Coverage of inexpensive drugs may increase length and quality of life after heart attack

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Providing free medications to people after heart attack could add years to patients' lives at a relatively low cost for provincial governments, according to a new study by researchers at St. Michael's Hospital in Toronto.

"Many patients are not benefiting from effective prescribed medications because they simply don't fill their prescriptions," says Dr. Irfan Dhalla, the study's lead author and a physician at St. Michael's Hospital. "There is growing evidence that having to pay for medications out of pocket is a major reason."

Public coverage of pharmaceuticals in Canada is neither universal nor uniform because the Canada Health Act covers only physician and hospital services. According to data published in 2005, 11 per cent of Canadians had only catastrophic public coverage, and 4 per cent had no coverage at all.

The goal of the study was to demonstrate to policymakers what would happen if governments fully covered the costs of five heart attack medications—a beta blocker, low-dose aspirin, an ACE inhibitor, a statin, and a relatively new drug called clopidogrel—which are routinely prescribed for patients who have survived a heart attack.

The use of these effective and relatively inexpensive drugs has led to a dramatic decline in deaths from cardiovascular disease in recent years. Between 1980 and 2000, mortality from cardiovascular disease in

Canada decreased by approximately 50%.

The researchers compared the benefits and the costs of two options:

- The "status quo" option reflects the current situation across Canada where people who don't have private drug insurance or who aren't eligible for government-funded drug programs are expected to pay the full cost of their prescriptions after a heart attack.
- The "full coverage" option would see governments pay the full cost of five recommended medications.

Implementing the full-coverage strategy for the five medications would result in average survival of 7.02 quality-adjusted life-years (QALYs) after heart attack at an average cost of $20,423 per patient, the study found.

The status quo strategy resulted in an average survival of 6.13 QALYs at an average cost of $17,173 per patient.

(In health care research, the term "QALY" is used to describe survival time based not just on quantity of years but also on quality of life. A year in perfect health is considered equal to 1.0 QALY. The value of a year in ill health would be lower—for example, a year spent in hospital might have a value equal to 0.5 QALY.)

"Full coverage would save lives at very low cost and would be cost-effective compared to the status quo," says Dr. Dhalla. "Our model suggests that providing free medications to people after heart attack would result in one more year of life for each additional $3,663 spent by government. We used very conservative assumptions, and it is quite

possible that a full coverage strategy would even be cost-saving for governments over the long-term."

The researchers say any added cost would be significantly below current thresholds used to decide whether new drugs and medical devices should be eligible for public funding.

Although the study looked at heart attack because that is where the evidence is strongest, there are many diseases where cheap, effective medications are available.

"Policy makers may wish to consider providing medications free of charge to all patients with chronic illnesses where specific drug treatments are known to be both highly cost-effective and associated with poor adherence—for example, preventing kidney and cardiovascular disease in patients with diabetes," Dr. Dhalla says. "Providing medications free of charge where they are likely to have the most value is one way policy makers can allocate limited public resources more efficiently."

Source: St. Michael's Hospital