

## **Study: Where one lives influences post-op care and rehab after hip replacement surgery**

November 12 2019

---

A new study finds that the community in which one lives influences whether they receive postoperative care and rehabilitation after elective hip replacement surgery in a facility or at home. An analysis of a large regional database found that patients in the least affluent communities were more likely to be discharged to an inpatient rehabilitation or skilled nursing facility rather than home care after hip replacement.

Bella Mehta, MBBS, MS, a rheumatologist at Hospital for Special Surgery (HSS) in New York City, presented the findings at the American College of Rheumatology/Association of Rheumatology Professionals annual meeting on November 11 in Atlanta.

"With the aging of the population, elective total hip replacement has become one of the fastest-growing procedures to manage severe osteoarthritis," said Dr. Mehta. "By 2030, the number of hip replacements is expected to reach 572,000 annually in the US. Medicare, the largest payer of joint replacement surgery, has introduced several payment reform models that target discharge destination and risk of hospital readmission after surgery. Our study examined how the socioeconomic status of the community in which one resides influences discharge destination and the odds of 90-day hospital readmission after hip replacement."

Dr. Mehta noted that where a patient receives post-op care and rehab has a considerable impact on the total cost of hip replacement surgery. Previous studies have demonstrated significant variations in outcomes

and costs due to individual factors such as race. There have been far fewer studies on the impact of community-level factors.

"Our study pushes the envelope by examining the role of where one lives in understanding variations in post-op care after elective joint replacement surgery. And it reflects the growing academic collaboration in [clinical research](#) between HSS and Weill Cornell Medicine investigators," explained Said Ibrahim MD, MPH, MBA, senior investigator and chief of the Division of Healthcare Delivery Science and Innovation at Weill Cornell Medicine.

For the analysis, the investigators identified almost 85,000 patients in the Pennsylvania Health Care Cost Containment Council database who had elective hip replacement surgery between 2012 and 2016. The researchers used the Area Deprivation Index (ADI) from the American Census Survey, which reflects a geographic area's level of socioeconomic deprivation and is associated with [health outcomes](#).

In addition to discharge destination, the investigators assessed the risk of 90-day readmission for patients sent to a facility compared to those who received their post-op care and rehab at home. The researchers also assessed the interaction of race and ADI on outcomes.

The study found that patients from impoverished communities were more likely to be discharged to an institution compared to home after a hip replacement. The interaction effect of race and ADI on discharge destination was statistically significant in African American patients 65 years and older, but not in patients under 65 years old. The level of community deprivation did not have an effect on 90-day hospital readmission, nor did the interaction of ADI and race.

As a possible explanation for the study findings, Dr. Mehta noted that patients from impoverished communities may have less access to

community-based services such as social support. Thus, discharge to a facility for post-operative and rehabilitative care might be perceived as a safer option in clinical decision-making.

"Our study is important because it advances our understanding of the relationship between health care and social determinants of health," said Dr. Ibrahim. "Future studies should determine which specific community factors influence discharge destination and how they could be modified to allow more patients to go home after a hip [replacement](#)."

Dr. Mehta added, "The ultimate goal of research is to design socially informed health policies to improve quality of care and outcomes."

Provided by Hospital for Special Surgery

Citation: Study: Where one lives influences post-op care and rehab after hip replacement surgery (2019, November 12) retrieved 24 July 2024 from <https://medicalxpress.com/news/2019-11-post-op-rehab-hip-surgery.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.