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Research Report

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Balancing Access and Cost Control in the TRICARE Prescription Drug Benefit

The Military Health System (MHS) provides health coverage—including prescription drug benefits—through the TRICARE program, which served an estimated 9.5 million beneficiaries in fiscal year (FY) 2018 (U.S. Department of Defense [DoD], 2019a). Like commercial insurance and other sources of drug coverage, TRICARE uses formularies and other policies and tools to strike a balance between access to prescription drugs—in terms of which drugs are covered and where enrollees can receive drugs—and spending. Spending on prescription drugs typically increases as access to drugs becomes more generous. Unlike other sources of prescription drug coverage, TRICARE also must balance the direct acquisition and distribution of drugs via military treatment facilities (MTFs) and mail-order pharmacies with payments for drugs dispensed in retail pharmacies. This report describes the TRICARE pharmacy benefit and the trade-offs in TRICARE pharmacy policies between increasing access and controlling costs. It also describes six approaches that TRICARE should explore further to improve access, control costs, or both, including a more-selective formulary, narrower pharmacy networks, and further harmonization with other federal purchasers, such as the Veterans Health Administration (VHA). These

KEY FINDINGS

- TRICARE could realize significant savings by steering prescribers and patients to generic alternatives within broader therapeutic classes.
- There is broad overlap in the classes of drugs used in TRICARE and the Veterans Health Administration (VHA). Increased formulary and acquisition harmonization between TRICARE and the VHA could lead to cost savings.
- Adopting TRICARE's narrower specialty pharmacy network for all prescription drugs would allow for further price reductions through lower dispensing fees, although the trade-offs between savings and access would have to be carefully studied.
- The U.S. Department of Defense (DoD) should take full advantage of lower prices when drugs are acquired directly by DoD. DoD should explore whether it is possible to dispense directly acquired drugs (when purchased at unit prices) through retail pharmacies and to shift specialty drug dispensing and administration to military treatment facilities under TRICARE's medical benefit.

approaches are worth exploring in light of the recompetition of the TRICARE pharmacy contract and the ongoing consolidation of authority and management for purchased care under the Defense Health Agency.

The Prescription Drug Landscape

Total U.S. spending on prescription drugs dispensed through retail pharmacies was $333 billion in 2017, or slightly less than 10 percent of overall health care spending (Centers for Medicare and Medicaid Services, 2019). U.S. spending on prescription drugs is increasing due, in part, to expensive new drugs that treat cancers, hepatitis C, and neurological conditions. In this environment of increasing drug spending, TRICARE, like other sources of prescription drug coverage, faces the dual objectives of containing spending growth while ensuring appropriate access to drugs for its enrollees in terms of which drugs are covered and where enrollees can receive drugs (Sisko et al., 2019).

TRICARE Pharmacy Overview

TRICARE includes both *direct care* and *purchased care* components. The direct care component involves the delivery of care in MTFs by DoD-employed and contracted practitioners and is directly financed through DoD. The purchased care component involves the delivery of services through civilian health care practitioners and pharmacies and is administered by private health insurers and benefit managers who enter into agreements with DoD.

Although there are several TRICARE health plans that vary in terms of eligibility standards, benefits, and the balance between direct and purchased care, all TRICARE beneficiaries are eligible to receive prescription drug coverage through a consolidated TRICARE Pharmacy Program (although cost-sharing levels can vary by category of beneficiary) (DoD, 2019c). The TRICARE Pharmacy Program offers beneficiaries the option to obtain their prescriptions at MTFs (unlike medical care, regardless of beneficiaries' active-duty military status), through the TRICARE Pharmacy Home Delivery Program (formerly known as the TRICARE Mail Order Pharmacy [TMOP]), or at retail pharmacies (10 U.S.C. Section 1074g). The contract to administer the purchased care elements of the TRICARE Pharmacy Program (the mail-order and retail options), known as TPharm, is currently awarded to Express Scripts, a major private-sector pharmacy benefit manager (PBM) (Jenkins, 2018). TRICARE pharmacy spending was nearly $7.7 billion in FY 2018, or about 2.4 percent of total U.S. spending on prescription drugs (DoD, 2018a; IQVIA Institute, 2018).

There is a robust literature demonstrating the effectiveness of formulary management in steering patients and prescribers toward preferred prescriptions and away from less-preferred drugs.

Report Overview

The remainder of this report describes strategies and tools currently used to balance prescription drug access and spending in TRICARE. We then introduce and discuss potential new strategies to better balance access and cost savings.

Current Strategies to Balance Access and Spending

TRICARE currently draws on similar strategies and tools to balance access and spending compared to those used by commercial insurers (including those offering Medicare Part D plans), state Medicaid programs, the VHA, and other sources of prescription

drug coverage. These strategies and tools focus on the following three areas:

1. use of **tiered formularies** as a tool to describe and implement prescription drug benefits and to control costs
2. use of **pharmacy networks** to control costs
3. use of **mail-order pharmacies** to control costs and improve adherence.

