Medicare patients in rural areas have lower rates of follow-up care after leaving the hospital—which may place them at higher risk of emergency department (ED) visits and repeat hospitalizations, according to a study in the September issue of *Medical Care*.

"This study provides evidence of lower rates of post-discharge follow-up care, and higher ED use for Medicare beneficiaries in rural settings," comments lead author Matthew Toth, PhD, MSW. The research was conducted while Dr. Toth was at University of North Carolina at Chapel Hill; he is now at RTI International. Especially with new "pay-for-performance" programs tying reimbursement to hospital performance on patient outcomes, the results highlight the need for policies to improve follow-up care for patients in rural areas.

**Differences in 30-Day Outcomes for Patients at Rural versus Urban Hospitals**

Using data from the nationally representative Medicare Current Beneficiary Survey, the study included approximately 12,000 Medicare-eligible patients with hospital admissions between 2000 and 2010. About 4,000 patients lived in rural areas; this group was further divided into patients living in large, small, and isolated rural areas (based on a standard coding system).

The rural and urban groups were compared on three key outcomes during the first 30 days after hospital discharge: follow-up healthcare visits, ED visits, and unplanned hospital readmissions. The comparisons were adjusted for a wide range of demographic, health-related, and hospital characteristics.

The results suggested that patients living in isolated areas were less likely to receive a follow-up visit within 30 days after leaving the hospital. Compared to those in urban areas, patients in isolated rural settings were 19 percent less likely to receive follow-up care.

The study also found a higher risk of ED visits within 30 days for patients living in large or small rural areas, compared to urban patients. This risk was 44 percent higher for patients who lived in small rural settings and 52 percent higher for those in large rural settings.

The overall risk of unplanned hospital readmissions was not significantly different for rural versus urban residents. However, this difference became significant when patients were classified by the location of the hospital where they were treated, rather than where they lived. Thirty-day readmission risk was 32 percent higher for patients discharged from hospitals in large rural settings and 42 percent higher for hospitals in small rural settings, compared to urban settings.

In addition to their impact on patient care, the findings may have important implications for rural healthcare providers at a time of changes in healthcare delivery and payment. These include a recently introduced Medicare program seeking to improve post-discharge outcomes by penalizing hospitals with higher-than-expected 30-day readmission rates.

"Consistent with previous [research] on safety-net and low-volume hospitals, our study finds that rural hospitals serving elderly Medicare beneficiaries may be disproportionately penalized under this program," Dr. Toth and coauthors write. "If so, poor readmission outcomes among these hospitals may be exacerbated."

The researchers believe their findings highlight the need for measures to improve access to care and reduce unplanned acute events for rural patients. That may include investment in programs such as telehealth, care management, transitional care, and policies to enhance primary care services. "A greater understanding of the reasons for these
differences would help inform efforts to improve care," Dr. Toth adds. "For example, are patients of rural hospitals more likely discharged to under-resourced settings, or are there more likely gaps in post-discharge instructions in the inpatient setting?"

**More information:** "Rural Medicare Beneficiaries Have Fewer Follow-up Visits and Greater Emergency Department Use Postdischarge" [DOI: 10.1097/MLR.0000000000000401](https://medicalxpress.com/news/2015-08-rural-medicare-beneficiaries-follow-up.html)