

**The Economic Impact of Arthritis:
Medical Expenditures and Earnings Losses among
US Adults with Arthritis in 2013**

Louise Murphy PhD

CDC Arthritis Program
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National Center for Chronic Disease Prevention and Health Promotion
Division of Population Health

Introduction

- Economic impact demonstrates societal and personal consequences of a condition
- Last published national arthritis cost estimates - 2003
 - Numerous changes
 - Aging of population - ↑ number
 - Medical management of arthritis – for example, rheumatoid arthritis
- Study objectives
 - Calculate arthritis-attributable medical costs and earnings losses for 2013

Terms used in presentation

- Arthritis-attributable costs= costs due to arthritis
- Medical expenditures = medical costs
- Earnings losses = lost wages

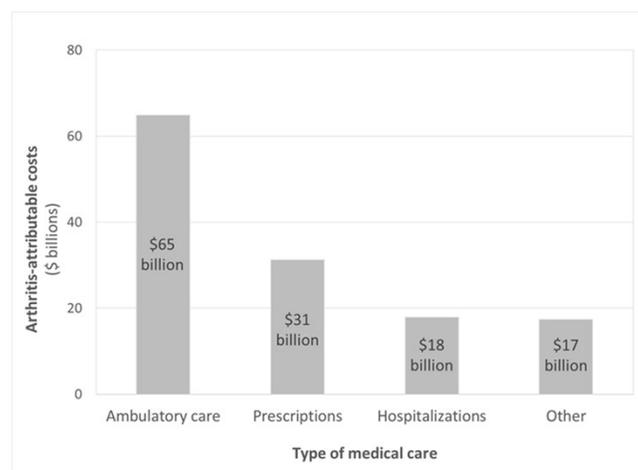
Study methods

- Data source: 2013 Medical Expenditure Panel Survey (MEPS)
- Medical costs
 - All adults age 18 years and older
 - Type : ambulatory care, hospitalizations, medications, home care, emergency room visits, dental/vision, medical devices
- Lost wages
 - Adults with arthritis age 18-64 years who had ever worked
- Calculated arthritis-attributable costs using multi-stage multivariable regression models

How much were arthritis-attributable medical costs?

- **In 2013, arthritis-attributable medical costs = \$140 billion**
 - In MEPS, 66 million US adults age ≥ 18 years reported arthritis
 - On average, medical costs per person due to arthritis = \$2,117
 - Total medical costs = 66 million X \$2,117 = \$140 billion

What type of medical care had the highest costs?

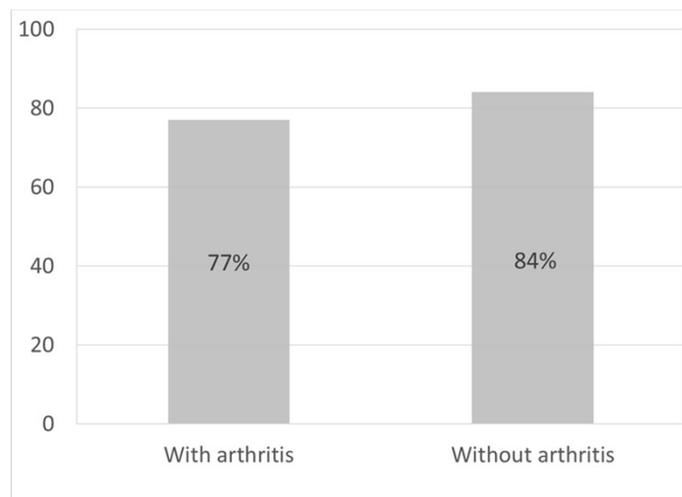


Other includes emergency room visits, home health care, dental and vision care, and medical devices

What were arthritis-attributable earnings losses?

- **In 2013, arthritis-attributable earnings losses = \$164 billion**
 - 40.5 million adults with arthritis age 18-64 years
 - On average, each adult with arthritis earned \$4,040 less than an adult without arthritis
 - Total earnings losses = 40.5 million X \$4,040 = \$164 billion

Percentage of adults with and without arthritis working in the past year



Summary

- In 2013, total medical costs and earnings losses due to arthritis were \$304 billion
 - Represented 1% of US gross domestic product in 2013
- Total earnings losses were slightly higher than medical costs
 - Personal impact of arthritis

Strategies to reduce arthritis economic impact

- Medical costs
 - Reduce pain and increase physical function
 - Interventions proven to reduce medical costs
 - CMS EnhanceFitness evaluation
 - \$945 per person
- Earnings losses
 - Interventions to keep people in the work force
 - Accommodations
 - Access to medical care
 - Community-based interventions

Co-authors

- Miriam Cisternas MA, MGC Data Services
- David Pasta MS, ICON
- Chad Helmick MD, CDC Arthritis Program
- Ed Yelin PhD, University of California at San Francisco

Thank you

lmurphy1@cdc.gov

State cost estimates

- Currently available on the Chronic Disease Cost Calculator
 - <https://www.cdc.gov/chronicdisease/calculator/index.html>
 - Based on a slightly different definition of arthritis
 - Arthritis and other rheumatic conditions
 - Medical and absenteeism costs
 - Medical cost projections to 2020

- Arthritis program will be updating state cost estimates
 - Will use same arthritis definition as 2013 national study
 - Projected release – early 2019

Why have arthritis costs increased?

- Cannot compare directly with previous results
 - Different definition of arthritis
 - More contemporary statistical methods

- Decrease in average medical cost per person
 - Reported for many other conditions as well
 - Cost containment strategies

- Number of adults with arthritis increased from 2003 to 2013
 - Affects both medical costs and earnings losses