Around 160,000 UK joint replacement surgeries missed during COVID-19 pandemic, study finds

July 31 2024

Credit: Pixabay/CC0 Public Domain

Nearly nine months' worth of joint replacement surgery has been missed in the UK—around 160,000 operations—since the start of the
COVID-19 pandemic, a new study led by the University of Bristol has found. The research suggests that returning to pre-pandemic levels will not tackle the backlog, and even with rapid expansion, it will take many years, if not decades, to fix this joint replacement crisis.


The researchers analyzed National Joint Registry (NJR) data between January 2019 and December 2022 inclusive, which includes all NHS and privately-funded hip, knee, shoulder, elbow, and ankle replacement operations.

The study compared the period including and after the pandemic (2020 to 2022 inclusive) to how many operations would have been performed had surgery continued at the same level as 2019.

The research team found that by the end of 2022, almost three-quarters of a year of planned operations—71.6% of 2019 activity and 158,994 joint replacements—had been lost. This gap continues to increase and therefore the recovery from this deficit does not appear to have started. Knee, shoulder, and ankle surgery has been affected more severely than hip and elbow surgery.

The NHS has been more impacted than the private sector. By 2022, NHS activity was still only 73.2% of 2019 levels, whereas operations in the private sector had increased to 126.8% of 2019 levels. The private sector is now the main provider of joint replacements (53% in 2022) in England, Wales, and Northern Ireland.

Wales and Northern Ireland have been worse affected than England.
Both countries recorded a backlog of more than a year's worth of operations between 2020-2022; 136% in 2019 for Wales and 121.3% for Northern Ireland, whereas the deficit in England was 66.7%.

Jonathan French, Clinical Research Fellow at the Bristol Medical School: Translational Health Science (THS), and corresponding author, said, "Patients awaiting different types of joint replacement surgery in England, Wales, and Northern Ireland have been affected disproportionately, and recovery to pre-pandemic levels will be challenging. This will inevitably lead to many patients enduring unnecessary pain, disability and wider decline in mental and physical well-being."

Michael Whitehouse, Professor of Trauma and Orthopaedics at the Bristol Medical School: THS, and senior clinical lead for the paper, explained, "If capacity was immediately expanded by five percent on top of 2019 levels, it would take until 2040 to address the backlog. An immediate ten percent expansion, if possible, would still take until 2031 to catch up. This represents a severe challenge that is currently underestimated in planning and provision that requires prioritization to mitigate the impact of debilitating joint related conditions on patients."

Tim Wilton, Medical Director of the NJR, added, "The value of the volume data held by the NJR is that we can glean an accurate insight into the longer-term impact of COVID on the supply and demand and provision of surgical orthopedic services. There is a clear need to plan and adjust service volumes based on this insight and research, so that patient waiting list numbers start to reduce across the different joints. These data, being based against the volume of cases done in 2019, are likely to be an underestimate of the catching-up required as the volume of cases was growing every year before 2019 rather than being static."

Joint replacement surgery is a common and very effective surgical
procedure used to treat a variety of musculoskeletal problems including osteoarthritis and acute trauma. Joint replacements are long-lasting, with over half of hip and knee replacements lasting over 25 years, and 90% of shoulder replacements lasting over ten years.


Provided by University of Bristol


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.