Musculoskeletal Health Disparities:
Breaking the Vicious Cycle

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St. Francis Orthopaedic Institute - Columbus, GA

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AOGME Webinar
Objectives

• Define osteoarthritis
• Define disparities
• Understand unintended consequences of payment models
• Identify implementable solutions
Ms. Davis

68 year old
- African American Woman
- Severe knee arthritis
- 5’ 2” / 285 lbs (BMI 52)
- High blood pressure, Diabetes, Kidney disease
- Disabled – cane/motorized scooter
- Lives with her working daughter & 4 grandchildren
- No car
Osteoarthritis (OA)

- Most common type of arthritis
- Multifactorial
  - Not just a “wear and tear”
  - Obesity is a factor
  - Other factor
    - Age
    - Sex
    - Family History
    - Race
    - History of trauma
The Link Between Obesity & Arthritis

• Gaining weight increases the pressure across the knees

• The knee “feels”
  – 3 times your body weight when walking
  – 6 times your body weight when going up stairs

• WEAK quadriceps muscles leads to LOSS of cartilage (worse arthritis)
Prevalence of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2015

Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.

*Sample size <50 or the relative standard error (dividing the standard error by the prevalence) ≥ 30%.
Prevalence of Self-Reported Obesity Among Non-Hispanic Black Adults, by State and Territory, BRFSS, 2013-2015

*Sample size <50 or the relative standard error (dividing the standard error by the prevalence) ≥ 30%.
## Obesity Rates by Race & Gender

<table>
<thead>
<tr>
<th></th>
<th>African Americans</th>
<th>Caucasians</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td>33%</td>
<td>28.4%</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td><strong>46%</strong></td>
<td>26.3%</td>
</tr>
</tbody>
</table>

Did you know?

54% of African-American women reported having doctor-diagnosed arthritis in the past five years, compared to 37% of white women.

Health Disparities

Higher burden of illness, injury, disability, or mortality experience by one population group relative to another group

HealthCARE Disparities

Differences between groups in:

- Health Coverage
- Access to care
- Quality of care
Disparities

Race

Age

Socioeconomic Status

Gender

Sexual Orientation

Location

Disability
On average, the rate of arthritis is 58% higher for women. The disparity persists at every age.
Ms. Davis

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So you want a knee replacement …

CMS Bundled Payment Model (Comprehensive Care for Joint Replacement)

- 1 “pot” of money for the entire episode of care (surgery and care during 90 global period)
- Hospitals are rewarded for coordinating care and improving the quality of care.
<table>
<thead>
<tr>
<th>MSA</th>
<th>MSA name</th>
<th>Wage-adjusted episode payments (in $)</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>11700</td>
<td>Asheville, NC</td>
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<td>12420</td>
<td>Austin-Round Rock, TX</td>
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<td>13140</td>
<td>Beaumont-Port Arthur, TX</td>
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<td>17140</td>
<td>Cincinnati, OH-KY-IN</td>
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<td>18580</td>
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<td>Dothan, AL</td>
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</table>
Policy Updates...

- Recent changes to **CMS Outpatient Prospective Payment to allow**

  **Outpatient**
  - Total Knee Arthroplasties
  - Partial Knee arthroplasties
Impact on Disparities

CMS Bundled Payment Model
(Comprehensive Care for Joint Replacement)

- Lack of adequate risk stratification
- Surgeons avoid "complex" patients
- "Complex" patients shifted to lower volume centers
- Poor outcome penalties

Risk Factors:
- Obesity
- Diabetes
- Tobacco Use
- Poor family support
• **African Americans** experience **more** short-term **complications** & present for **TKA later than Whites**
  • ↑↑↑ preop pain & ↓ function
• **African Americans** experience **worse** long term outcomes
  • ↓ Pain
  • ↓ Function
  • ↓ Patient Satisfaction
• **Factors:**
  • **Poverty**
  • **Obesity**
  • **Insurance Status**
  • **Lower Volume hospitals**

Impact on Disparities

- Inadequate risk stratification
  - Surgeons & Hospitals avoid "complex" patients
    - Complex patients: Obese, Diabetics, Tobacco Users, Poor family support
  - "Complex" patients shifted to lower volume centers
  - Poor surgical outcome
  - Hospitals & Surgeons are penalized
Ms. Davis

- 68 years old
- **African American Woman**
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So what can we do?!?!
MOVEMENT
Breaking the Vicious Cycle

- JOINT PAIN
- Increased Pressure on Knee Joints
- Limited Mobility
- MOVEMENT
- Obesity
- Lack of Physical Activity
- Heart Disease
- Type 2 Diabetes
- Depression

Arthritis
Arthritis is the single greatest cause of chronic pain and disability among Americans

- Obesity accelerates the onset of arthritis; 70% of obese adults with mild osteoarthritis at 60 will develop end-stage disease by age 80. In contrast, just 43% of non-obese adults will have and stage disease over the same time period.
- Arthritis cost the nation more than $128 billion a year in medical care and lost earnings in 2003.
- There is no cure for osteoarthritis.
Movement is Life Caucus

- **multi-disciplinary** coalition
- **Our Vision:**
  - to eliminate racial & ethnic disparities in muscle & joint health
  - to promote physical mobility to improve quality of life among African Americans & Hispanic women.
- We believe in the importance of **early intervention**
  - slow musculoskeletal disease progression
  - reduce disability
- We encourage **physical activity** and **daily movement** to improve the overall health of the nation.
Online Resources
Start moving toward less joint pain

*Start Moving Start Living* is a new documentary that raises awareness about an alarming epidemic in America. Millions experience limited mobility due to joint pain, and this often leads to obesity and other related health issues. What’s worse, African Americans, Latinos, and women of all races suffer more and receive disparate healthcare.

This important film gives a voice to the “invisible people” who suffer from chronic pain. It also aims to inspire change. Individuals, healthcare providers, and even entire communities can participate in healthy initiatives to help people get moving and receive better care.
Are you puzzled by the vicious cycle of joint pain that’s keeping you from living the life you deserve?

It’s never too late to learn the skills you need to increase your mobility and decrease your pain.

You can make small changes today that will have a huge effect on your future health and your life.

Learn about:

- The added risks for women
- What might be holding you back
- How to break the vicious cycle

Visit www.movementislifejourney.com to solve the puzzle and break the cycle.
Knee Replacement

Borowski  8 days ago  4 Replies

Hi, All! I am having a knee replaced on Tues. I am 55. Does anyone have any advice or suggestions for me? Thanks!

Related Tags
knee replacement

Related Posts
Total Knee Replacement
Knee and back pain suffer!
Alternatives to knee surgery
Hip and knee issues connected
Knee pain exacerbated with inactivity - Now
Operation Change

Interactive Educational Programs

Joint Friendly Physical Activity

Motivational Interviewing
Knee Friendly Exercises
Impact on Disparities

- Inadequate risk stratification
- Surgeons & Hospitals avoid "complex" patients
- "Complex" patients shifted to lower volume centers
- Poor surgical outcome
- Hospitals & Surgeons are penalized

Complex patients: Obese, Diabetes, Tobacco Users, Poor family support
FREE Registration at:

movementislifecaucus.com/registration
It’s heavy lifting but we CAN decrease disparities!
Tamara Huff, MD

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- St. Francis Orthopaedic Institute
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Questions?