

Barwon Joint Replacement Registry

Celebrating 30 years of data collection

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Background

Joint replacement is a common surgical procedure. More than 118,000 replacements occurred in Australia in 2018. Assessing outcomes following arthroplasty is necessary for quality assurance and research.

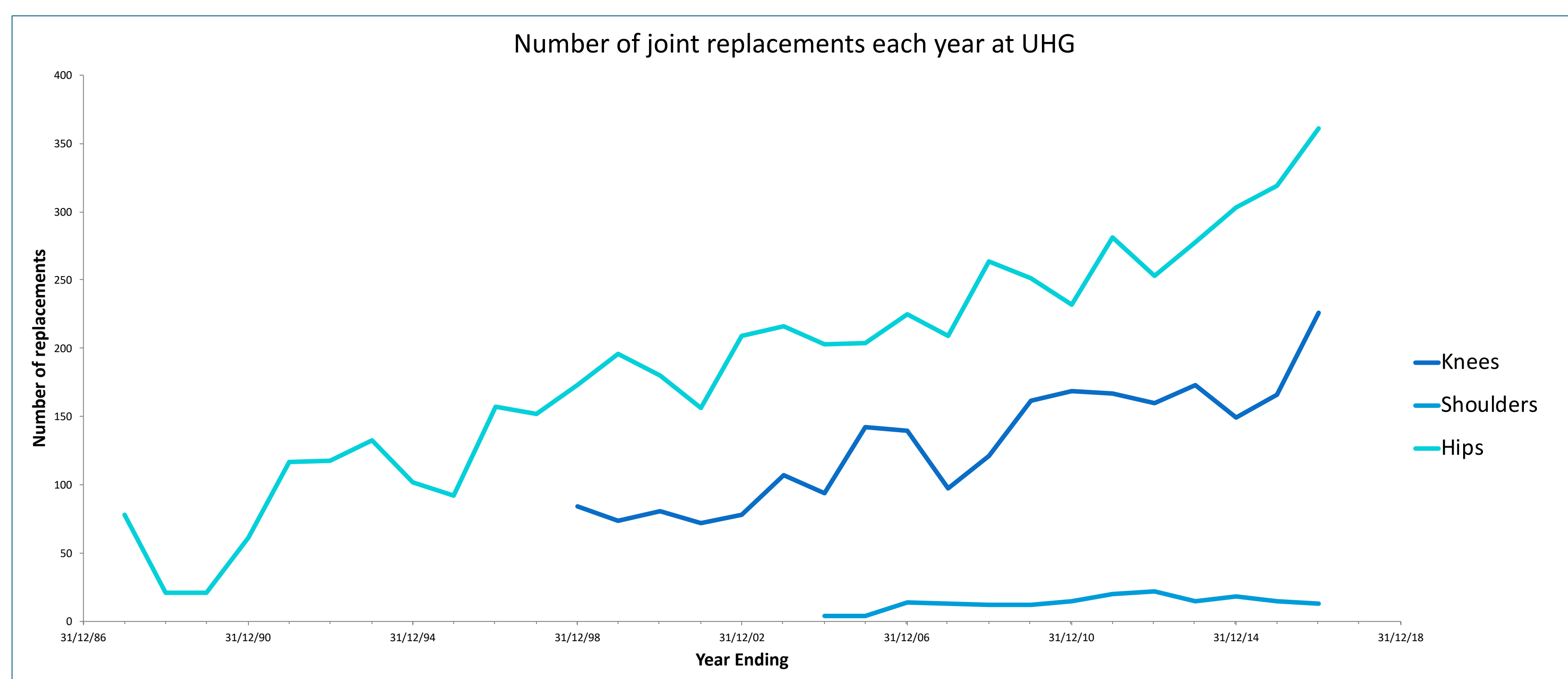
The Barwon Joint Replacement Registry (BJRR) commenced in 1998. The BJRR collects pre and post-operative data from people receiving hip, knee, shoulder and elbow joint replacement at Barwon Health.

