionals who want to learn about emerging treatment options for common conditions encountered by orthopedic surgeons. Course lectures include new strategies for treating a range of orthopedic conditions and injuries, and discussion of new procedures compared with alternate management options.

Sports Medicine Fellowship: The AAMC Sports Medicine team is honored to be asked by the Uniformed Services University to take part in teaching their Sports Medicine Fellows.
Upper Extremity Surgery

The Upper Extremity Surgery program is the second busiest program in Maryland, and the fastest growing high-volume program in the state. Upper extremity data includes cases with CPT codes: 29848, 25609 and 23472.

The Upper Extremity Surgery program performed 308 cases in 2017 and has maintained an annual growth rate of 14 percent over the past three years.

Foot and Ankle Surgery

In 2017, AAMC was the third busiest foot and ankle program in the state, and has performed 775 procedures over the past three years. Foot and ankle data includes cases with CPT codes: 29898, 28308, 27792, 28296 and 27698.
The Upper Extremity Surgery program utilizes the Disabilities of the Arm, Shoulder and Hand Score (QuickDash) to track the impact of surgery from the patient perspective. A lower score indicates a better functional outcome for patients. In 2017, patients undergoing surgery at AAMC displayed postoperative functional outcomes that outperformed national benchmarks at both six months and one year postop.
About

Our Osteoporosis and Screening program started in 2006 with the name of Bone Alert, under the leadership of Dr. Christina Morganti, an orthopedic surgeon who had studied exercise and aging, and developed an interest in osteoporosis through her research fellowship at Tufts University in the mid 90s. As osteoporosis awareness increased, it became apparent that the orthopedic surgeon is a logical bridge between the high-risk patient who has sustained a fragility fracture and the primary care doctor who traditionally manages chronic disease including osteoporosis. The concept of Fracture Liaison Service was developed and promoted. A Fracture Liaison Service typically refers to a hospital-based program, focusing on inpatient fragility fracture patients, especially hip fracture patients. However, we have found that the outpatient setting is the most appropriate and efficient for managing osteoporosis patients.

We started the Bone Alert program as a notification service to the primary care doctor of each fragility fracture patient who was at least 50 years old. It has evolved to a comprehensive outpatient program that includes evaluation and treatment of osteoporosis if desired.

How the program works

Intake Points:
- Post fragility fracture referrals, PCP referrals, patient self referrals

Care Coordination:
- Ongoing osteoporosis management in collaboration with PCP

- DEXA Scan
- X-Ray
- Blood Work
- National Osteoporosis Case Conferences
- Longitudinal Patient Tracking
- Pharmaceutical Treatment as Needed
- Smoking Cessation and Alcohol Reduction
- Lifestyle Management: Nutrition and Exercise
- National Osteoporosis Case Conferences
- Longitudinal Patient Tracking
- Pharmaceutical Treatment as Needed
- Smoking Cessation and Alcohol Reduction
- Lifestyle Management: Nutrition and Exercise
Own the Bone is a registry developed by the American Orthopedic Association to support the mission of improving the initiation of osteoporosis evaluation and management in patients after they have sustained a fragility fracture. Participating in the program allows us to benchmark our performance to other programs across the country. Since we began participating in the registry two years ago, the Osteoporosis and Screening program has been designated a Star Performer in both years. All data gathered through June 30, 2017.

**Patient and Physician Letters**

<table>
<thead>
<tr>
<th></th>
<th>AAMG Subjects</th>
<th>All Subjects</th>
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</thead>
<tbody>
<tr>
<td>Patient Letter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician Letter</td>
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N = 121

**Counseling Compliance Measures**

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<tr>
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<th>AAMG Subjects</th>
<th>All Subjects</th>
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<tbody>
<tr>
<td>Calcium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Prevention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoking Cessation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol Consumption</td>
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<td></td>
</tr>
</tbody>
</table>

N = 41,449

**Counseling Fracture Location**

- AAMG Subjects
  - Spine 36%
  - Wrist 13%
  - Arm 5%
  - Shoulder 3%
  - Pelvis Ring 3%
  - Ankle/Foot 15%
  - Leg 6%
  - Hip 7%
  - Thigh 2%
  - Knee 2%

