

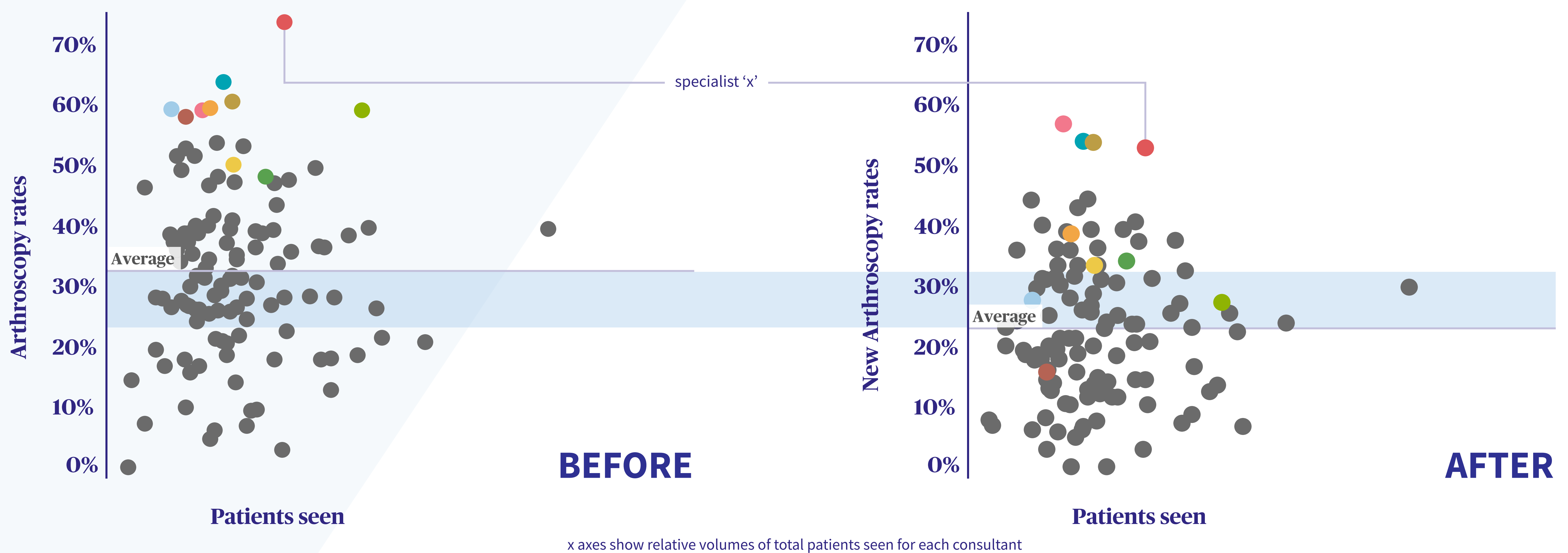
# The effects of data sharing in reducing unnecessary knee arthroscopies in the UK private medical sector

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## 1. Introduction

Knee arthroscopy (KA) is one of the most common elective operations in orthopaedics. Best practice guidelines<sup>1,2,3</sup> recommend conservative options in the initial phase of treatment of degenerative lesions and meniscal tears of the knee, followed by surgical intervention when all options are exhausted.

### Arthroscopy intervention rates before vs after data sharing



## 2. Methodology

### 2.1 Collecting data about surgery rates

AXA PPP healthcare analysts identified specialists performing KAs from its claims data, 2013 to 2018. Individual reports were created, with the specialist's peers anonymised, to enable data sharing, either in face-to-face meetings or electronically.

