



News and Research Communications

Lack of pharmacy access sends some patients back to the hospital

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PORTLAND, Ore. – Hospital readmissions, a \$17 billion annual problem, are higher in rural, remote or smaller communities that sometimes have significantly less access to pharmacies, according to a study published today that was one of the first to examine this issue.

Researchers at Oregon State University and Oregon Health & Science University found that the average number of readmissions from rural areas was 15.3 percent, compared to 14.7 percent for their urban counterparts where the days and hours a person could find an open pharmacy were much higher.

Unplanned hospital readmissions are such a serious national problem that recent changes in federal law are penalizing hospitals that have high readmission rates. It can be a problem with various groups:

older adults; people who have several medical conditions; those taking multiple medications; and people who have difficulty adhering to their medication regimen.

The study was done in Oregon with census data of patients over 65, studying 507 pharmacies and 58 hospitals. It was supported by the OHSU Layton Alzheimer Disease Center, which is funded by the National Institutes of Health.

“It’s a huge burden both on a patient and our medical system when they have to be readmitted to a hospital,” said David Lee, an assistant professor in the OSU/OHSU College



of Pharmacy, and senior author on a new study in the Journal of the American Pharmacists Association.

“The modern pharmaceutical profession is increasingly being recognized as an important partner in health care, and as its services continue to expand it will help even more. This research shows that pharmacy access can help people from going back to the hospital. For older populations who often find hospital experiences quite exhausting, that’s extremely important to their overall health.

“The sooner a person gets out and stays out of a hospital, the better off they usually will be.”

In some rural areas of Oregon, Lee noted, a person might have to drive 100 miles or more to find a pharmacy. In one of Oregon’s rural communities there is a single pharmacy that’s open 54 hours a week; by comparison, in some major urban areas a person might be able to find multiple pharmacies that collectively are open more than 3,800 hours a week.

These challenges of availability, distance and convenience to professional pharmaceutical products, service and counsel are a problem, researchers said. Another interesting corollary to the issue, they said, is identification of what have been called “pharmacy deserts” even within major urban areas, such as Chicago.

“Large, urban, predominantly white communities usually have a lot of pharmacies and access,” said Sarah Bissonnette, lead author on this study and an OSU postdoctoral fellow. “But in some lower socioeconomic areas even within cities, it’s much more difficult to find an open pharmacy.”

If more conventional pharmacies are not economically viable, the researchers said, a possible remedy to the problem is growth and improvement of what’s called “telepharmacy,” or mail-order services that are carefully backed up by personal advice, monitoring and counsel from professional pharmacists.

Improved hospital discharge medication counseling has been shown to increase adherence to use of new or changed medications, the study indicated. And some hospitals around the country have also taken it upon themselves to open community and 24-hour pharmacies in an attempt to reduce readmission rates.

Nonadherence to medication usage ranges from 25-50 percent in the United States, depending on the disease state, and is associated with increased illness and death, the study noted. Causes can include adverse side effects, insurance coverage, costs, education levels, cognition and pharmacy access.