It is important to note that the impacts of these approaches on enrollees and prescribers may be affected by the degree to which consumers can choose their pharmacy plans. In commercial insurance and Medicare Part D, for example, there are typically a variety of options, with various levels of formulary generosity and network breadth, allowing consumers to select plans that meet their needs. By contrast, in the case of the TRICARE, VHA, and state Medicaid programs, beneficiaries do not have as many choices, potentially making changes to pharmacy benefit design more impactful.

The following sections describe tiered formularies, preferred pharmacy networks, and mail-order pharmacy service in more detail. Boxes in each section describe TRICARE's status quo use of each approach. For interested readers, the Appendix describes each of the three strategies in the context of the financial incentives and payment arrangements that are the foundation of the entire U.S. prescription drug market. In brief, these tools aim to either reduce the unit price paid for drugs or the costs involved in the distribution of drugs.

Tiered Formularies

Drug formularies are often divided into tiers, with drugs more preferred by the plan on lower-numbered tiers and drugs less preferred by the plan on higher-numbered tiers. Drugs can be placed on more- or less-preferred tiers for a variety of reasons, including effectiveness, cost, and safety. In many cases, the insurers (or their PBMs) negotiate larger rebates from manufacturers by placing one from a set of competing drugs on a preferred tier and increasing the volume (and therefore revenue for the manufacturer) for that drug. Generic drugs are typically on the more-preferred tiers, followed by preferred brand-name drugs (where the plan has negotiated the largest rebate), and nonpreferred brand-name drugs.

In general, formularies have grown in "depth" with the addition of fourth, fifth, and specialty tiers over time (Kaiser Family Foundation, 2012b; Werble, 2017). Plans steer patients and prescribers to drugs on more-preferred tiers by requiring lower cost-sharing and fewer (or no) preapproval steps or conditions for coverage (known collectively as "utilization management") for these drugs compared with those on less-preferred tiers.

There is a robust literature demonstrating the effectiveness of formulary management in steering patients and prescribers toward preferred prescriptions and away from less-preferred drugs (Fairman, Motheral, and Henderson, 2003; Joyce et al., 2002; Nair et al., 2003). More recently, researchers have considered broader utilization management techniques. They found that these techniques tend to reduce the use of less-preferred drugs—and, therefore, spending on them—but that there can be negative implications for adherence, health, and costs elsewhere in the health care system (Happe et al., 2014; Park and Martin, 2017). However, other studies document a connection between lower cost-sharing (often associated with lower tiers) and increased pharmacy utilization and adherence to medications for patients with chronic conditions (Goldman, Joyce, and Zheng, 2007).

The savings from tiered formularies—particularly from the share of savings from negotiated rebates retained by PBMs rather than passed along to insurers and ultimately to consumers—are not well established (Sood et al., 2017). Ultimately, the degree to which any achieved cost savings are passed back to insurers depends on contract provisions. (For more on TRICARE's tiered formulary, see Box 1.)

Preferred Pharmacy Networks

Pharmacy benefit plans often restrict the network within which beneficiaries can obtain their prescriptions at lower out-of-pocket costs. Pharmacy networks generally include both retail and mail-order pharmacies. In recent years, insurers and PBMs have increased their use of tiered pharmacy networks (meaning that out-of-pocket costs vary depending on where prescriptions are filled)—for example, by limiting the pharmacies that are considered in-network ones or by requiring certain prescriptions to be filled

Box 1. TRICARE'S Tiered Formulary

Overview. Since 2005, TRICARE has used a Uniform Formulary with three tiers: generic, brand, and nonformulary (Winkenwerder, 2004; Trice et al., 2009). In addition to drugs in these three tiers, a small number of drugs are not covered. Nonformulary drugs have higher cost-sharing than the generic or brand drugs on the formulary, and beneficiaries must pay the full price for noncovered drugs.

TRICARE's formulary is less nuanced than most commercial formularies. For example, there is a single-brand tier (rather than the preferred and nonpreferred brand tiers that are common in other formularies). Although specialty drugs—which are typically expensive drugs that tend to be injected—are subject to specific dispensing provisions (described below), they are combined in the same tiers as all other drugs. TRICARE's formulary is also more inclusive than many commercial formularies. New Food and Drug Administration (FDA)-approved drugs are automatically added to the formulary unless they are reviewed by DoD's Pharmacy and Therapeutics (P&T) Committee, within 120 days of approval (DoD, 2019c). In contrast, for nearly all other formularies, drugs are only added after approval from the P&T Committee.

Formulary Management. DoD has long used applied pharmacoeconomics research to inform changes to its pharmacy benefit (Finder, 1997; Ries et al., 1995). The DoD Pharmaceutical Operations Directorate evaluates clinical and economic evidence and supports the DoD P&T Committee; a Pharmacy Outcomes Research Team develops research and evidence to support formulary decisions; and a Pharmacy Operations Center responsible for implementation, operations, and data management.

MTFs vary in their use of an Extended Core Formulary for drugs associated with specific specialties (beyond the required Basic Core Formulary)[12] and in their utilization management implementation practices. This variation mirrors the heterogeneity of MTFs in terms of offered specialty services and other factors. The recent transition of MTF management from services to the Defense Health Agency may reduce this variation and result in some efficiencies (DoD, 2018b).

