RUPRI Center for Rural Health Policy Analysis
Rural Policy Brief

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Independently Owned Pharmacy Closures in Rural America

Kaitlin Boyle, BS; Fred Ullrich, BA; Keith Mueller, PhD

Introduction

The closure of rural independently owned pharmacies, including pharmacies that are the sole source of access to local pharmacy services, from 2003 through 2011 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 (Part D) 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 from local stock without delay or travel, overseeing administration of medications to nursing homes and hospitals, and patient consultation.

Key Findings

- From March 1, 2003, to December 1, 2011, there was a loss of 852 independently owned rural pharmacies in the United States.
- Between May 2006 (four months after the Medicare prescription drug benefit began) and December 2011, 296 rural communities lost their only retail pharmacy (an increase from 268 as of December 2010). During the same period, nine other rural communities with two retail pharmacies lost both of them.
- An additional 198 rural communities went from having more than one retail pharmacy in May 2006 to only one retail pharmacy in December 2011 (an increase from 176 as of December 2010).

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RUPRI Center for Rural Health Policy Analysis, University of Iowa College of Public Health, Department of Health Management and Policy,
105 River Street, N200 CPHB, Iowa City, IA 52242, (319) 384-3830
http://www.public-health.uiowa.edu/rupri
E-mail: cph-rupri-inquiries@uiowa.edu

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). Previous publications by the North Carolina and RUPRI rural health research centers have reported cash flow concerns for rural independent pharmacies located at least 10 miles from the nearest alternative since the introduction of the Medicare Part D program (Radford et al. 2006, 2007). This policy brief continues tracking rural retail pharmacy closures, updating our June 2011 policy brief.

Methods

Monthly data from January 2003 through December 2011 were obtained from the National Council for Prescription Drug Programs (NCPDP) and 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):

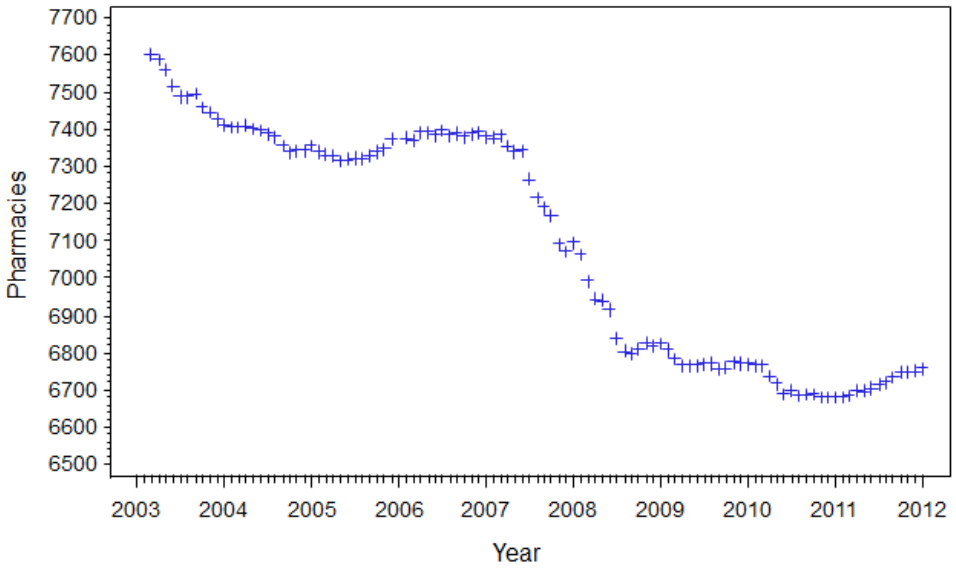
- retail; independently owned (including franchised pharmacies), using NCPDP's definition of an independent pharmacy;[1]
- rural, using the Federal Office of Rural Health Policy's definition of rural;[2] and
- the only independent pharmacy in the community.

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 in the data set. Pharmacy closure is identified when the provider number ceases to be included in the monthly data set.

Findings

The number of rural independently owned pharmacies in the United States was relatively constant from 2003 to 2006, peaking around May 2006. From May 2006 through September 2008, there was a rapid decline in the number of rural independently owned community pharmacies, from 7,395 to 6,799 (Figure 1). This 8.1% drop in the number of pharmacies took place after the introduction of the Medicare Part D program until September 2008. The decrease in the number of rural pharmacies continued, but at a much slower pace, 0.7% from September 2008 to December 2011 (decreased to 6,751 pharmacies). In communities at risk of loss of the only pharmacy present at the time, the decrease in the number of independently owned pharmacies was slightly greater (Figure 2). The number of retail pharmacies that were the only pharmacy in the community dropped by 10.7% since May 1, 2006, from 1,965 to 1,755 (a decline from 1,759 in December 2010). The 1,755 sole community pharmacies in December 2011 included those in places where there had been more than one pharmacy and there was now only one and, possibly, those in places where there were no pharmacies and there was now one. Between 2006 and 2011, 296 rural communities lost their only retail pharmacy and nine more went from two retail pharmacies to none. This loss of rural retail pharmacies was spread over 45 states (Table 1). Conversely, there were 137 rural ZIP codes in which a pharmacy was established where there had been none, but 57 of those were in places within micropolitan areas or places with "urban focused" rural-urban commuting area codes.

