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HOW MANY ENROLLEES COME TO VA JUST FOR PHARMACY?

Shao C. Zhu, MPH
John A. Gardner, Ph.D.
Ann Hendricks, Ph.D.

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Health Care Financing & Economics

VA Boston Health Care System Research & Development
150 South Huntington Avenue (Mail Stop 152H), Boston, MA 02130 • Phone: (617) 232-9500 Ext. 6058 • http://www.hcfe.org

ABSTRACT

Objectives: To estimate what proportion of patients come to VA primarily for pharmacy services, calculate their annual pharmacy costs, and describe the population.

Methods: For a convenience sample of all patients (n~150,000) using VA care in FY1998 at six study sites, we applied four alternative definitions to identify those who were "primarily outpatient pharmacy (POP)" users. POP patients were defined as having no inpatient utilization but at least some pharmacy cost during FY1998 and: (a) Non-pharmacy cost less than $800; or (b) No more than 4 outpatient visits; or (c) Pharmacy costs over $100 and comprising at least 33% of annual VA costs; or (d) The intersection of conditions (a)-(c). Sub-samples of patients with diabetes or Parkinson's disease were also examined.

Results: In FY1998, POPs were 32.2% by the non-pharmacy cost definition (a), 18.7% of VA patients by the outpatient visit definition (b), and 32.0% by the pharmacy cost definition (c). Definition d (the intersection of the other three) included 14.4% of all outpatients with pharmacy cost and 10% of all outpatients. This fourth group of POP patients averaged $471 in annual pharmacy cost ($300 for non-pharmacy). Larger proportions of these patients had lower priority levels (70% were levels 4-7 compared to 53% of non-POP patients) and had fewer diagnoses in the VA administrative data.

Conclusions: This preliminary exploration of ways to quantify the impact of veterans coming to the VA primarily for outpatient pharmacy suggests that about one in seven of VA pharmacy outpatients fit a definition of having only a small number of outpatient visits annually with a relatively large pharmacy cost. This number was 10 percent of all VA patients. The budget impact of this 10 percent was only about 1 percent of medical care appropriations.

Impact: The VA pharmacy benefit is sufficiently important for a significant share of VA patients that they come to VA primarily for that service. Depending on the definition, the pharmacy costs of these patients average between $400 and $1,200. This amount could change if Medicare adds a drug benefit, but VA is unlikely to save a large amount of the medical care appropriation if these veterans stop coming to VA.

INTRODUCTION

Conventional wisdom holds that many Veterans Health Administration (VA) patients enroll and use VA's services only to obtain medications already prescribed by the patients' non-VA physicians. The reasoning is that these drugs are too costly under the veterans' alternative health care coverage such as Medicare (which covers few prescription drugs) or private insurance policies. This view of veterans' incentives to use VA care is supported by anecdotal and survey evidence.[1] The proportion of VA patients and their relative share of the VA's budget are not ascertainable by those methods, however.

In evaluating the cost of VA health care, this analytic team explored alternative definitions that might be used to estimate the size of the patient population coming to VA primarily for outpatient pharmacy (POP). This exploration used administrative utilization data and the estimated budget expenditures for that care. The definitions were based on the assumptions that VA patients primarily with outpatient pharmacy use would have limited VA utilization and a relatively high proportion of pharmacy expenditures per patient. The exploration suggests that for fiscal year 1998, 14.4% of VA pharmacy patients might have come to VA primarily for its pharmacy benefit.

BACKGROUND

The VA Pharmacy Benefit

In 1998, veterans were eligible for VA's outpatient pharmacy benefit if they were eligible for VA medical care, determined by review of service and income records prior to any initial visits. In that year, VA's pharmacy co-payments were limited to $2 per prescription per month

[1] Perlin J, Kazis LE, Skinner K, Ren RX, Lee A, Rogers W, Spiro A, Selim A. Health Status and Outcomes of Veterans: Physical and Mental Component Summary Scores, Veterans SF-36, 1999 Large Health Survey of Veteran Enrollees, Executive Report. Department of Veterans Affairs, Veterans Health Administration, Office of Quality and Performance, Washington, D.C., May 2000.

for patients with incomes above a set threshold and without a service-connected disability condition for which the drug was prescribed.

