## Performing Joint Replacements in Ambulatory Surgery Centers Could Help 500,000 People Avoid Overnight Hospital Stays and Save \$3 Billion Annually: Methodology and Citations

## Methodology

Outcomes reported by patients and surgeons for hip and knee replacement surgeries at Optum's Surgical Care Affiliates Ambulatory Surgery Centers (ASCs) were analyzed for procedures conducted during 2018 and 2019 at facilities performing more than 25 joint replacements in 2019. Outcome measures for hospital transfers, hospital admissions, and emergency department visits are those defined by the ASC Quality Collaboration.

Utilization and costs for hip and knee replacement surgeries were analyzed using UnitedHealthcare claims for members with employer coverage and Medicare Advantage coverage in 2018. Estimates of baseline costs, potential shifts in volume, and potential savings are based on low- and medium-severity surgeries. Costs are defined as total allowed costs—including consumer deductibles, coinsurance, and copayments—for the surgical episode, which is defined as extending from 14 days before to 42 days after the procedure and inclusive of utilization and costs directly related to the underlying surgery.

## **Citations**

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- <sup>2</sup> Hilal Maradit Kremers et al., "Prevalence of Total Hip and Knee Replacement in the United States," Journal of Bone and Joint Surgery, 2015.
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- <sup>3</sup> UnitedHealthcare (UHC) analysis conducted in 2020 of U.S. commercial insurance and Medicare Advantage claims from 2018.
- <sup>4</sup> U.S. Centers for Disease Control and Prevention, "Healthcare-Associated Infections," 2020. www.cdc.gov/hai/data/index.html
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  - www.psnet.ahrq.gov/primer/health-care-associated-infections
- <sup>5</sup> JB Mistry et al., "Decreasing the Incidence of Surgical-Site Infections after Total Joint Arthroplasty," American Journal of Orthopedics, 2017.
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- <sup>7</sup> U.S. Centers for Disease Control and Prevention, "National Healthcare Safety Network Patient Safety Component Manual," 2020. <u>www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual\_current.pdf</u>
- <sup>8</sup> Agency for Healthcare Research and Quality, "Healthcare-Associated Infections," 2019. <u>www.psnet.ahrq.gov/primer/health-care-associated-infections</u>
  - Agency for Healthcare Research and Quality, "Surgical Site Infections," 2020. www.psnet.ahrq.gov/primer/surgical-site-infections

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- M Ziemba-Davis et al., "Outpatient Joint Arthroplasty-Patient Selection: Update on the Outpatient Arthroplasty Risk Assessment Score," The Journal of Arthroplasty, 2019. <a href="https://www.ncbi.nlm.nih.gov/pubmed/30738619"><u>www.ncbi.nlm.nih.gov/pubmed/30738619</u></a>
- OptumCare analysis conducted in 2020 of data reported by patients and surgeons for joint replacement surgeries performed in 2018 and 2019.
- <sup>12</sup> UHC analysis conducted in 2020 of U.S. commercial insurance claims from 2018.
- <sup>13</sup> UHC analysis conducted in 2020 of U.S. commercial insurance and Medicare Advantage claims from 2018.
- <sup>14</sup> UHC analysis conducted in 2020 of U.S. commercial insurance and Medicare Advantage claims from 2018.

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