



## **Benefits of hip and knee replacement**

### **Knee and hip replacement surgery successfully combats a severe and growing health problem in the United States.**

- Bone and joint disorders are the leading health-related cause of disability.<sup>1</sup>
- 27 million Americans suffer from osteoarthritis.<sup>2</sup>
- Joint and spine disorders together account for more physician visits than any other condition.<sup>3</sup>
- 80% of patients with osteoarthritis experience limitations in movement, and 25% of patients are unable to perform significant activities of daily living.<sup>4</sup>
- 59 million adult Americans suffer from chronic joint pain.<sup>1</sup>
- Bone and joint disorders drain \$339 billion per year from the U.S. economy in lost productivity.<sup>5</sup>

### **Joint replacement intervention dramatically improves quality of life.**

- Total knee replacements are 90% effective in relieving pain and improving function.<sup>6</sup>
- Hip and Knee replacements improve patients' ability to perform daily tasks and often restore them to pain-free mobility.<sup>7,8</sup>
- 91% of total knee replacement recipients reporting satisfaction with their activity level.<sup>9</sup>
- Individuals over 65 years of age who received total knee replacements experience significant improvement in function, including a 17.5% increase in mobility, a 39.3% improvement in motor skills; and a 46.9% decrease in limitations in activities of daily living such as bathing and dressing oneself.<sup>10</sup>
- Patients receiving total hip replacements demonstrate significantly increased life expectancy compared to a matched group.<sup>11,12</sup>
- In a study of hip replacement patients, nearly all patients working prior to surgery return to the workforce, and nearly 50% of those not working pre-operatively regained employment. For those who did not return to work, the reasons were unrelated to their hip condition.<sup>12,13</sup>
  - Joint replacements improve cardiovascular fitness.<sup>14, 15</sup>
  - 38.9% of patients only able to walk 10 minutes pre-surgery were able to walk over an hour after knee replacement surgery.<sup>16</sup>

### **Joint replacements are valuable and proven treatments.**

- Total joint replacement can save an individual as much as \$68,000 (total knee replacement) to \$180,000 (total hip replacement) in medical costs over the life of the average total joint recipient as compared to non-surgical treatment.<sup>17, 18</sup>
- Total joint replacements have proven to be durable over the long term, with survivorship rates as high as 98% at 10-20 years post-operation.<sup>19-22</sup>

**Joint replacement is an underutilized intervention, and the need for joint replacement technology will only increase.**

- Despite clear value and benefit, only 9-13% of people needing total knee replacements, and fewer than 25% needing hip replacement, undergo the procedure.<sup>6,7</sup>
- Due to endemic obesity and a longer-living population, the need for knee and hip replacements will increase dramatically in the next two decades.<sup>23</sup>
  - The demand for knees will increase 674% through 2030.<sup>24</sup>
  - The demand for hips will increase by 174% through 2030.<sup>24</sup>
  - Hospitals are seeing younger patients,<sup>25</sup> requiring newer, high-demand technologies.<sup>26</sup>

**Joint replacement technology has demonstrated improved durability.**

- Overall revision burden in the U.S. has dropped from 14.2% of all primary procedures in 1998 to 11.2% in 2007, even as the proportion of younger patients increased.<sup>27</sup>
  - Using 2006 average hospital charge data for revision joint replacement, this reduction saved as much as \$1.3 billion in hospital charges since 1998.<sup>28</sup>
- Newer polyethylene technology has reduced clinical wear by 85-95%.<sup>29</sup>

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