N = 132

- All Subjects
  - Spine 11%
  - Wrist 6%
  - Arm 2%
  - Shoulder 6%
  - Pelvis Ring 3%
  - Ankle/Foot 7%
  - Leg 2%
  - Knee 4%
  - Thigh 3%

N = 44,453

**Compliance Measure: BMD Testing Recommended to Patient**

- AAMG Subjects
  - Yes 91%
  - No-Not Indicated 7%
  - No 2%

- All Subjects
  - Yes 74%
  - No-Not Indicated 12%
  - No 14%
In 2016, AAMC Orthopedics received an exemplary designation (top 10 percent nationally) from ACS-NSQIP in six postoperative occurrence categories: cardiac, pneumonia, renal failure, SSI, sepsis and readmissions.

The following are highlights of our performance, presented as Odds Ratios. This reports the estimated odds of an event happening at AAMC compared to the estimated odds of that event happening in all hospitals in the ACS NSQIP database. A number of 1.0 means the hospital is performing as expected. A number less than 1.0 means the hospital is performing better than expected. A number greater than 1.0 means the hospital is performing worse than expected.

**CY 2016 NSQIP Outcomes: AAMC Orthopedics (All Procedures)**

**30-Day Risk-Adjusted Occurrence Rates**

<table>
<thead>
<tr>
<th>Event</th>
<th>Odds Ratio</th>
<th>National Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>0.29%</td>
<td>0.65</td>
</tr>
<tr>
<td>Morbidity</td>
<td>0.14%</td>
<td>0.65</td>
</tr>
<tr>
<td>Cardiac</td>
<td>0.21%</td>
<td>0.65</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>0.14%</td>
<td>0.65</td>
</tr>
<tr>
<td>Unplanned Intubation</td>
<td>0.07%</td>
<td>0.65</td>
</tr>
<tr>
<td>Ventilator &gt;48 Hours</td>
<td>0.07%</td>
<td>0.65</td>
</tr>
<tr>
<td>VTE</td>
<td>0.14%</td>
<td>0.65</td>
</tr>
<tr>
<td>Renal Failure</td>
<td>0.08%</td>
<td>0.65</td>
</tr>
<tr>
<td>UTI</td>
<td>0.47%</td>
<td>0.65</td>
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<tr>
<td>SSI</td>
<td>0.40%</td>
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<tr>
<td>Sepsis</td>
<td>0.14%</td>
<td>0.65</td>
</tr>
<tr>
<td>Return to OR</td>
<td>0.96%</td>
<td>0.65</td>
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</table>

**CY 2016 NSQIP Outcomes: AAMC Orthopedics (All Procedures)**

**vs. National Benchmark**

<table>
<thead>
<tr>
<th>Event</th>
<th>Odds Ratio</th>
<th>National Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>1.05</td>
<td>0.65</td>
</tr>
<tr>
<td>Morbidity</td>
<td>0.82</td>
<td>0.65</td>
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<tr>
<td>Cardiac</td>
<td>0.78</td>
<td>0.65</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>1.08</td>
<td>0.65</td>
</tr>
<tr>
<td>Unplanned Intubation</td>
<td>1.04</td>
<td>0.65</td>
</tr>
<tr>
<td>Ventilator &gt;48 Hours</td>
<td>1.04</td>
<td>0.65</td>
</tr>
<tr>
<td>VTE</td>
<td>1.17</td>
<td>0.65</td>
</tr>
<tr>
<td>Renal Failure</td>
<td>0.89</td>
<td>0.65</td>
</tr>
<tr>
<td>UTI</td>
<td>0.78</td>
<td>0.65</td>
</tr>
<tr>
<td>SSI</td>
<td>0.65</td>
<td>0.65</td>
</tr>
<tr>
<td>Sepsis</td>
<td>0.70</td>
<td>0.65</td>
</tr>
<tr>
<td>Return to OR</td>
<td>0.91</td>
<td>0.65</td>
</tr>
</tbody>
</table>

