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Schaafsma

# THE WAITING GAME

**Shorter wait times for elective surgeries benefit everyone—patients and the medical system**

What is the ideal time a patient should wait for elective surgery?

It depends on who you ask. While the medically recommended maximum wait time is six months for non-urgent hip replacement surgery, a patient waiting in pain for months is likely to say “the sooner the better.”

The problem with recommended maximum wait times is that they’re based on subjective assessments of the medical literature, says University of Victoria health economist Dr. Joseph Schaafsma. He has developed an economic framework that balances the interests of patients with those of the medical system.

Central to Schaafsma’s framework is that the number of patients referred for a specific procedure fluctuates weekly around a level or rising average. If treatment capacity within the medical system matches this average number of weekly referrals, and there is no wait list, a cost known as “idle treatment capacity” can occur when there is no patient to treat.

“Idle capacity is costly to the medical system,” says Schaafsma. “Equipment depreciates even if not used, and staff may be underemployed. These costs can be avoided by having a target wait list that buffers weekly fluctuations in the referral rate.”

The longer the target wait list, the less likely the chance of idle treatment capacity. However, waiting imposes costs on a patient, such as lost income and diminished quality of life.

Schaafsma’s framework minimizes the sum of the costs of waiting and of idle capacity. “We want to avoid the cost of having people wait longer than they need to,” he says, “but we also want to avoid the cost to the medical system of running out of patients to treat because the actual wait list has emptied and referrals that week are below average.”

Schaafsma has used his framework to determine an upper limit on the target wait time for non-urgent hip replacement surgery in a city the size of Victoria. Using basic economic principles and published data on the cost of a hip replacement and the number

performed in BC, he calculated how the costs of waiting and of idle capacity varied with the size of the wait list.

The results showed that the optimal wait time for this surgical procedure should be no longer than five weeks, not the recommended maximum of six months.

Schaafsma hopes that policy-makers will implement his model to set new optimal wait times for elective surgeries.

“The problem with wait times is not life-threatening, but certainly quality of life–destroying,” says Schaafsma. “Reducing a wait time that fluctuates around six months to one that fluctuates around five weeks doesn’t require a permanent increase in treatment capacity, provided operating rooms can be run overtime. Once the wait time is down to five weeks, normal hours can resume.”

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Over the last 10 years in BC, the rate of surgeries across all age groups, particularly seniors, has increased annually.

According to Statistics Canada, wait times were the number one barrier for Canadians accessing specialized health care services in 2005. The number of patients who waited longer than three months for joint replacement surgeries increased from 26 per cent to 39 per cent between 2003 and 2005.

In 2004, the federal government developed a national wait times strategy for five areas of concern: cancer care, cardiac treatment, diagnostic tests such as MRIs, joint replacements and cataract surgeries. The strategy commits \$4.5 billion over six years for priorities such as training and hiring more health professionals, and clearing surgical backlogs.

Over his 35 years at UVic, Joseph Schaafsma’s research has ranged from exploring the economic integration of Canadian immigrants to studying the cost-effectiveness of lung cancer treatments. Most recently, he’s focused on an economic evaluation of the BC telehealth program.

UVic researchers were awarded more than \$82 million in external research grants and contracts in 2005-06, up nearly 150 per cent since 2001-02.



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