

Doctor-pharmacist partnership reduces hospitalization for heart failure

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Thinking "outside the medicine cabinet" is paying off in Australia, where a doctor-pharmacist partnership is reducing hospitalizations for heart failure — one of the most expensive conditions to treat — researchers report in *Circulation: Heart Failure*.

In the American Heart Association journal, researchers describe a collaborative model for ensuring [heart failure](#) patients take their medicines properly. The rate of hospitalization was cut by 45 percent in the first year of being part of a collaborative medicines review service.

"This is the first study to show these benefits in real-world practice rather than in a trial setting," said Elizabeth E. Roughead, Ph.D., lead author of the study and a pharmacist and associate professor in the School of Pharmacy and Medical Sciences at the University of South Australia in Adelaide. "If you have heart failure, getting a home visit with your pharmacist and then having a follow-up visit with your doctor about your medicines can keep you out of the [hospital](#)."

Researchers followed 273 heart failure patients over age 65 who underwent collaborative medicine review and compared them to 5,444 controls who didn't have their medicines reviewed. The participants were Australian veterans, who have extremely detailed medical records. All participants took one of three types of beta blocker drugs. Before these drugs are used, Australian physicians must sign paperwork confirming a heart failure diagnosis.

Those in the test group were slightly sicker than controls, and had more co-morbidities (eight other conditions vs. seven for the controls). Compared to controls, the group undergoing medicine review also had more [prescriptions](#), more changes in medication prior to their home review, prescriptions from a higher number of caregivers and more hospitalizations.

After adjusting for a range of possible confounders, the researchers found that only 5.5 percent of the patients in the collaborative review group were hospitalized within a year, compared to 12 percent of the control group.

The collaborative approach features house calls with a twist: Pharmacists go to patients' homes and ask them to bring out all their prescription and non-prescription medications. The pharmacists are trained to notice signs of possible medication misuse, including under-dosing, overdosing and hoarding unneeded medicines from old prescriptions — a habit that increases the chance of accidentally taking the wrong medicine.

The pharmacists also look for over-the-counter medications and vitamins that could interact with the patients' prescription drugs. The average age of patients in both groups was 81.6 years, Roughead said.

Under the system used in Australia since 2001, a patient's general practitioner provides a referral to a pharmacist with the special collaborative training. The pharmacist conducts an interview, preferably in the patient's home, and reports findings from the review to the general practitioner. The report notes any known or potential problems the patient may have managing their medicines. The doctor then follows up with the patient if necessary. That follow-up could include showing the patient how, why and when to take their medicines or discussing proper ways to store the drugs as well as describing possible interactions between prescriptions, non-prescription medicines or vitamins found in

the home by the pharmacist.

"Poor use of medicines can increase costs enormously," Roughead said.
"This study indicates that investing in improvements in medication management can result in more cost-effective health care."

Source: American Heart Association ([news](#) : [web](#))

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