
Independently Owned Pharmacy Closures in Rural America

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INTRODUCTION

The purpose of this policy brief is to provide policy makers, researchers, and stakeholders with information about the closure of rural independently owned pharmacies, including pharmacies that are the sole source of access to local pharmacy services, from 2003 to 2008. This period coincides with the implementation of two major policies related to payment for prescription medications: Medicare prescription drug discount cards were introduced on January 1, 2004, and the Medicare prescription drug benefit began on January 1, 2006. In this brief, we focus on rural pharmacy closure because of the potential threat such closures present to access to *any* local pharmacy services in a community. Services include providing medications as needed (not waiting for mail order), overseeing administration of drugs to nursing homes and hospitals, and patient consultation. While Medicare Part D has provided access to drug coverage for some previously uninsured patients and mail order prescriptions to patients without access to a pharmacy, there also may have been some unintended consequences associated with the program. Organizations representing rural pharmacies have argued that Medicare prescription drug plans threaten the viability of those pharmacies (Grisnik 2006). Furthermore, pharmacies have reported that the gross margin they received on Medicare Part D prescriptions was below what they needed to stay in business (Radford et al. 2007). The impact of receiving less than cost from payment should be evident after some months of experience with a new payment system.

KEY FINDINGS

- 998 independently owned rural pharmacies in the United States have closed since May 1, 2006.
- In that same period, 495 independently owned pharmacies opened in rural communities, resulting in a net loss of 503 independently owned rural pharmacies.
- The total number of independently owned rural pharmacies that were the only pharmacy in a community declined from 1,965 in May 2006 to 1,827 in April 2008 (reflects closures, openings, and declines from multiple pharmacies to only one).
- Among those that were open in May 2006 and later closed, 158 were the only pharmacy serving their community at the time, and no other pharmacy replaced them.

BACKGROUND

The early experience of rural independently owned pharmacies with Medicare Part D brought stories of financial difficulties attributed to the new program. A story in October 2006 reported rural independently owned pharmacies closing in Wyoming, North Dakota, and North Carolina. That story quoted a member of the Wyoming State Board of Pharmacy saying that closures in towns with only one pharmacy could be a big problem for access (Paul 2006). The financial difficulties that rural independently owned pharmacies now face may have existed before Medicare Part D due to changes in Medicaid pricing and the pricing strategies of commercial insurance, which are mimicked in the Part D program. Pharmacies generally are paid more for prescription medications by cash-paying customers than by insured patients, and cash-paying customers subsidize some of the cost of the insured patients. Passing the costs of staying in business as an independently owned pharmacy in a remote location to consumers is difficult if nearly all the pharmacy's customers are enrolled in an insurance plan that limits payment (Stratton 2001). Previous publications by the

North Carolina and RUPRI rural health research centers have reported the cash flow concerns since the introduction of the Medicare Part D program of rural independent pharmacies located at least 10 miles from the nearest alternative (Radford et al. 2006, 2007). This policy brief contributes to a better understanding of the impact of current policies on access to pharmacy services.

METHODS

Monthly data from January 2003 through April 2008 were obtained from the National Council for Prescription Drug Programs (NCPDP) that included the location of, and other information on, the more than 70,000 pharmacies in the United States. Using NCPDP's categorization of pharmacies, we created subsets of those pharmacies meeting the following criteria (in order of use): retail; independently owned (including franchised pharmacies), using NCPDP's definition of an independent pharmacy;¹ rural, using the Federal Office of Rural Health Policy's definition of rural;² and the only independent pharmacy in the community. Sole community independent pharmacies were identified using the following process. First, all pharmacies in any ZIP code with more than one pharmacy were excluded.³ Then, any remaining pharmacy in the same city as another retail pharmacy was excluded. Finally, only independent pharmacies were retained. Pharmacy closure is identified when the provider number ceases to be included in the monthly dataset.