VA pharmacies filled prescriptions written only by VA physicians. Patients had to visit a VA medical center to see a doctor and have the prescriptions (re-)written for the VA system. Once the initial prescriptions were filled, the patients could receive refills automatically through the mail. For many patients the total financial cost was zero because they were exempt from co-payments. The maximum patient cost was likely to be $50 for each physician visit and $2 per prescription per month. The potential savings were large for patients taking multiple medications or any very expensive ones.

Veterans' Alternative Coverage

The vast majority of VA patients have some type of healthcare insurance.[2] More than half are enrolled in the Medicare program and about half of those enrollees also have private supplemental policies ("Medigap"), which may or may not cover prescriptions. About 12% of dual VA-Medicare enrollees are in Medicare HMOs, which may also provide prescription coverage. Almost a fifth of all VA patients (usually those under age 65) have only private health insurance, which may or may not cover medications. Finally, about 6-7% of all VA patients have Medicaid coverage, which generally includes prescription coverage.

How many insured VA patients have alternative prescription coverage is unknown. Estimates for the general Medicare population are about two thirds.[3,4,5] Low incomes and assets are the criteria that qualify about 40-45 percent of all VA patients for enrollment (as Priority 5). Consequently, it is reasonable to think that they are less able to afford such coverage. On the

[2] Shen Y, Hendricks AM, Zhang S, Kazis L. VHA Enrollees' Health Care Coverage and Use of Care. Medical Care Research and Review. 2003;60(2): 253-267.
[3] Poisal JA, Murray LA, Chulis S, Cooper BS. Prescription Drug Coverage and Spending for Medicare Beneficiaries. Health Care Financing Review. 1999;20(3): 15-27.
[4] Davis M, Poisal J, Chulis G, Zarabozo C, Cooper B. Prescription Drug Coverage Utilization, and Spending Among Medicare Beneficiaries. Health Affairs. 1999;January/February: 231-243.

other hand, low-income veterans also will have trouble affording expensive prescriptions outside the VA.

METHODS

This analysis built on the "Evaluation of VA Costs" which priced services at six VA facilities across the country.[6-7] The sites were Albuquerque, NM; Birmingham, AL; Cincinnati, OH; Kansas City, MO; Milwaukee, WI and Providence, RI. Using VA utilization and pharmacy data, we explored four ways to define a VA POP patient population.

Population: In fiscal year (FY) 1998, the six sites served about 150,000 patients with almost 130,000 receiving only outpatient care.

Data Sources: The analysis used VA FY 1998 administrative data from the patient treatment (PTF), extended care and outpatient files. The patient's gender, date of birth, and percent of service-connected disability came from the PTF or the VA enrollment files (when patients did not have a PTF record). A count of the unique diagnoses the patient had in outpatient services in FY 1998 used all diagnoses in the outpatient records.

The ICD-9-CM codes in the primary and secondary diagnosis fields in patient treatment and extended care main files were used for a preliminary, broad-based identification of patients who had or might have Parkinson's disease. We included codes for 3320, Paralysis Agitatans; 3330, other degenerative diseases of the basal ganglia; 3331, essential and other specified forms of tremor. The diabetes patients were identified from the "VA Diabetes Epidemiology Cohort" study, which used ICD-9-CM diagnosis codes and patient prescriptions to identify VA patients

[5] Gluck ME. A medical prescription drug benefit. National Academy of Social Insurance Brief. 1999;(1):1-11.

[6] Nugent G, Hendricks A, Estimating private sector payments for VA health care: an overview, Medical Care Supplement 2003; 41(6): II-2-II10.

[7] Render M, Novak J, Hammond EK, et al. Method for estimating and comparing VA outpatient drug benefits with the private sector. Med Care Supplement 2003; 41(6):II-61-II69.

with this condition.[8] Patient-level annual costs for pharmacy and all other services were obtained from the VA's Allocation Resource Center. About 105,000 patients who used only outpatient services at the six sites had pharmacy costs; their average annual pharmacy cost was $621.50 and ranged from $1 to $42,378.