Utilization Management. In general, the use of off-formulary drugs is low in the direct care system. DoD has less control over use in the purchased care system. However, DoD, through the PBM contracted to manage the TRICARE pharmacy benefit, still applies industry-standard utilization management and other formulary management practices in the purchased care system. These include medical necessity criteria to receive nonformulary medications at formulary cost-sharing rates, step therapy, quantity limits, and prior authorization for certain drugs (DoD, 2019c; Defense Health Agency, Pharmacy Operations Division, 2020). Select specialty drugs have additional restrictions, including a requirement that they be obtained either through the Specialty Drug Home Delivery Program or at a smaller set of in-network pharmacies (TRICARE, 2019b).

Cost-Sharing. Active duty military personnel receive all prescriptions free of charge regardless of how they obtain them, though there may be an upfront cost at retail pharmacies. TRICARE beneficiaries not on active duty face increasing copays from generic to brand-name to nonformulary drugs. Beneficiaries face 100 percent of the cost for drugs that are not covered.

via mail-order pharmacy to be covered. One locus of activity has been in Medicare Part D, where the share of pharmacy plans with tiered pharmacy networks, including subnetworks of preferred cost-sharing pharmacies, has spiked dramatically (Hoadley, Cubanski, and Neuman, 2015; Centers for Medicare and Medicaid Services, 2015).

Lowering costs is a major motivation for placing restrictions on where prescriptions can be filled—PBMs can negotiate more aggressively on dispensing costs with a subset of pharmacies by promising them a large volume of business (U.S. House of Representatives, 2015) (Federal Trade Commission, 2017). This practice, known as "selective contracting," is in use throughout the health care industry. For example, insurers also construct networks of preferred hospitals and steer business to them in return for discounts on services. Several studies have found

that consumers respond to incentives that encourage them to use preferred networks to access prescriptions at lower costs (Thomas et al., 2002; Roebuck and Liberman, 2009; Landon et al., 2007).

Although PBMs may implement tiered pharmacy networks to reduce costs in terms of the dispensing fees they pay to pharmacies for prescriptions, PBMs likely retain a portion of these savings rather than passing them on to beneficiaries in the form of lower premiums and out-of-pocket prescription costs. As with the savings from negotiated rebates on ingredient costs, it is not clear what share of the savings realized by PBMs are passed back to insurers and ultimately beneficiaries through lower premiums or cost-sharing.

Narrower networks could have positive or negative effects on beneficiaries. If narrow networks provide PBMs more bargaining power to negotiate lower prices and then plans pass on these savings to beneficiaries, narrower networks could save patients money and increase utilization and adherence. Moreover, if the plans funnel patients to a select set of pharmacies and this move leads to them developing a relationship with a pharmacist at a preferred establishment, this could have beneficial impacts on patient health (Worley and Hermansen-Kobulnicky, 2008; Alghurair, Simpson, and Guirguis, 2012). However, if introducing narrower networks results in patients being farther from a pharmacy where they can fill their prescriptions, causes confusion about which pharmacies are in-network options, or forces people to switch pharmacies and end a longstanding relationship with a pharmacist, these consequences could have detrimental effects on prescription utilization, adherence, and ultimately health outcomes (Hoadley, 2015; Polinski et al., 2015; Shepherd, 2014; Greiss and Tadrous, 2014; Syed et al., 2016). These consequences could also reduce satisfaction with pharmacy plans. Shepherd, 2014, suggests that people tend to select plans with more-restrictive networks and lower costs when given the choice. (For more on TRICARE pharmacy networks, see Box 2).

Mail Order

Mail-order drugs are prescriptions that are filled for patients remotely and securely delivered to their homes. Mail-order prescriptions are often most appropriate for patients taking maintenance medications for such chronic diseases as diabetes, chronic heart disease, HIV/AIDS, and others. Most health plans now offer the option of obtaining up to a 90-day supply of prescriptions through mail order as an alternative to filling prescriptions at retail pharmacies. Use of a mail-order pharmacy is often voluntary, although health plans with integrated pharmacy services can choose to stock and distribute certain drugs exclusively through a mail-order pharmacy.

In general, health plans prefer shifting volume to mail-order services for three reasons, all of which are related to cost savings: (1) mail-order services can increase adherence, which in turn can improve

Box 2: Pharmacy Networks in TRICARE

In addition to obtaining prescriptions at MTFs (of which there are more than 200) and through the TRICARE Home Delivery Program, TRICARE beneficiaries can fill their prescriptions at a retail pharmacy network than includes more than 57,000 pharmacies nationwide. Prescriptions filled at these in-network pharmacies have lower copays than those filled at out-of-network pharmacies. Maintaining the network is the responsibility of Express Scripts, which must adhere to retail network access standards that specify the percentage of beneficiaries who must have a network pharmacy within a certain distance from where they live (which varies in urban, suburban, and rural areas). Express Scripts also must notify beneficiaries in advance of changes to the pharmacy network that result in the removal of a pharmacy at which the beneficiary has filled a prescription within the past six months. There is a narrower retail pharmacy network for specialty drugs, which includes Walmart, Rite Aid, Walgreens, and Kroger locations. Specialty drugs can also be filled through the Specialty Drug Home Delivery Program and are occasionally stocked at MTFs.

health outcomes and reduce nondrug health spending; (2) mail-order benefits from economies of scale, at least to a point; and (3) payers generally do not pay a dispensing fee for prescriptions dispensed via a mail-order pharmacy (Visante, 2011; Visante, 2014). For beneficiaries, the possible impacts on satisfaction, costs, and health of the shift toward mail-order pharmacies are similar to those of narrow networks more broadly.