FINDINGS

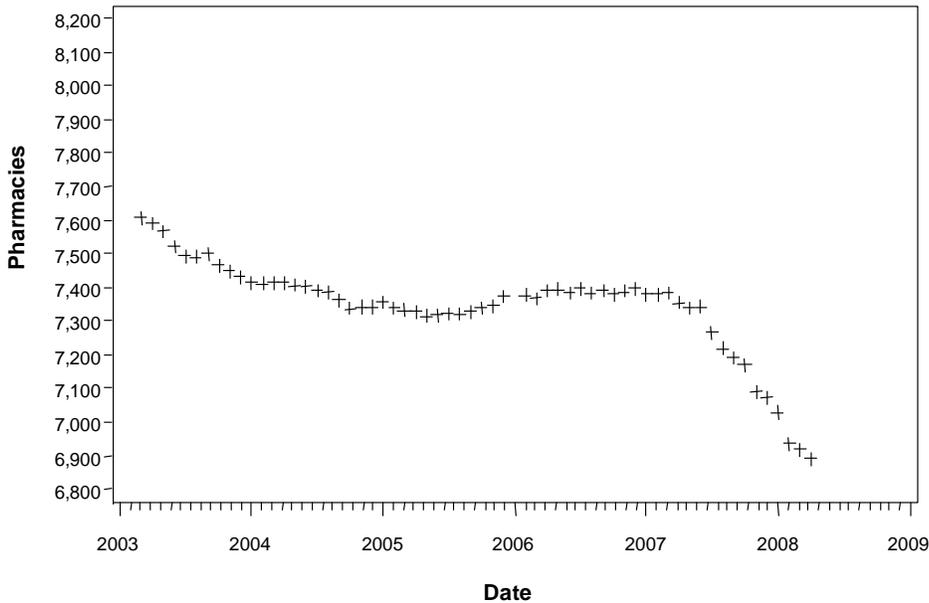
The number of rural independently owned pharmacies in the United States was relatively constant from 2003 to 2006, peaking around May 2006. During this period, Medicare prescription drug discount cards were introduced and the Part D program began operating. From May 2006 through April 2008, there was a rapid decline in the number of rural independently owned community pharmacies, from 7,395 to 6,892 (Figure 1). This 6.8% drop in the number of pharmacies has taken place since the introduction of the Medicare Part D program. The decrease in the number of pharmacies since 2006 is a function of an increase in the number of pharmacies closing (in the data set the provider number ceases to be included) each month, with 426 more pharmacies closing in 2006-2007 (total of 881 closures) than in 2004-2005 (total of 455 closures), and a total of 998 closures from May 2006 through April 2008.

In communities most vulnerable to loss of access to pharmacy services, the decrease in the number of independently owned pharmacies has been slightly greater (Figure 2). The number of pharmacies serving these communities in which they were the only pharmacy in the community dropped by 7.0% since May 1, 2006, from 1,965 to 1,827. In that same period, the number of pharmacies closing each month was almost double what it was in the previous two years. The 1,827 sole community pharmacies in April 2008 include those in places where there had been more than one pharmacy and there is now only one and, possibly, those in places where there were no pharmacies and there is now one. Of the number of pharmacies that were open in May 2006 and later closed (which exceeds the net loss of sole community pharmacies because there are new openings elsewhere that are in the count and declines in places where there had been multiple pharmacies and there is now only one), 158 were in places where, as of April 2008, there was no replacement retail pharmacy.

IMPLICATIONS

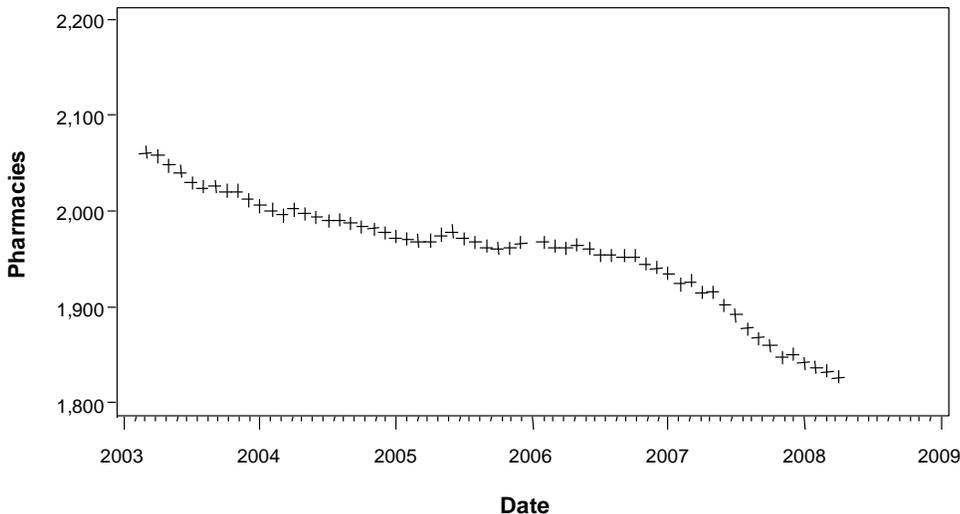
Medicare Part D, which is in its third year, has increased financial access to prescription medications for Medicare beneficiaries. This policy brief suggests that an unintended consequence of the program is to reduce geographic access to pharmacy services in rural communities.