### 2.2 Sharing the data with surgeons

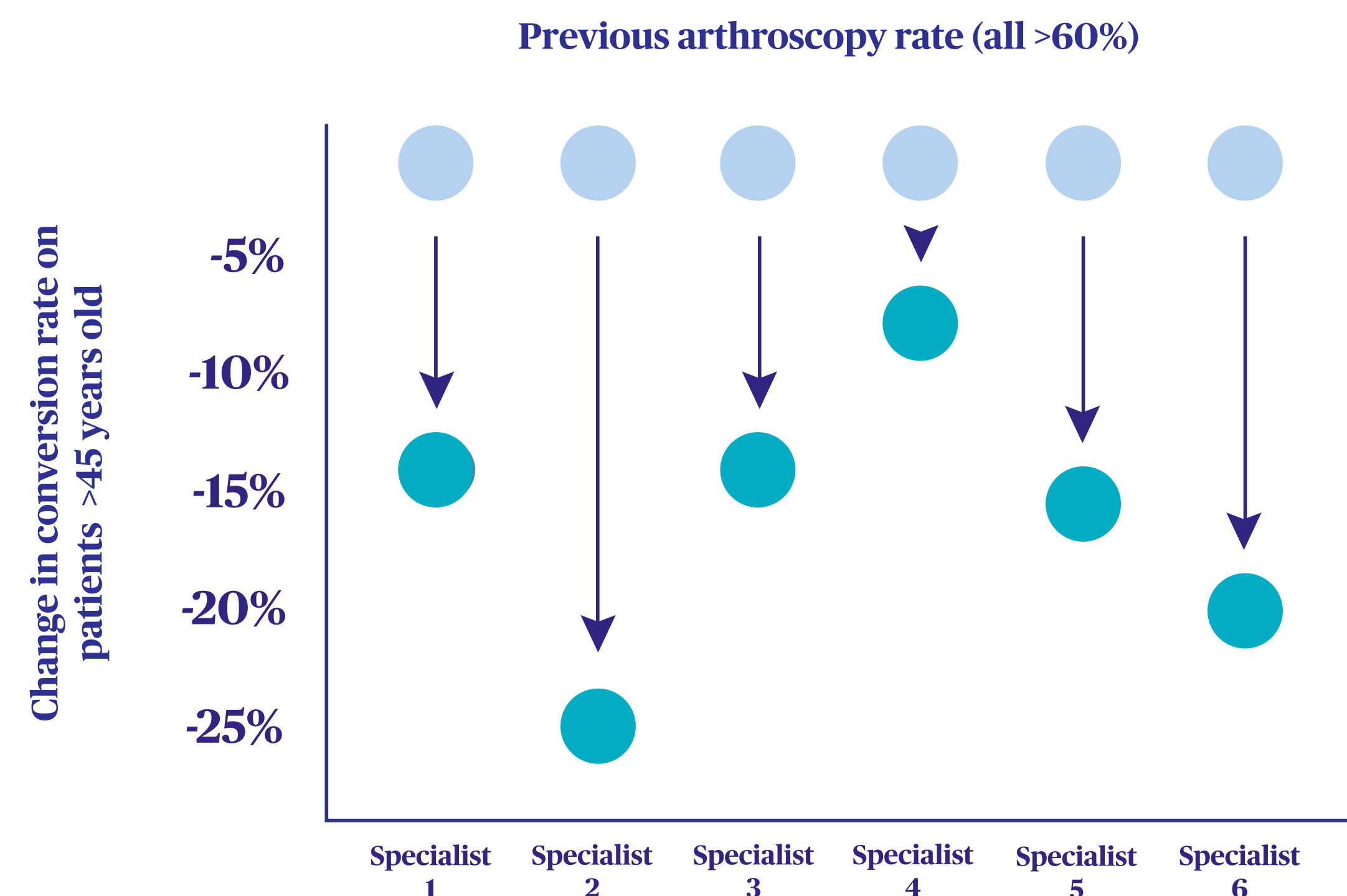
Our analysis identified 909 surgeons performing one or more KAs. The average conversion rate (from initial consultation to KA) in all age bands was 36.3% (in surgeons carrying out 10-99 KAs pa) and 38% (in surgeons with 100 or more KAs pa).

Over 35% of the KAs were done in patients over 45 years old. In this group, we observed an 8% reduction in the average number of KAs performed after sharing data and discussing surgery volumes in patient groups seen.

### 2.3 We took further action

- 22 orthopaedic surgeons were identified as outliers for unusually high KA rates.
- AXA PPP healthcare transferred information about three outlier surgeons to their Responsible Officer for review and investigation.
- AXA PPP healthcare withdrew recognition from 15 surgeons, rendering them ineligible for payment for treatment of AXA PPP healthcare-insured patients.

### Behaviour change in individual outliers before vs after data sharing



## 3. Conclusions

- 1 | This project showed that when outlier surgeons saw data compared with their peers this led to a reduction in their rate of surgery. The most likely explanation of this reduction is a decrease in unnecessary KAs.
- 2 | Our successful engagement with Responsible Officers and independent expert knee surgeons suggests that using existing governance and control functions, which maintain quality and accountability of care, may help drive down overdiagnosis and overtreatment.
- 3 | Behaviour change initiatives have a role in influencing outlier surgeons to change practices. In this case, to prefer conservative treatment for knee pain to avoid unnecessary surgery.

AXA PPP healthcare is exploring new ways of working with specialists to reward them for outcomes and value, enhancing the commercial sustainability of private practice. AXA PPP healthcare advocates greater collaboration with Responsible Officers and will continue to monitor claims data to promote adherence to best practice guidelines across multiple specialties.

1. Arthroscopic surgery for degenerative knee arthritis and meniscal tears: a clinical practice guideline available <https://www.bmj.com/content/357/bmj.j1982>  
 2. British Association for Surgery of the Knee (BASK) Meniscal surgery guideline available <https://baskonline.com/professional/clinical-care/meniscal-surgery-guidelines/#1531380165416-89d240cf-0dd0>  
 3. ESSKA Meniscus Consensus Project: Degenerative meniscus lesions available <https://www.esska.org/resource/resmgr/Docs/meniscus-consensus-project-s.pdf>