Use of mail order can control prescription spending by lowering transaction costs through reduced administrative burden and dispensing fees (Carroll, 2013; Rivers, Hall, and Frimpong, 2006). Although several studies have found that mail order programs increase adherence (Zhang et al., 2011; Schmittdiel et al., 2013; Valluri et al., 2007), others do not (Khandelwal et al., 2011; Fernandez, McDaniel, and Carroll, 2016). To the extent that mail-order programs do improve adherence, they may increase utilization and therefore pharmaceutical spending (Valluri, et al., 2007) with possible offsets in terms of avoided nonprescription spending from better-managed health conditions.

Other studies have suggested that using mail order reduces the face-to-face interaction that patients might have with a pharmacist who might provide valuable advice to patients on side effects, adverse events, dosage, and other informational aspects. (Khandelwal et al., 2012). Although evidence on patient satisfaction with mail-order programs is limited, the available evidence suggests that patients prefer mail-order prescriptions over retail prescriptions when both are available at the same cost-sharing level (Khandelwal et al., 2012). However, patients oppose mandatory mail-order prescriptions "on principle" even if they tend to use mail-order services themselves (Rupp, 2013). (For more on mail-order services in TRICARE, see Box 3).

TRICARE's Unique Direct Care Context

TRICARE covers and pays for drugs dispensed in retail pharmacies, delivered by mail-order service, and via MTFs. Although many sources of drug coverage include retail and mail-order distribution channels, TRICARE is unique in having a third channel through its direct care system. TRICARE's costs for prescriptions filled through these three channels vary.

TRICARE prescriptions filled at retail pharmacies follow roughly the same processing and payment steps as prescriptions covered by other commercial insurers. DoD pays a final price reflecting confidential rebates from the drug manufacturer and dispensing fees. The standard retail refund is the difference between two benchmark prices, the nonfederal average manufacturers price (non-FAMP)[1] and the Federal Ceiling Price (FCP).[2] Additional refunds or rebates are negotiated between DoD's contracted PBM and manufacturers.[3]

There are important differences in terms of costs for TRICARE prescriptions filled at MTFs or through mail-order service. In general, prices for brand-name drugs are lower when they are acquired directly by DoD compared with when DoD pays for prescriptions dispensed via retail pharmacies, even after rebates are applied to retail fills (Congressional Budget Office, 2005).[4] Drugs distributed through the MTF and Home Delivery Program points of service are purchased at lower federal benchmark prices, plus fees and taxes, minus copayments, and minus prime vendor discounts for drugs purchased through contracted national wholesalers (Congressional Budget Office, 2009). Overall, DoD realizes lower ingredient costs and does not pay a PBM margin or dispensing fees for drugs dispensed via MTFs and mail-order service, although there are significant separate costs to operate these delivery options.

TRICARE's cost-sharing structure works to shift as much volume as possible to MTF and mail-order distribution to take advantage of lower prices in these settings, particularly for brand-name drugs. Military personnel receive all prescriptions free of charge regardless of how they obtain them, though there may be an upfront cost at retail pharmacies, and nonformulary medications are generally not available at MTFs. Other beneficiaries can fill prescriptions at MTF pharmacies at no cost to them, but there are copays tied to the three-tiered formulary for prescriptions filled in a network of retail pharmacies under contract with TRICARE[5] or through mail-order service. Copays are significantly higher for prescriptions filled at retail pharmacies compared with mail-order service. As of February 1, 2018, beneficiaries pay $11

Box 3. Mail Order in TRICARE

In DoD, TRICARE has been promoting its mail-order pharmacy service, the TRICARE Pharmacy Home Delivery Program, which filled 20.4 million prescriptions through home delivery in the first nine months of FY 2016 (Levine, 2016). Under TRICARE, patients pay the same copay for a 30-day supply of medication at a retail pharmacy as they do for a 90-day supply that can be dispensed using a mail-order pharmacy. Therefore, the cost savings for the patient are significant. Additionally, these medications can be mailed worldwide, including locations where the medications are not readily available. The mail-order program is operated under the TPharm contract with Express Scripts, which also replenishes the mail-order drug stocks.