Figure 1. Monthly Count of Rural Independently Owned Pharmacies, 2003-2008



Note: "Pharmacies" includes only independent pharmacies in a retail setting (community/retail, grocery, or department store) in the 50 states and District of Columbia. Consistent with the definition that the Federal Office of Rural Health Policy (ORHP) uses for program eligibility, we define "rural" as ZIP codes classified as Rural Urban Commuting Area (RUCA) codes 4-10.6 inclusive, including those that are within metropolitan areas. Since we are using ZIP codes in this analysis, we have not extended the definition of rural to include "Census Tracts within metropolitan areas with RUCA codes 2 and 3 that are larger than 400 square miles and have population density of less than 30 people per square mile," which ORHP also considers rural (<http://ruralhealth.hrsa.gov/funding/eligibilitytestv2.asp>).

Figure 2. Monthly Count of Rural Independently Owned Pharmacies That Were the Only Pharmacy in a Community, 2003-2008



Note: "Pharmacies" includes only independent pharmacies in a retail setting (community/retail, grocery, or department store) in the 50 states and District of Columbia. Consistent with the definition that the Federal Office of Rural Health Policy (ORHP) uses for program eligibility, we define "rural" as ZIP codes classified as Rural Urban Commuting Area (RUCA) codes 4-10.6 inclusive, including those that are within metropolitan areas. Since we are using ZIP codes in this analysis, we have not extended the definition of rural to include "Census Tracts within metropolitan areas with RUCA codes 2 and 3 that are larger than 400 square miles and have population density of less than 30 people per square mile," which ORHP also considers rural (<http://ruralhealth.hrsa.gov/funding/eligibilitytestv2.asp>).

NOTES

1. NCPDP defines an independent pharmacy as one to three pharmacies under common ownership.
2. Consistent with the definition that the Federal Office of Rural Health Policy (ORHP) uses for program eligibility, we define “rural” as ZIP codes classified as Rural Urban Commuting Area (RUCA) codes 4-10.6 inclusive, including those that are within metropolitan areas. Since we are using ZIP codes in this analysis, we have not extended the definition of rural to include "Census Tracts within metropolitan areas with RUCA codes 2 and 3 that are larger than 400 square miles and have population density of less than 30 people per square mile," which ORHP also considers rural (<http://ruralhealth.hrsa.gov/funding/eligibilitytestv2.asp>).
3. We realize that we may exclude a small number of isolated pharmacies in communities embedded in geographically large ZIP codes with this method; however, this method assures that we will not include two pharmacies in neighboring communities because each is in a separate community. Thus, this is a conservative estimate of total pharmacies that are the only ones in their communities.

REFERENCES

- Grisnik P. (2006, May 3). Testimony Before the Subcommittee on Health of the House Committee on Ways and Means.
- Paul R. (2006, October 23). Medicare Part D leaving independents stranded. *Drug Topics*. Retrieved June 20, 2008, from <http://www.drugtopics.com/drugtopics/article/articleDetail.jsp?id=379879&searchString=leaving%independents%stranded>
- Radford A, Mason M, Richardson I, Rutledge S, Poley S, Mueller K, & Slifkin R. (2007). One year in: Sole community rural independent pharmacies and Medicare Part D (Findings Brief). A joint publication of the North Carolina Rural Health Research & Policy Analysis Center and the RUPRI Center for Rural Health Policy Analysis. Chapel Hill, NC: North Carolina Rural Health Research & Policy Analysis Center.
- Radford A, Mason M, Richardson I, Rutledge S, Poley S, Mueller K, & Slifkin R. (2006). The experience of sole community rural independent pharmacies with Medicare Part D: Reports from the field (Policy Paper P-2006-3). A joint publication of the North Carolina Rural Health Research & Policy Analysis Center and the RUPRI Center for Rural Health Policy Analysis. Omaha, NE: RUPRI Center for Rural Health Policy Analysis.
- Stratton TP. (2001). The economic realities of rural pharmacy practice. *Journal of Rural Health, 17*(2), 77-81.

This study was funded under a cooperative agreement with the Federal Office of Rural Health Policy (ORHP), Health Resources and Services Administration, U.S. Department of Health and Human Services, Grant Number 1 U1GH07633. The conclusions and opinions expressed in this brief are the authors' alone; no endorsement by the University of Nebraska, ORHP, or other sources of information is intended or should be inferred.