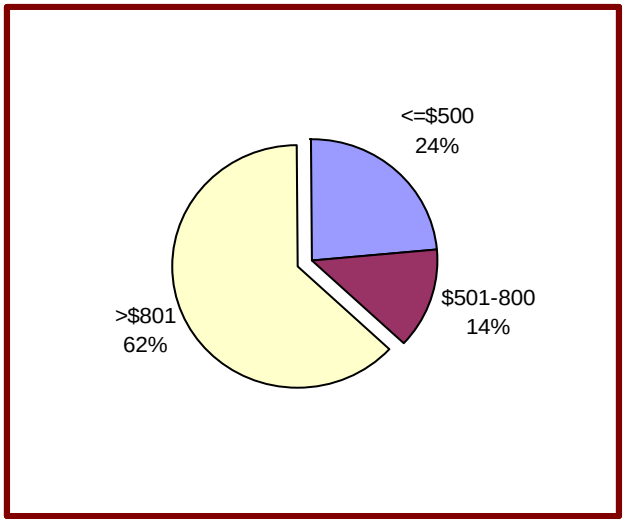
Definition: To define POP patients, we considered four dimensions of their VA care:

1. Using only outpatient VA services
2. A low dollar amount for non-pharmacy costs
3. A low number of outpatient visits
4. A higher than average percentage of annual total costs for pharmacy

The first criterion ruled out inpatients because they logically were coming to VA for more than the pharmacy benefit. The second limited non-pharmacy costs. We chose to apply a limit of $800, assuming this level would be consistent with about one visit every quarter to monitor the patient and renew a prescription. Figure 1 shows that about 38% of outpatients met this criterion. This proportion is too large to have face validity as a measure of POP patients.

[8] Miller DR, Stafford MM, Pogach LM. Who has diabetes? Best estimates of diabetes prevalence in the Veterans Health Administration based on computerized patient data. Diab Care. 2004, in press

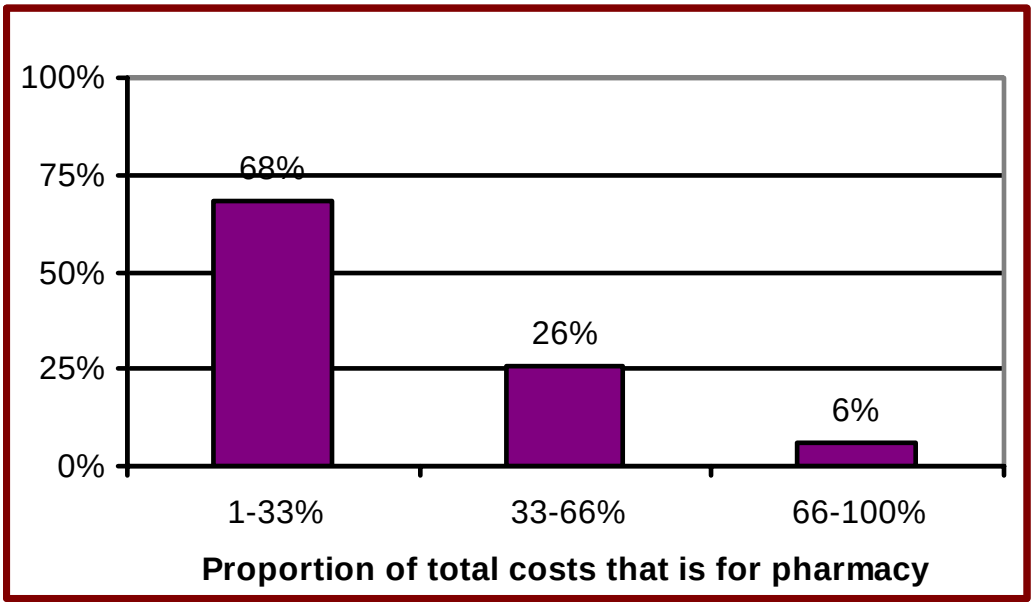
Figure 1: Proportion of VA Outpatients by Annual Non-Pharmacy Costs



When we defined POPs as those outpatients with four or fewer visits in a year (the VA average was 12), we identified an even smaller patient subpopulation. Only 18.8% of the study population had four or fewer outpatient visits in the study year. While this proportion is in keeping with surveys of new VA enrollees, it may include patients with little or no pharmacy use for a variety of reasons (e.g., those needing only an eye exam or an annual check-up).

The fourth dimension to explore for defining POPs with administrative data was the relative size of the pharmacy cost. For this approach, we chose lower limits of at least $100 in pharmacy costs and pharmacy being more than a third of annual total costs. We assumed that POPs would be unlikely to be seeking VA care if their medication expenses were not substantial especially compared to their non-pharmacy cost. Figure 2 shows that 32% of the outpatients with pharmacy costs of more than $100 also had these costs account for more than 33% of their total VA costs. Many of these patients may have had substantial outpatient care, however.