The requirements governing the mail-order program and the relative parity of copays between mail order and retail have fluctuated in recent years as a result of congressional actions. The FY 2013 National Defense Authorization (NDAA) created a pilot program that required TRICARE for Life beneficiaries to fill certain maintenance medications through mail-order services or at MTFs (Pub. L. 112–239, 2013). Around this time, the DoD Inspector General reported that the cost to DoD of filling maintenance medications through the TRICARE Mail Order Pharmacy was 16.7 percent lower than filling them at retail pharmacies (DoD Inspector General, 2013). The pilot program was expanded to all TRICARE beneficiaries not on active duty and made permanent as of October 1, 2015, by the FY 2015 NDAA, which also required a Government Accountability Office (GAO) report on the pilot program (Pub. L. 112–239, 2013).

This GAO report found cost savings to the government and beneficiaries stemming from this program, while expressing some concern with the level of monitoring of prescription availability and timeliness and satisfaction for beneficiaries affected by the pilot program (GAO, 2015).

Although subsequent, congressionally mandated DoD reports tracking the expansion of the pilot program found a 99.9 percent mail-order accuracy rate and 95 percent satisfaction rate (Levine, 2016), Congress continued to seek greater copay parity between mail-order fills and retail fills (at the time, there were no copays for generic formulary drugs). This ultimately led to the establishment of a schedule of copays for FYs 2018 to 2027 in the FY 2018 NDAA, which eliminated the zero copays for generic formulary drugs through mail order, a change that DoD suggests is responsible for a partial reversal of a trend toward increases in the share of purchased case utilization obtained through mail-order pharmacies (DoD, 2019a).

The TPharm contract contains numerous incentives for Express Scripts to shift volume to mail-order fills (or to MTFs) and away from retail. These include both a broad, volume-based performance incentive for shifting a prescription away from retail, and an additional "high-cost-medication" incentive that bases the payment to the contractor on the difference in the ingredient cost between retail and the other distribution channels. Also, TRICARE maintains a tool allowing enrollees to "calculate your savings" from switching to mail-order fills and links to "make the switch" online (TRICARE, 2020a).

for a 30-day supply of generic drugs at a retail pharmacy and $7 for a 90-day supply of generics through mail-order service, $28 for a 30-day supply of brand-name drugs on formulary at a retail pharmacy and $24 for a 90-day supply of these drugs through mail-order service, and $53 for a 30-day supply of nonformulary drugs at retail pharmacies or a 90-day supply through mail order.[6] Certain name-brand maintenance medications can only be obtained via mail or at MTFs, unless the beneficiary is an active duty service member.

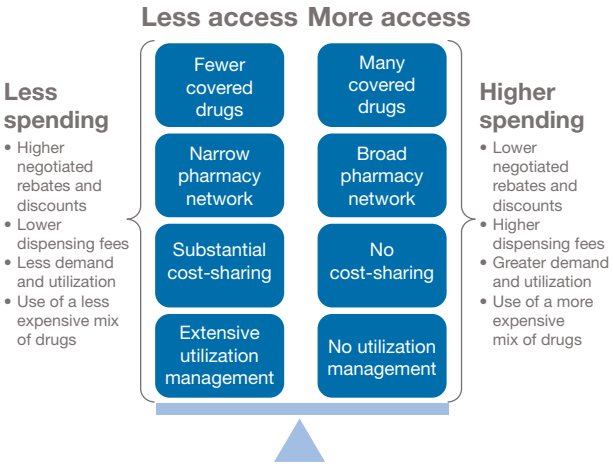
TRICARE's Challenge

TRICARE, like every other source of prescription drug coverage, must grapple with the tension between *access to* and *spending on* prescription drugs (Figure 1). In the context of prescription drug coverage, access can relate to

- coverage for specific drugs coverage for specific versions of a drug (e.g., a formulation, strength, or brand name)

FIGURE 1

Trade-Offs Between Access and Spending in Prescription Drug Coverage



- availability of covered prescriptions from specific pharmacies
- the out-of-pocket costs associated with obtaining specific drugs and drugs from different sources
- the hurdles facing prescribers and patients in terms of time and convenience associated with obtaining specific drugs and drugs from different sources (including prior authorization, quantity limits, and other utilization management requirements) (TRICARE, 2020b).

Greater access in terms of one or more of these dimensions typically results in greater spending by the health plan. This is because

- covering more drugs and versions of drugs typically results in smaller negotiated rebates from manufacturers
- allowing enrollees to obtain prescriptions from a broader set of pharmacies typically results in higher negotiated dispensing fees
- fewer out-of-pocket costs means the plan bears more of the direct cost of drugs
- fewer out-of-pocket costs and hurdles to obtaining prescriptions means greater demand and utilization overall, use of a more expensive mix of drugs, and therefore higher spending.

Although TRICARE and its enrollees would prefer to maximize access and minimize spending, the fact that access and spending increase or decrease hand in hand creates the need for a practical approach to *balance* access and spending. TRICARE's current approach favors access over cost control compared with most other sources of prescription drug coverage even after recent efforts to shift utilization to mail-order services (Figure 2).[7] State Medicaid programs and Medicare Part D plans more aggressively pursue cost control even though they are limited to some extent by programmatic features (such as protected classes in Medicare Part D where all drugs must be covered). At the other end of the spectrum, VHA aggressively pursues cost control with relatively less access to drugs.[8] Some integrated sources of managed commercial coverage (such as Kaiser Permanente) aggressively manage formularies and direct patients to an internal distribution system (such as VHA).

