

The ageing population and the increasing demand for joint replacement

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Arthritis of the hip and knee joint is a common cause of disability within the community creating a significant and increasing socioeconomic burden.¹ The incidence of osteoarthritis, which is responsible for well over 90% of joint replacements performed in this country, increases rapidly in patients over 50 years of age.

Currently the mean age for both total hip (THR) and total knee replacement (TKR) in New Zealand (NZ) is 68 years for females with the youngest replacement being 15 years.² Males are similar to females for THR but have a lower mean age of 65 years for TKR. Projections from the USA³ suggest that by the year 2030 the demand for THR and TKR will have increased by 174% and 673% respectively. Joint registry data from several countries support this increasing demand.^{2,4}

The NZ Joint Registry was initiated by the NZ Orthopaedic Association in 1999 to collect information on all patients undergoing joint replacement. It provides accurate and real time data on both the rate and distribution of replacement surgery in this country. It has shown a steady increase in the number of both hip and knee replacements over the last 13 years, with a 75% increase in THR and 158% increase in TKR. Already there have been more than 165,000 joints entered on this registry.

Like all developed countries, the population of NZ is ageing, with the 65+ age group likely to make up over one quarter of the population in the late 2030s. This will result in an increase from half a million in 2005 to 1.33 million in 2051 in this age group (Statistics New Zealand, March 2006). This ageing population will place a heavy burden on health care funding in the future 20 years. The outcome of pain relief and improved function following joint replacement is both predictable and lasting.

With people living to an older age and remaining healthy and active for longer, there is an increased expectation of being productive during this time which fuels the increasing demand for joint replacement.

Gwynne-Jones, in this issue of the *NZMJ*, highlights the problem of fair access to joint replacement across NZ in “*Quantifying the demand for hip and knee replacement in Otago, New Zealand*” and criticises the current methodology for determining funding apportioned to DHBs.⁵

Any formula for funding of public hospital joint replacements must take into account the demographic data of the region rather than rely on standardised intervention rates. The NZ Joint Registry has a 98% capture rate for all joint replacements and is a robust and reliable tool to provide funding agencies with information to rationalise funding for joint replacements.

The issue of unmet need is troubling. While the demand for joint replacement increases the waiting times in public hospitals have shortened without a

corresponding increase in service provision. This has resulted in a larger number of patients being rejected from the waiting list because they fall outside of the recommended waiting time despite reaching the clinical threshold for replacement. Return of these patients to their general practitioner for 'further care' is a major source of frustration not only for the patient but for the doctor who has exhausted all avenues of treatment.

Reducing the waiting time by excluding these patients is nothing short of manipulating the numbers and does nothing to facilitate patient care. Shorter waiting times may have given some patients certainty of treatment but as the waiting times drop and the demand increases, with no compensatory increase in service provision, this group of 'privileged' patients will also diminish.

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