Figure 2: Proportion of All VA Outpatients with Pharmacy Cost over $100 Whose Pharmacy Cost is <1/3 or >2/3 of Annual Cost



Our fourth and final definition of POP patients represented the intersection of all four criteria:

- Outpatients only
- Total VA non-pharmacy costs no more than $800
- No more than four visits in the year
- Pharmacy cost over $100 and accounting for at least 1/3 of total VA costs.

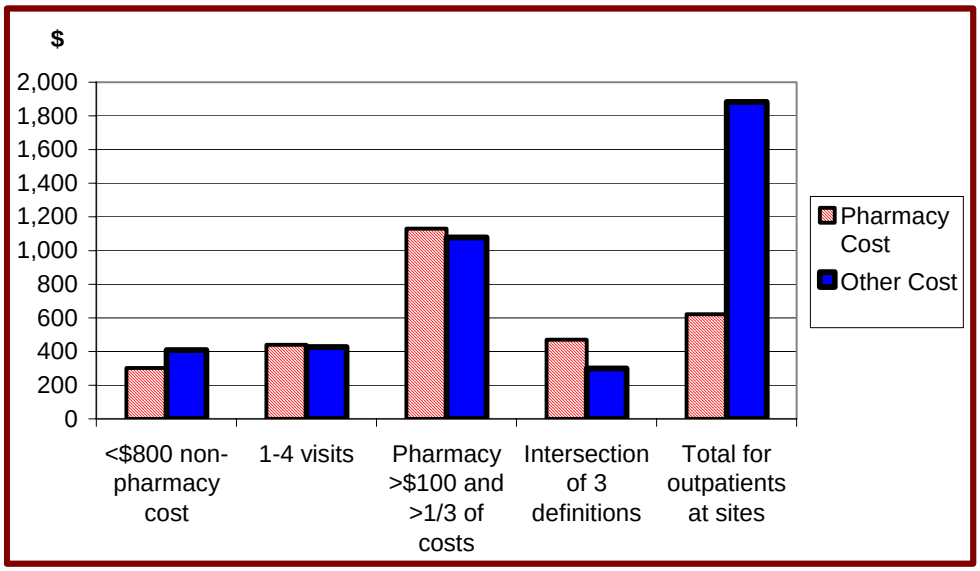
By this more stringent definition, we identified 15,026 patients or 14.4% of our VA outpatient pharmacy population. We believe that this definition is the best of the four created for this preliminary exploration because it combines substantial pharmacy cost with little non-pharmacy cost. It provides a starting point for future work.

RESULTS

Comparison of Definitional Approaches

Figure 3 shows the average 1998 dollar amounts for outpatient pharmacy and non-pharmacy services for all outpatients at the study sites and for each of the definitional approaches. For all 105,000 outpatients with pharmacy costs, total pharmacy averaged just over $600 while the average non-pharmacy cost was about $1,900. In contrast, the four POP definitions identified outpatients whose non-pharmacy costs averaged less than $1,200; for three of them, average pharmacy costs were also less than the overall average of $622. For the preferred definition (the intersection of all criteria), the average pharmacy cost was $471 while annual non-pharmacy costs averaged $300.

Figure 3: Pharmacy and Non-Pharmacy Costs for Each POP Definition, FY 1998



Exploration of POP Definition 4

Table 1 summarizes characteristics of outpatients defined as POP by the intersection of their relatively high pharmacy and low non-pharmacy costs. They were somewhat more likely than non-POP VA patients to be 65 or older and male. Almost 70 percent did not have a service-

connected disability (eligibility status of 4-6 or 7) with the greatest difference (15% versus 6%) being in the proportion who were not disabled and had higher economic status (priority 7).

Table 1: Characteristics of VA Patients by Degree of Pharmacy Use

Percent	Primarily Pharmacy Use	Not Primarily Pharmacy Use
Male	**96.3**	**95.0**
Age 65+	**43.5**	**40.5**
VA Eligibility Estimated as 4-6	**54.4**	**46.9**
VA Eligibility Estimated as 7	**15.2**	**6.0**
Receiving Treatment for Service Connected Disability	**18.4**	**19.9**

Table 2 demonstrates that the potential POP patients tend to have few diagnoses compared to other outpatients at the study sites. This finding is consistent with them having few outpatient visits in the year. The outpatient record is the source of the diagnostic codes and most records have only one or two diagnoses.