The amount that enrollees and patients pay for drug coverage and prescription drug fills for the different sources of coverage illustrated in Figure 2 varies widely. TRICARE, VHA, and Medicaid have relatively low or no premiums and cost-sharing (although TRICARE and VHA amounts vary by beneficiary group). In contrast, Medicare Part D and some commercial coverage are relatively much more expensive in terms of premiums and cost-sharing.

Potential New Strategies and Recommendations for the Military Health System to Better Balance Access and Cost Savings

Next, we outline potential strategies that the MHS could pursue to improve access and/or control prescription drug spending. These strategies are related to the specific design and implementation of TRICARE's formulary, pharmacy network, and mail order program. We briefly discuss the feasibility of each strategy: some would be possible to implement using *status quo* authorities and support, some would require integration in the TPharm contract, while others would likely require legislation to implement. We highlight specific recommendations related to each strategy in bold text.

Transitioning to a Narrower, Therapeutic Class-Based Formulary

Several reports by the GAO compare retail and direct care prices paid by TRICARE for drugs to those paid by other insurers. The prices paid by TRICARE for retail pharmacy-dispensed prescriptions are higher on average than those paid by state Medicaid programs and Medicare Part D prescription drug plans (GAO, 2014). This difference is driven primarily by higher prices for generic drugs. TRICARE faces higher generic prices compared with the VHA for generic drugs (GAO, 2013). Overall, TRICARE utilization is much more skewed toward brand-name drugs than utilization in most other systems. One GAO report found that more than half of drugs dispensed in the TRICARE direct care system were brand-name drugs. Nationally, and more narrowly in the VHA and Medicare Part D, the generic penetration rate is close to 85 percent.

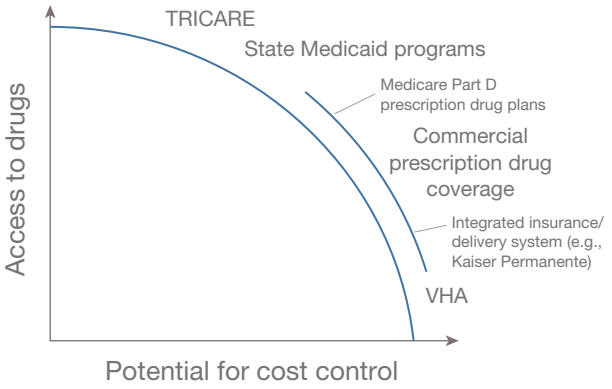
This extremely different blend of brand-name and generic drugs is due to two factors: TRICARE's access to federal schedule prices (such as VHA and other federal payers) and, unlike VHA and most other sources of prescription drug coverage, a very broad formulary. TRICARE historically includes all FDA-approved drugs in its formulary. The result is that TRICARE community and MTF prescribers have little reason to prefer available generic drugs within therapeutic classes.

Although it is clear that TRICARE gets lower prices than other purchasers on brand-name drugs, it is equally clear that brand-name prices, even with TRICARE's discounts, are much higher—on average about five times higher for retail prescriptions according to a recent GAO report—than prices for generic drugs (Figure 3). TRICARE could realize significant savings from steering prescribers and patients to generic alternatives within broader therapeutic classes. Using data from the same GAO report, we calculated that 34 percent of TRICARE retail prescriptions were brand-name compared with 22 percent of Medicare Part D retail prescriptions. At the average prices reported in the GAO report, retail pharmacy spending would fall by 19 percent if TRICARE lowered brand-name prescribing to Medicare Part D levels. The savings would be even higher in the direct care system where more than half of prescriptions are brand name (GAO, 2013).

TRICARE should move in this direction with a more-nuanced formulary with preferred and nonpreferred brand tiers and more aggressive utilization management for brand-name drugs.

FIGURE 2

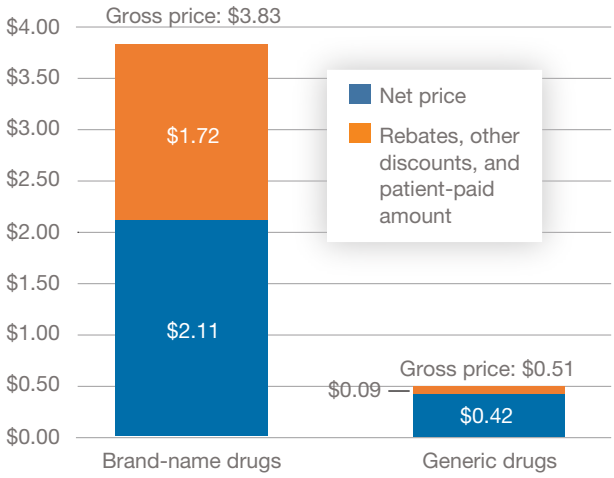
Notional Relationships Between Sources of Prescription Drug Coverage in Terms of Balancing Access and Cost Control



SOURCE: RAND authors' qualitative assessment of insurers in terms of access to drugs and potential for cost control. The position of the curve is notional and not based on actual data.

