Cardiac patients given longer prescriptions at discharge more likely to continue taking medication

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Elderly cardiac patients prescribed heart medications for 60 days or more after leaving hospital have four times the odds of adhering to the drug regime than patients prescribed the same medications for 30 days, according to research conducted at the Institute for Clinical Evaluative Sciences (ICES) and Women's College Hospital (WCH).

The study, published today in the *Canadian Journal of Cardiology*, found longer initial prescriptions when leaving hospital are associated with long-term adherence in elderly patients. The findings suggest prescriptions covering a longer interval of time are both more patient-centered and more effective.

"Studies show that adherence to cardiac medications after a cardiac event like a heart attack declines over time. But we know that taking these medications for the long-term is absolutely essential for preventing further cardiac events," said Dr. Noah Ivers, lead author of the study and family physician at Women's College Hospital. "This study shows that longer prescriptions for cardiac patients after leaving hospital increase the likelihood that patients will take the medications for the long term, which may reduce their risk of heart attacks, stroke or even death."

In the study, researchers investigated medication adherence of more than 20,000 elderly patients with coronary artery disease to three common classes of cardiac medications – ACE inhibitors, beta blockers and

statins. For an 18-month period, the researchers compared the results of those prescribed the medications for less than 30 days, for 30-60 days and for 60 days or more. They found:

- Patients prescribed the medication for 60 days or more were more likely to adhere to the medication in the long term than those prescribed the medication for 30 days or less
- Older patients were less likely to adhere to medications.
- Male patients were more likely to continue to take some medications but not others.
- Up to 50 per cent of prescriptions covered only 7 days.
- More than 80 per cent of patients had a follow-up appointment within one month, regardless of prescription length.

"The majority of patients in our study left hospital with a prescription for cardiac medications for 30 days or less," said Dr. Ivers. "This may be a result of the common clinical perception that short prescriptions encourage patients to go to their followup appointments, yet our study found regardless of the duration of the prescription, nearly all patients did, in fact, attend their followup appointment."

Short prescriptions may inadvertently suggest to patients and family physicians alike that long-term adherence isn't necessary, the authors suggest.

"When we reduce the requirement for early refills, patients still follow up with their family physician or cardiologist and they are more likely to remain on the medications as well, Dr. Ivers said. "We certainly want to encourage early outpatient follow up after hospitalization, but holding medications ransom may not be the best way to do it."

Modifying the length of a prescription is an easy fix, Dr. Ivers adds.

"Forcing elderly patients to frequently visit their cardiologist or family physician to renew prescriptions is only exacerbating the problem," he said. "While dosage adjustments are sometimes required, increasing the duration of a prescription for cardiac patients can easily be done, leading to significant benefits for patients."

Provided by Women's College Hospital