Figure 1. Monthly Count of Rural Independently Owned Pharmacies, 2003-2011



Note: "Pharmacies" included only independent pharmacies in a retail setting (community/retail, grocery, or department store) in 50 states and the 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, 2003–2011

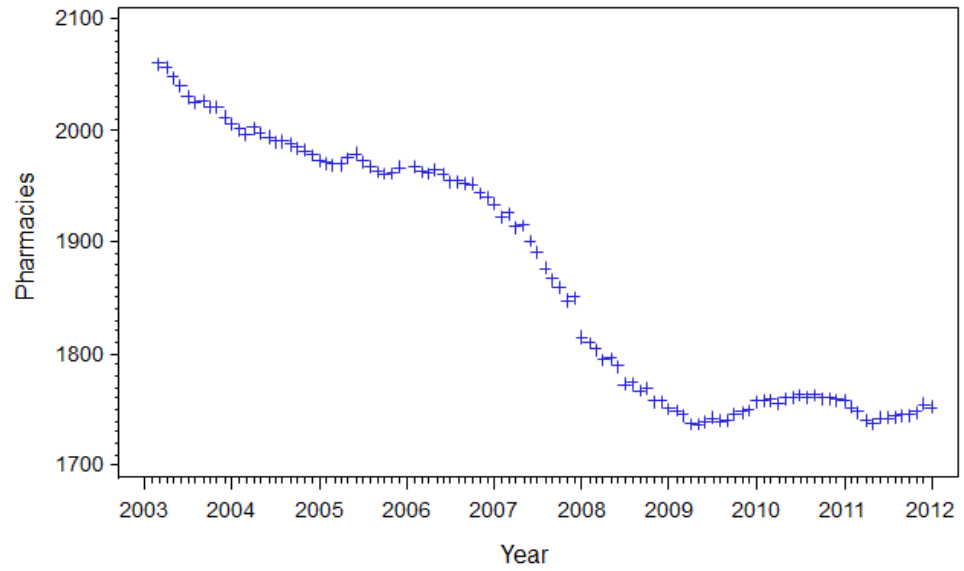


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Table 1. Number of Rural ZIP Codes, by State, Going from 1 or More Pharmacy to None, or from More than 1 to only 1, 2006-2011

State	1 in 05/06, 0 in 12/11	>1 in 05/06, 1 in 12/11	>1 in 05/06, 0 in 12/11
AK	0	0	0
AL	9	6	0
AR	6	4	0
AZ	4	3	0
CA	9	6	0
CO	6	4	0
CT	1	0	1
DE	0	0	0
FL	5	2	0
GA	5	5	0
HI	1	1	0
IA	11	8	2
ID	3	3	1
IL	9	9	0
IN	13	6	0
KS	4	9	1
KY	12	6	0
LA	11	3	0
MA	0	1	0
MD	1	0	0
ME	6	2	0
MI	14	8	0
MN	12	7	0
MO	4	6	0
MS	7	11	1
MT	4	5	0
NC	8	9	0
ND	6	5	0
NE	9	6	1
NH	2	4	1
NJ	0	0	0
NM	3	1	0
NV	1	0	0
NY	7	6	0
OH	9	4	0
OK	10	3	0
OR	5	3	0
PA	10	7	0
RI	0	0	0
SC	2	2	0
SD	10	3	0
TN	4	2	0
TX	23	10	0
UT	4	1	0
VA	4	5	0
VT	2	2	0
WA	4	1	0
WI	10	6	0
WV	5	1	0
WY	1	2	1
TOTAL	296	198	9

Discussion

The sharp decline in independently owned retail pharmacies in rural communities was associated with the implementation of Medicare Part D (Klepser et al., 2011). The number of sole community independent pharmacies stayed relatively steady between September 2009 (1,741) and December 2011 (1,755). During the same period, there was an initial slow decline in the total number of independent pharmacies in rural communities (from 6,759 in September 2009 to 6,681 in November 2010), but that number increased to 6,751 independent pharmacies in rural communities in December 2011. Although the number of independent pharmacies in rural communities continues to fluctuate, the steep decline in numbers seen between 2007 and 2008 appears to have leveled off for the time being. Two questions continue to be important for rural communities and future policy considerations. First, what are the consequences to the delivery of health services in rural communities that have lost their only retail pharmacy? Second, should we anticipate access issues in those places that now have only one retail pharmacy?

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 to include "Census Tracts within metropolitan areas with RUCA codes 2 and 3 that are larger than 400 square miles and have a 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 need to 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

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