FIGURE 3

Average TRICARE Retail Prices, Brand and Generic Drugs



SOURCE: GAO, 2014.

NOTE: Average prices are for a sample of 33 brand-name and 45 generic drugs with high volume or high expenditures for DoD and Medicare Part D as studied in GAO, 2014.

Both strategies would shift utilization to in-class generics and would curtail access to specific brand-name drugs. The fact that VHA, commercial insurers including Part D prescription drug plan sponsors, and many state Medicaid programs all maintain therapeutic class-based formularies and preferred drug lists suggests that this approach does not inappropriately restrict access to drugs.

Although legislation may be required to modify the TRICARE formulary structure, there may be some opportunities with existing authority. Section 702(b)(10) of the 2018 NDAA allows the Secretary of Defense, at the recommendation of the TRICARE P&T Committee, to "exclude from the pharmacy benefits program any pharmaceutical agent that the Secretary determines provides very little or no clinical effectiveness to covered beneficiaries and the Department" (Pub. L. 115-91, 2017). Although the P&T Committee could previously assign drugs to a nonformulary category, these drugs were still considered covered drugs under the TRICARE pharmacy benefit. The new authority allows the P&T Committee to assign drugs to a noncovered category where the enrollee is responsible for 100 percent of costs. The P&T Committee recently designated several FDA-approved drugs as not covered by the Uniform Formulary under this provision (DoD, 2019b). **TRICARE should expand its application of this new authority to more aggressively exclude drugs that offer little or no value to TRICARE enrollees from the formulary.**

Broader Use of Value-Based Insurance Design

Value-based insurance design (VBID) programs offer an alternative to across-the-board increases in copays. Under VBID programs, lower or zero cost-sharing is used to promote use of drugs therapies that are particularly important to managing patient health (Chernew, Rosen, and Fendrick, 2007). For example, many VBID programs eliminate or reduce cost-sharing for many drugs to treat high cholesterol, diabetes, and asthma. VBID programs have successfully been implemented by many employers and insurers (Choudhry et al., 2014; Hirth et al., 2016; Chernew et al., 2010). CMS is currently piloting VBID for Medicare Advantage plans (Eibner et al., 2018).

Appropriate medications for VBID meet two general criteria. First, patient adherence to these therapies must be sensitive to patient copays. For a given therapy, if lowering copays does not increase adherence, then implementing VBID will not increase adherence. Second, adherence to these medications must lead to either reductions in total medical spending or improvements in patient health. In other words, appropriate therapies for VBID are high-value therapies that are sensitive to changes in cost-sharing. Implementing VBID for low-value therapies, or therapies for which patient adherence is not sensitive to cost-sharing is not likely to result in reduced medical spending or improvements in patient health.

The NDAA of 2018 gives the Secretary of Defense, at the recommendation of the TRICARE P&T Committee, the authority to treat certain brand-name drugs as generic drugs for the purposes of determining copays. Although this provision provides some flexibility to reduce copays for

The NDAA of 2018 gives the Secretary of Defense, at the recommendation of the TRICARE P&T Committee, the authority to treat certain brand-name drugs as generic drugs for the purposes of determining copays.

The VHA develops and maintains its own prescription drug formulary and, like DoD, negotiates lower prices from drug manufacturers in exchange for preferred formulary placement.

high-value brand-name drugs, it is limited in scope to brand-name drugs. A broader provision would reduce copays for generic maintenance medications to $0. TRICARE implemented a drug adherence pilot program that reduces copay amounts for an insulin product and a drug used to treat high cholesterol (TRICARE, 2019a). **In addition to these drugs, TRICARE should consider the reduction or elimination of cost-sharing for additional classes of drugs used to treat chronic conditions**—for example, generic drugs in the following categories:

- ACE/ARBs (e.g., losartan) and beta blockers (e.g., metoprolol) for hypertension and congestive heart failure drugs
- Oral antihyperglycemics (e.g., metformin) for diabetes
- SSRI/SNRIs (e.g., fluoxetine) to treat depression, anxiety, and other conditions
- statins (e.g., atorvastatin) to treat hyperlipidemia.

Narrow Pharmacy Networks

For most drugs, TRICARE enrollees can obtain retail prescription fills from a broad network of more than 58,000 in-network pharmacy locations—for comparison, Express Scripts' entire national network includes 67,000 pharmacies (United Healthcare, 2019). The breadth of the TRICARE pharmacy network satisfies network adequacy requirements set by TRICARE.[9] Although a wide network of pharmacies improves patient access, it limits the ability for TRICARE to negotiate lower dispensing fees. Narrow pharmacy networks are increasingly common in commercial coverage (Bartolone, 2017).

