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Determinants of Dispensing Location in the TRICARE Senior Pharmacy Program

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Summary

The MHS serves approximately 8.6 million eligible beneficiaries, including active-duty military personnel and their family members (dependents), retired military personnel and their dependents, and surviving dependents of deceased military personnel. TRICARE, the program that administers health care for the DoD, includes a pharmacy benefit that provides coverage for virtually all U.S. Food and Drug Administration (FDA)-approved prescription medications.\(^1\) Prior to fiscal year (FY) 2001, elderly military retirees and their dependents who wished to use their military benefits to fill a prescription could do so only at a MTF outpatient pharmacy. However, some drugs that were frequently prescribed by civilian providers were not always available at MTFs because of formulary restrictions.\(^2\) As of FY 2001, DoD introduced a new program for elderly military retirees and their dependents, entitled TRICARE Senior Rx (TSRx). TSRx beneficiaries can now fill their prescriptions at any of four points of service: (1) outpatient pharmacies at MTFs; (2) the TRICARE Mail Order Pharmacy (TMOP),\(^3\) currently administered by Express Scripts Inc.; (3) retail pharmacies

\(^1\) Exceptions are medications to treat cosmetic conditions resulting from the normal aging process, medications whose sole use is to stimulate hair growth, medications for investigational use, medications for obesity and/or weight reduction, medications for smoking cessation, and some prescription vitamins.

\(^2\) The term “formulary restriction” is used in the health services literature to refer to the practice of choosing to provide some brands of a particular class of drugs and not to provide others.

\(^3\) The TRICARE Mail Order Pharmacy was formerly known as the National Mail Order Pharmacy (NMOP). The TMOP is suitable for ongoing prescriptions (that is, prescriptions used to treat chronic conditions).
contracted by regional TRICARE contractors (referred to as “network” pharmacies); and (4) non-network retail pharmacies.

The TMOP dispenses drugs for chronic conditions. Although it cannot dispense a few drugs, such as atorvastatin, without proof of medical necessity, the overwhelming majority of drugs for chronic conditions are available. Retail pharmacies have completely open formularies: TRICARE reimburses them for all prescriptions except those specifically excluded from TRICARE coverage.

The location at which a TSRx beneficiary chooses to obtain a prescription drug affects the cost of that drug to the beneficiary. Elderly beneficiaries pay no co-payment for pharmacy items (either generic or name-brand) obtained from a MTF. The co-payment for items obtained through the TMOP and network retail pharmacies is $3.00 for a generic drug (up to a 90-day supply is available through the TMOP) and $9.00 for a name-brand drug. Non-network retail pharmacies charge a higher co-pay. The FY 2000 National Defense Authorization Act proposes establishing a Uniform Formulary, which will add a third tier for non-preferred brands (with a co-pay of $22.00) to the current two-tier structure and will require TMOP to have an open formulary.

The location at which a TSRx beneficiary chooses to obtain a prescription drug also affects the acquisition cost (defined here as the estimated ingredient cost of the drug to DoD, ignoring dispensing fees, co-payments, and sales taxes). Drugs dispensed through MTFs and the TMOP are purchased at prices negotiated by the Defense Supply Center in Philadelphia (DSCP) and the Department of Veterans Affairs. By contrast, drugs dispensed through TRICARE retail network pharmacies are reimbursed at rates negotiated by TRICARE managed care support contractors. The retail prices typically are considerably higher than those negotiated by the DSCP and the Veterans’ Administration.

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4 Medical necessity is determined on an individual basis, based on a review of information provided by the beneficiary’s provider. According to the DoD Pharmacoeconomic Center’s (PEC’s) Web site, “reasons why a specific medication may be considered medically necessary include, but are not limited to: (1) an allergic reaction to the preferred or contracted medication, (2) a side effect or adverse reaction to the preferred or contracted medication, or (3) failure to achieve the desired effect with the preferred or contracted medication.” In contrast, prior authorization requirements are designed to ensure that certain drugs are used by targeted beneficiaries for whom the drugs are most cost-effective and safe.
In principle, therefore, DoD could reduce its pharmacy acquisition costs by shifting prescription workload from retail pharmacies to MTFs and/or the TMOP.

The purpose of the present study was to gather information about where TSRx beneficiaries receive their medications and what factors influence these choices, and to provide a basis for developing policy options that can improve DoD’s ability to manage the costs of the TSRx program. Specifically, the study sought to answer the following questions:

- What were the most-frequently dispensed and highest-cost drugs and drug classes at each of the three dispensing locations in FY 2002?
- To what extent did ingredient costs differ by dispensing location?
- How did use of each dispensing location change over the course of the year?
- How did beneficiaries’ proximity to MTFs influence their use of MTF pharmacies, the TMOP, and retail pharmacies?
- Were MTF formulary restrictions associated with higher rates of retail dispensing?
- Do the patterns observed for TSRx beneficiaries also hold for 45- to 64-year-old, non–active-duty MHS beneficiaries (most of whom will be TSRx beneficiaries in the future)?

**Approach**

The study focused on prescriptions filled in FY 2002 by TRICARE beneficiaries aged 65 and over as well as those, ages 45 to 64, who were not active duty. The sample of TSRx beneficiaries consisted of 1.8 million eligibles, to whom 54 million prescriptions were dispensed.

