The Right People Waiting in the Right Order for Joint Replacement Surgery: Translation of Evidence About Best Care and Best Assessment into Practice

Abstract:

Aim: The increasing demand for hip and knee joint replacement surgery (JRS) in Australian hospitals motivated the Victorian Department of Human Services to fund a University of Melbourne/Melbourne Health partnership to develop a new system to more effectively manage patients with osteoarthritis (OA) on orthopaedic waiting lists and determine priority for surgery.

Method: The Hip and Knee Questionnaire (a Multi-Attribute Prioritisation Tool – MAPT) is a patient-administered questionnaire that supports evidence-based, clinically reliable prioritisation of people with hip/knee OA who may need surgery. The new ambulatory service delivery model, the OA Hip and Knee Service, supports comprehensive care for people with hip/knee OA.

The guiding principles of the model are:

1. Workforce role redesign and the multidisciplinary team including a Musculoskeletal Coordinator (MSC)
2. Triage of patients referred to orthopaedic outpatients
3. Early comprehensive assessment
4. Conservative management and appropriate referrals
5. Ongoing monitoring
6. Prioritisation for surgery

Results: In short-term pilots (5 to 7 months) across four Victorian hospitals, 815 people with OA were assessed, including 252 patients already on the surgical waiting list, and 563 outpatients. Assessments occurred within 1 week to 4 months (compared with previous waiting times of 5 months to 2 years); 75 outpatients (13%) were fast-tracked for early surgical assessment; 111 patients (20%) were deferred (assessed as not requiring surgery in the near future but monitored for deterioration); 27 patients (5%) chose not to have surgery and were discharged; 33-68% of patients across sites had received inadequate conservative management leading up to assessment; 50-73% of patients were referred for conservative management by the MSC.

Implementation of the system at the Repatriation General Hospital (RGH, South Australia) produced 15 months of MAPT data and over 2,500 scores. Average waiting times at RGH reduced from 12 months to 3 months. MAPT scores and RGH feedback forms are collected 3 monthly. Two education modules have been introduced for these patients to encourage self-management. RGH now has a pilot study underway to engage GPs in developing improved processes for referral of patients for possible JRS. Goals include an accurate assessment of patients and ongoing conservative management by GPs of all OA patients including those on the waiting list for JRS.

Conclusion: A robust multi-attribute prioritisation tool (MAPT) in association with a high quality chronic disease care service model can be used effectively to optimise appropriate and timely referral for JRS. The success of the model of care has come from careful consultation and engagement with clinical groups, recognition of a need for service redesign, and development of a MAPT with high clinical utility.