**Morbidity**

**Cardiac**

**Pneumonia**

**Unplanned Intubation**

**Ventilator >48 Hours**

**VTE**

**Renal Failure**

**UTI**

**SSI**

**Sepsis**

**Return to OR**
2017 marked the introduction of the Orthopedic Patient-Centered Post-Procedure Opioid Prescribing Initiative. This initiative was developed in response to the overwhelming opioid epidemic facing our community and nation. The goal of the initiative was to determine, and prescribe, the actual amount of narcotic pain medication needed for a given procedure. Recent published literature has demonstrated that as much as 66 percent of the narcotic pills prescribed for patients undergoing orthopedic surgical procedures may go unused, thus creating a potential surplus of narcotic pills that may be diverted to support the opioid crisis. The initiative involved creating a consensus amongst treating surgeons on how much narcotic is actually needed for a given procedure. The patients undergoing those procedures were then asked to fill out a patient diary documenting actual opioids consumed in the immediate postoperative period. Finally, any time a second prescription was required during the postoperative period, it was documented and tracked within the medical record. This feedback loop of patient-reported consumption as well as the need to write a second prescription has enabled providers to ensure the amount being prescribed is the actual amount of narcotic needed during the postoperative period. The results to date have been remarkable. Through the first six months of the program patients experienced a 47.9 percent decrease in the amount of opioids prescribed, with only 8.5 percent of patients requiring a refill of their prescription.

Total Opioid MMEs Prescribed: 2017 May-November

Second Scripts for Opioid Prescription Required: 2017 May-October
In the spring of 2018, AAMC Orthopedics launched a campaign to establish a higher-level brand identity and build awareness of its trusted orthopedic care. This campaign, Your Comeback Starts Here, featured four patients with compelling stories of how AAMC Orthopedics helped them get back to the things they love.

To read more of their stories, see the commercial and behind the scenes interviews, visit AAMCortho.com.
Alma Adams
Tyler Heights Elementary Crossing Guard

Alma Adams loves her job as a crossing guard in Annapolis, helping young students safely navigate the intersection of Woods Drive and Tyler Avenue. When she’s not working, she also keeps busy by traveling and volunteering. “I am constantly on the go,” she says.

Firefighter Donny Fletcher was at the scene of an apartment fire when he felt a tightening across his shoulder and the next day, it was difficult for him to move his arm.

Daniel Redziniak, MD, orthopedic surgeon, ordered an arthrogram – a test that gives high definition images with contrast.

The test detected a full labral tear.

Donny immediately began non-operative treatment, and struck a deal with Dr. Redziniak. He would keep going to rehab, as long as he was allowed to keep working.

Not only did his treatment help him get back to the work he loves, it has also helped him to enjoy other activities that are special to him.

Campbell Goodburn
Fourth grade student, swimmer and dancer

When fourth-grader Campbell Goodburn broke her ankle playing a game of tag, her mom wanted the very best care — Campbell just wanted to get back to swimming and dancing as quickly as possible.

“My husband and I didn’t want to take Campbell to the emergency room or urgent care for her injury. We are fortunate to have AAMC Orthopedics in our community. It’s a convenient solution when you need somewhere to have a broken bone looked at and treated by orthopedic specialists,” shares Dawn.

Thanks to excellent care from the entire team at AAMC Orthopedics, Campbell was able to perform at the Lyric Theater this past December and have an experience to last a lifetime.

Nyme Manns
Former Bowie State Football Player

Nyme Manns was playing in Bowie State University’s first football game of the year in 2014 when he took a blow to his knee that sidelined him for the rest of the season.

Daniel Redziniak, MD, an orthopedic surgeon and team doctor for the Bowie State University Bulldogs, assured Nyme that everything would be okay.

When Nyme returned to the field the following season, it was his most successful year as a Bulldog, Nyme recalls. He was named the fifth-ranked receiver in the country, and landed on the Black College Football Hall of Fame’s watch list, after breaking every record in Bowie State football history.

“I feel like my injury made me a better athlete and a stronger person,” he says.
Therapy dogs bring smiles and comfort to patients and families

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