

Handling the Handoff:
Rural and Race-Based Disparities in Post-Hospitalization
Follow-up Care Among Medicare Beneficiaries with Diabetes



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**Handling the Handoff: Rural and Race-Based Disparities in Post-Hospitalization
Follow-up Care Among Medicare Beneficiaries with Diabetes**

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September 2011



Funding Acknowledgment:

This report was prepared under Grant Award No 6 U1C RH 03711-04-01 with the Federal Office of Rural Health Policy, Health Resources and Services Administration



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Executive Summary

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Diabetes is one of the most common chronic diseases, affecting an estimated 23.6 million people in the United States (7.8% of the total population). Rural African American and Hispanic residents with diabetes are less likely to exhibit good control of their condition, putting them at greater risk for the consequences of this disease, such as kidney failure, blindness and amputation. Effective outpatient care is key to diabetes management. Absence of such care, conversely, may play a role in poorer diabetes control in rural areas.

The present report uses information regarding Medicare beneficiaries with diabetes to examine the provision of care in rural America. It provides estimates of hospital admission rates for rural Medicare beneficiaries with diabetes, tracks the proportion of patients who receive adequate outpatient care post discharge, and assesses subsequent readmissions to the hospital. It also explores the potential for race-based disparities in care for diabetes.

The data were obtained from the 2005 Medicare claims data from the Chronic Condition Warehouse (CCW), merged with the 2007 Area Resource File (ARF). The study population was limited to beneficiaries who did not die during the year and did not have one of the following diagnoses: Alzheimer's disease, dementia, schizophrenia, congestive heart failure, chronic kidney disease or end stage renal disease. Beneficiaries were also excluded if they were discharged to a long term care facility, another hospital, hospice or with home health services. Thus, only beneficiaries who were not hospitalized during the study year, or who were hospitalized and discharged back into the community after hospitalization, are included in the study.

Beneficiaries were characterized as urban or rural based on the county in which they lived, using Urban Influence Codes. Rural counties were further subdivided into micropolitan, small rural adjacent to a metropolitan area, and remote rural counties. We examined the hospitalization rate of all beneficiaries, then subset to just those with diabetes. Among persons who were hospitalized, we studied the time frame in which they might have made a follow-up visit to a physician's office, visited an emergency department, or been hospitalized.

Key findings are highlighted here:

Rural – Urban Disparities

- Diabetes is more common among beneficiaries who live in rural counties (16.7%) than among those who live in urban areas (13.5%).
- Among beneficiaries with diabetes, rural residents were slightly more likely to have at least one hospitalization (13.0%) than were urban beneficiaries (12.0%).
- Rural beneficiaries with diabetes were less likely to have physician follow-up within thirty days of a hospital stay (85.5%) than were urban beneficiaries with diabetes (88.3%).

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- The proportion of beneficiaries with no follow-up even after 90 days increased as residence became more rural, from 2.3% in micropolitan rural counties to 3.5% in remote rural counties.
- Rural residents with diabetes were less likely to be readmitted within 30 days than were urban beneficiaries (12.3% versus 14.9%), despite being less likely to have prompt physician follow-up.

Race Disparities

- Diabetes is markedly more prevalent among African American than among white beneficiaries. More than one in four rural African Americans has diabetes (27.4%), versus about one in six (15.9%) among rural white beneficiaries. For both groups, prevalence does not differ across rural county types.
- African American beneficiaries with diabetes were *less* likely to be hospitalized during the year than white beneficiaries. Across all rural residents with diabetes, 11.7% of African American beneficiaries were hospitalized, versus 13.1% of whites.
- Rural African American beneficiaries with diabetes were less likely than white beneficiaries with this condition to have a follow up visit within 30 days of hospitalization (85.0% versus 87.7%).
 - For white beneficiaries with diabetes, prompt follow up was highest at micropolitan counties (88.0%) and lowest in remote rural counties (79.5%).
 - For African American beneficiaries with diabetes, follow up within 30 days was most common in small adjacent rural counties (89.2%); in these counties, African Americans were more likely to receive prompt follow up than were whites (84.6%).
- African American beneficiaries were more likely to be readmitted within 30 days (15.9%) than were white beneficiaries (12.0%); individuals of other race did not differ from whites.

Policy Implications

- The Triple Aim is a useful framework for identifying gaps in care, shaping interventions, and studying outcomes of the interventions aimed at improving transitions in care and reducing readmissions
- Coordinated care transition programs have been shown to be effective in reducing readmissions, but their current use is sporadic.
- Use of health information technology can aid transitions across levels of care, by enabling sharing of patient data, alerting providers of a discharge, and reminding both providers and patients of necessary care
- Patient empowerment is a vital component of improving transitions in care, and cannot be overlooked.
- Further study regarding the transition from hospital care to the primary treating physician is necessary to understand its potential in improving quality of care.