Table 2: Number of Unique Diagnoses by Degree of Pharmacy Use

Percent With:	Primarily Pharmacy Use	Not Primarily Pharmacy Use	Total
1 Diagnosis	**39.4**	**6.1**	**11**
2-5 Diagnoses	**60.4**	**37.7**	**41**
6 or more Diagnoses	**0.3**	**56.1**	**48**

POP Patients with Diabetes or Parkinson's Disease

We applied our preferred definition of POP patients to VA patients diagnosed with either Parkinson's disease or diabetes. Pharmacy costs are often high for these two patient populations so they may be more motivated to avail themselves of VA's pharmacy benefit. Among the study patients, only 8.3% of those with a diabetes diagnosis and 13.2% of those with Parkinson's disease met the criteria for POP.

Both diagnostic groups had markedly higher pharmacy costs, however, whether or not they were primarily outpatient pharmacy patients (Table 3). For example, POP patients with diabetes at the study sites averaged $592 in pharmacy costs in 1998, compared to $471 for POP patients overall. Patients with Parkinson's incurred $946.

Table 3: Average Annual VA Pharmacy Cost by POP Status and Diagnosis

	POP	Non-POP
All VA Outpatients*	**$471**	**$647**
Outpatients with:		
Parkinson's Disease **	**$946**	**$1,142**
Diabetes*	**$592**	**$995**

* P<0.01; ** P= 0.1, N.S.

These differentials also exist for patients with these two diagnoses who did not meet the POP criteria. Patients with Parkinson's diagnoses averaged over $1,100 and those with diabetes, almost $1,000 compared to $647 for outpatient overall (not shown).

The POP patients with Parkinson's or diabetes also trended to have far fewer diagnoses during the year (Table 4). This pattern is consistent with these patients coming to VA just for the pharmacy benefit.

Table 4: Number of Unique Diagnoses by POP Status and Diagnosis

Percent With:	Parkinson's Disease POP	Parkinson's Disease Non-POP	Diabetes POP	Diabetes Non-POP
1 Diagnosis	**32.0**	**2.4**	**21.9**	**1.3**
2-5 Diagnoses	**68.0**	**28.1**	**77.5**	**26.0**
6-10 Diagnoses	**0**	**33.6**	**0.1**	**36.9**
11 or more Diagnoses	**0**	**36.0**	**0**	**35.8**

DISCUSSION

This exploratory analysis of administrative data suggests that one out of ten VA outpatients and one out of 7 (14.4%) of those with any outpatient pharmacy cost may have come to VA just for prescriptions in 1998. While the average annual pharmacy cost to VA of this defined subpopulation was substantial ($471), it was less than the average for all outpatients at the study sites ($622). A subanalysis of patients with diagnoses for Parkinson's disease and diabetes indicated that lower proportions of these patients were likely to use VA care primarily for outpatient pharmacy, but their average pharmacy cost was higher than for POP patients overall.

These findings are suggestive but do not establish a definitive approach to defining VA patients who use the system primarily for outpatient pharmacy. This preliminary examination suggests that the financial impact of POP patients is not very sizeable. At the six study sites, 10% of all outpatients fit the preferred POP definition and had annual costs of $471 for pharmacy and $300 for other VA health care. In FY 1998, there were approximately 2.8 million VA outpatients. If 10 percent of those patients used VA primarily for outpatient pharmacy (280,000 patients) at an average cost of $471, their total pharmacy cost would be about $132 million.

This amount is less than 1% of that year's total medical care budget of $17 billion. The estimate for non-pharmacy cost ($300) would add $84 million to bring the total cost of this 10% of outpatients to $216 million or 1.3% of the total medical care budget. On the one hand, this $84 million for non-pharmacy VA care may represent a potential dead weight loss in that it may represent the physician and other clinical time necessary for non-VA prescriptions to be re-written for VA pharmacies rather than real medical care. If the VA had a pharmacy benefit that allowed it to fill non-VA prescriptions, this amount could be saved and the clinical time be redirected to other care. On the other hand, if VA were to change

its outpatient pharmacy benefit, more veterans might choose to be POP patients and VA's pharmacy costs might rise by more than the $84 million estimate of the non-pharmacy impact of current POP patients. Thus, the requirement that VA patients have to have their non-VA prescriptions re-written for VA pharmacies serves as a form of rationing in that it limits the number of veterans who are POP patients in VA.