Methods

Pre-operative data is collected shortly prior to each patient's operation. Post-operative outcomes are assessed at 3-6 months, 1 year, 5 years, 8 years, and then biennially thereafter. Outcomes include disease-specific and quality-of-life patient reported outcomes measures (PROM) such as the Oxford Hip, Knee and Shoulder Scores, WOMAC Hip and Knee Scales and the DASH Shoulder Scale, which assess pain and physical function. Data is incorporated into research and quality improvement cycles.

Results

Hip and knee replacements are increasing



As of 30 June 2017, the BJRR contained data on 6610 hip, 3914 knee, 304 shoulder and 42 elbow replacements.

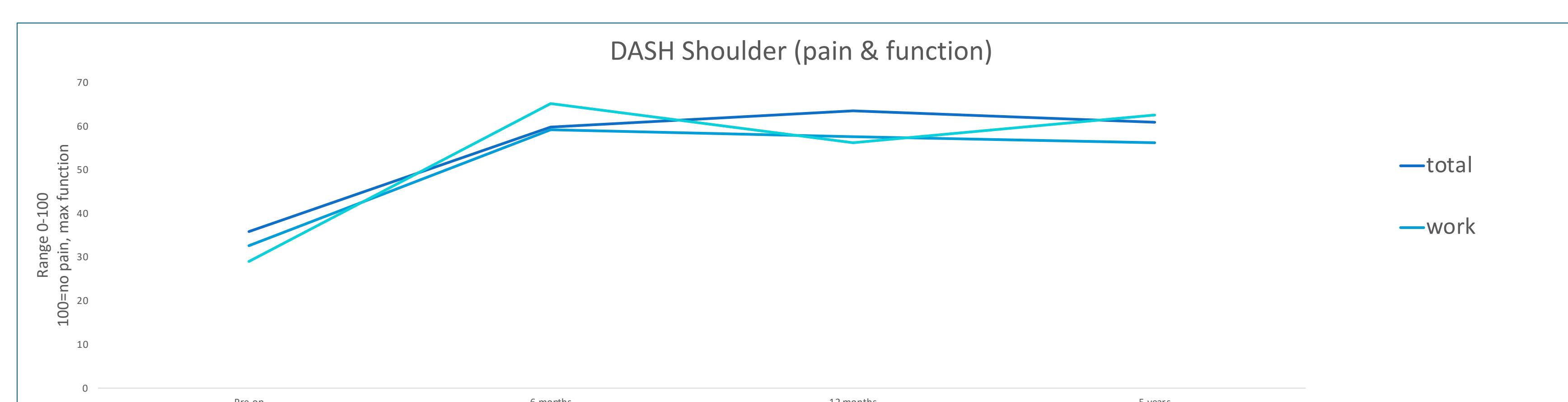
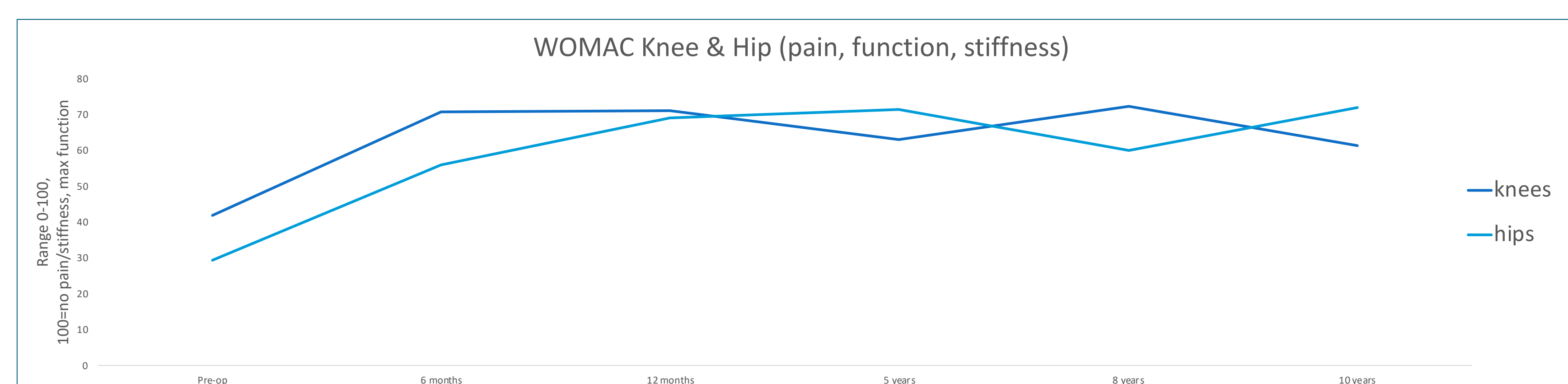
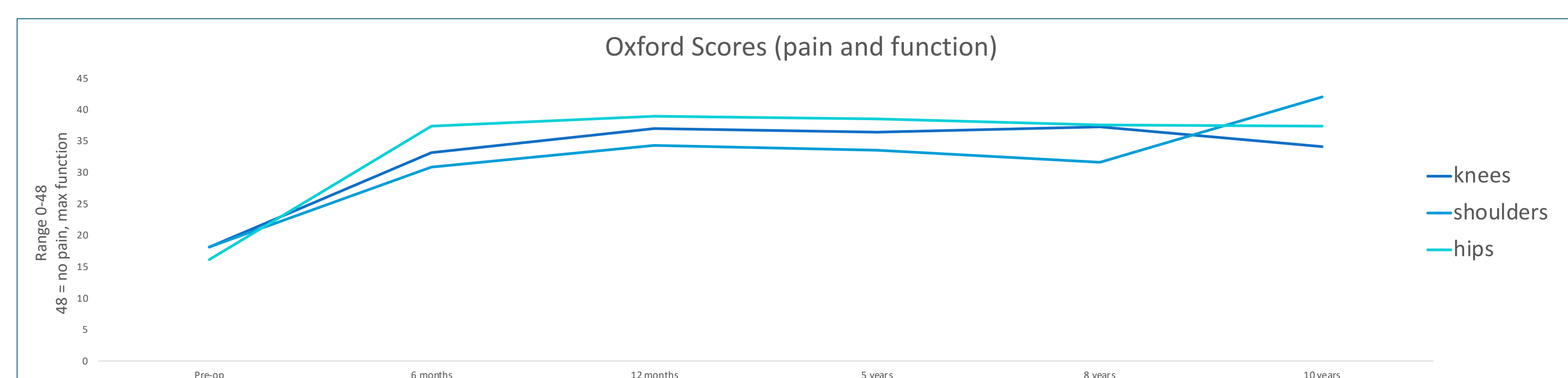
Complication rates are low

Cumulative revision rates for complications following hip, knee, shoulder and elbow replacement are less than 2%.

Data informs service redesign

Investigation of complications revealed that less than 15% were identified in routine outpatient appointments, all of which were found in the first year post-operatively. These findings led to post-operative services being redesigned to a questionnaire-based remote review model in 2016. The new model saves patients' time and financial costs, and reduces the number of outpatient appointments by at least 1500/year, thereby increasing access for new patients.

Pain and function improves



Expanding the BJR

In 2018, the BJRR expanded its horizons to include St John of God Hospital Geelong patients which will add an additional 600 patients to the registry each year. The BJRR has been selected as a pilot site for the Australian Orthopaedic Association National Joint Replacement Registry Patient Reported Outcome Measures (PROMs) project which will capture PROMs throughout Australia to allow benchmarking and service improvement.

Conclusions

The BJRR is essential for monitoring clinical outcomes following joint replacement and for research purposes. The BJRR demonstrates improved outcomes for people following joint replacement and facilitates service redesign to improve care quality, efficiency and access. The BJRR is expanding its influence both regionally and nationally by including more sites and participating in national projects.