A data set was assembled by linking TRICARE pharmacy claims data from the Pharmacy Data Transaction System (PDTS) to information about military beneficiaries and the MTFs closest to their residential ZIP codes. PDTS captures all pharmacy claims from MTF
outpatient pharmacies, the TMOP, and in-network retail pharmacies, including prescription drugs and certain medical supplies, but does not capture the small proportion of prescriptions (fewer than 1 percent of the total in FY 2002) dispensed from non-network retail pharmacies and paper claims. Beneficiary-level data came from the Defense Enrollment Eligibility Reporting System (DEERS) Point-in-Time Extracts (PITEs). A list of MTF pharmacies and their locations was obtained from the Medical Expense and Performance Reporting System (MEPRS) and was supplemented by conducting an online search.

TSRx utilization by drug class and type of dispensing location was analyzed as numbers of 30-day equivalent prescriptions. The effect of MTF proximity was examined by calculating the mean numbers of MTF, TMOP, and retail pharmacy prescriptions obtained by beneficiaries living close (within 20 miles of) to an MTF, at an intermediate distance (21 to 40 miles) from an MTF, or at a considerable distance (more than 40 miles) from the nearest MTF. The association between local MTF formulary restrictions and choice of dispensing location was examined by looking at use patterns of beneficiaries who received drugs that are generally not available from MTFs. We hypothesized that use of such drugs would be associated with increased use of retail pharmacies for drugs other than the one in question. For example, we hypothesized that beneficiaries receiving astorvastatin (brand name Lipitor) would be more likely than those not receiving atorvastatin to use retail pharmacies for drugs other than atorvastatin.

Findings and Limitations

Our analysis of the TSRx program, which focused on describing utilization patterns by dispensing location, and on assessing the impact of MTF proximity and local MTF formulary restrictions on TSRx use, provided four major findings:

First, although a majority of TSRx prescriptions in FY02 were dispensed from MTF pharmacies, a majority of TSRx estimated ingredient costs were attributable to drugs dispensed from retail pharmacies. Moreover, with respect to the proportion of prescriptions dispensed
from each dispensing location, there was a steady trend throughout FY02 toward greater use of retail pharmacies and less use of MTFs.

Second, as expected, we found that estimated ingredient costs of high-cost, widely-dispensed drugs were significantly higher for drugs dispensed from retail pharmacies than for drugs dispensed through MTFs and the TMOP, suggesting that—holding utilization constant—DoD’s estimated ingredient costs could be reduced if dispensing shifted from retail pharmacies to dispensing locations where federal pricing is the basis of DoD’s ingredient cost (that is, MTFs and the TMOP).

Third, geographic proximity to MTFs was strongly associated with TSRx use and utilization patterns. Specifically, beneficiaries who lived near MTFs were more likely to use the TSRx program, more likely to use MTF pharmacies, less likely to use the TMOP, and less likely to use retail pharmacies than were beneficiaries living far from MTFs. In addition, proximity to a MTF was associated with increased volume of MTF prescriptions, reduced volume of TMOP prescriptions, and reduced volume of retail pharmacy prescriptions. These findings are consistent with decades of previous research showing that use of a medical service tends to increase with a corresponding decrease in distance between the beneficiary and the provider of the service.

Fourth, within two major therapeutic classes—antihyperlipidemics and gastrointestinals—the availability of a drug at a MTF was associated with increased use of the MTF and reduced use of retail pharmacies to fill other prescriptions. Consider, for example, simvastatin (brand name Zocor), the preferred antihyperlipidemic, and atorvastatin, a widely used antihyperlipidemic that was not available from MTFs except in cases of medical necessity. Our analysis shows that simvastatin users obtained 28 percent of their non-simvastatin prescriptions from retail pharmacies, whereas atorvastatin users received 63 percent of their non-atorvastatin prescriptions from retail pharmacies.

These findings are relevant for the DoD Pharmacy & Therapeutics (P&T) Committee, which is responsible for determining the contents of the Basic Core Formulary (BCF) as well as the TMOP formulary; and for local MTF P&T Committees, which determine MTF formularies and manage special requests for non-formulary drugs.
Several factors may limit the strength, applicability, or validity of the study findings:

- The variable we used in our cost analyses—estimated ingredient cost—contains some portion of the dispensing fee for prescriptions dispensed from retail pharmacies. At least some of the discrepancy in ingredient costs between retail pharmacies and the other dispensing locations is attributable to this measurement error.

- It was not possible to control for a number of potentially important confounding factors, such as the marital status, race, and supplemental insurance coverage of beneficiaries as well as characteristics of the nearest MTF (such as average wait time).

- The study did not consider the type of provider (MTF versus non-MTF) used by the beneficiary, a factor that is likely to have a substantial effect on the dispensing location selected by the beneficiary. MTF providers presumably are more familiar with and attentive to the MTF and TMOP formularies than providers in the non-MTF community.

- Proximity to the nearest MTF was calculated assuming that visits originated from the beneficiary’s residence (rather than a location that the beneficiary might regularly visit, for example). In addition, the software we used calculated distance “as the crow flies” as opposed to the more relevant metric of travel time.

- Whereas the pharmacy and enrollment data appeared to be complete, a small number of problems were observed, such as implausibly high costs for some pharmacy claims and items dispensed from ZIP codes that did not, according to MEPRS records, contain a MTF pharmacy.

Next Steps

The results of this study can serve as a baseline for future reforms. It will be instructive, for example, to assess how the trends identified in
this report will change if the co-payment for non-formulary drugs is raised (as DoD has proposed). In addition, our findings suggest the desirability for a prospective survey to identify the determinants of dispensing locations in the TSRx program, for example, the extent to which co-payments, geographic proximity, and hours of operation play a role in beneficiaries’ decision to use or not use MTF pharmacies.