For select specialty drugs, the MHS currently has a narrower network of four in-network retail pharmacies (e.g., Kroger, Rite Aid, Walgreens, and Walmart). The narrow set of in-network pharmacies allows the TRICARE pharmacy contractor to negotiate discounts and lower prices. **TRICARE should consider adopting the narrower specialty network for all drugs.** Doing so would allow for further price reductions through lower dispensing fees. However, this option must be carefully studied and faces several practical challenges. Many TRICARE members may live in areas with limited access to these four pharmacies. It may be important to consider exceptions to the narrower network in certain regions to ensure access. For example, enrollees living further than a certain distance from one of the narrower network pharmacies could be automatically permitted to fill prescriptions at other pharmacies. Determining eligibility for out-of-network fills would require additional administrative efforts to process out-of-network pharmacy requests and to make eligibility determinations. Considering these factors together, the net savings from a narrower pharmacy network depend on how much lower negotiated discount fees can be with a smaller number of network pharmacies, the extent to which a smaller number of pharmacy chains cover TRICARE enrollees across the country, and the administrative cost of addressing exceptions. It seems likely that some savings are possible given many sources of commercial coverage are pursuing narrow networks as a cost-saving strategy. The most significant barrier to implementing this strategy may be pushback from enrollees losing access to their most convenient pharmacies.

Further VHA–MHS Harmonization

The VHA develops and maintains its own prescription drug formulary and, like DoD, negotiates lower

prices from drug manufacturers in exchange for preferred formulary placement. In general, the VHA formulary is more restrictive than the TRICARE formulary. **TRICARE should assess the cost and access implications of transitioning to a narrower formulary through harmonization with the existing U.S. Department of Veterans Affairs (VA) formulary.** The FY 2016 NDAA already required a joint uniform formulary for transition of care from DoD to VA, including "pharmaceutical agents relating to . . . the control of pain, sleep disorders, and psychiatric conditions, including post-traumatic stress disorder." Patients already on specific prescriptions that would be nonpreferred under the integrated formulary could be grandfathered to minimize treatment disruptions. This would limit the short-term savings from an integrated formulary.

In terms of direct acquisition, VHA and DOD should negotiate together to leverage deeper negotiated discounts on drugs. VHA and DoD have many joint acquisition contracts that help lower prices for TRICARE prescriptions dispensed through MTFs and mail order (DoD, 2019a). TRICARE could extend access to these lower-cost directly-acquired drugs by allowing enrollees to fill prescriptions at all VA medical centers. There are currently some co-located MTF/VAMCs (such as in San Antonio) that could serve as a model.

There are several barriers to further harmonization between VHA and TRICARE. Electronic medical records and prescribing are major barriers to broader VHA-TRICARE harmonization in terms of dispensing. In terms of formulary harmonization, there is no question that the patient populations served by VHA and TRICARE are significantly different. We used Medical Expenditure Panel Survey (MEPS) data to compare prescription drug spending patterns for TRICARE and the VHA in three ways:

- First, we compared the top therapeutic classes of drugs in terms of volume between the two programs to gauge overlap.
- Second, we compared the highest-volume single-source drugs (i.e., brand-name drugs without generic competition) between programs.
- Third, we compared the share of drugs within select classes to illustrate differences and to suggest areas where there is potential for savings from formulary harmonization.

We restricted the second analysis to single-source drugs because potential savings from formulary harmonization and joint negotiation are greater. Details regarding data and methods and specific results are in Box 4.

This analysis yielded three principal findings. First, despite differences in the patient populations served, we identified broad overlap in terms of the classes of drugs used in both programs.[10] This suggests that there is scope for enhanced coordination. Second, we found some differences in the top single-source drugs used by TRICARE and VHA. Third, we noted that the distribution of active ingredients prescribed within select high-volume classes differs meaningfully. In these cases, aligning which single-source drugs are on the formularies in tandem with enhancing coordination could yield savings. This is particularly true where lower-cost generic drugs are preferred in VHA over more expensive brand-name drugs in TRICARE.

We found broad overlap between TRICARE and VHA in terms of the top therapeutic classes in terms of prescription volume and payments in both programs (Table 1). This finding suggests that TRICARE and the VA might benefit from enhanced coordination that strengthens their negotiating power within these classes, potentially leading to larger discounts from drug manufacturers and cost savings to the government.

Overall, per-enrollee use of single-source drugs was higher in VA than in TRICARE (Table 2). We found only some overlap of high-volume active ingredients between TRICARE and the VA. We compared how the mix of drugs compared between TRICARE and VHA within select classes. This comparison may reveal opportunities for savings by shifting toward one formulary's approach or the other. We found several classes where TRICARE and VHA both use brand-name drugs at high rates and where TRICARE and VHA prefer different brand-name drugs:

- For biologic disease-modifying antirheumatic drugs, TRICARE volume focuses on etanercept (Enbrel) with a small share of

Box 4. Data, Methods, and Results for MEPS Analysis

Data. MEPS is a survey conducted by the Agency for Health Care Research and Quality (AHRQ) of the Department of Health and Human Services. It surveys a sample of households to collect detailed information on health care utilization and expenditures. To compare pharmacy spending by TRICARE and the VA, we used MEPS' Prescribed Medicines File, which includes variables indicating how much these programs (and other payers) paid for each fill. We pooled 2015 and 2016 data. It is important to note that active duty military generally are not included in MEPS, which surveys from the civilian noninstitutionalized population, although they can appear when living with a key, in-scope person (AHRQ, 2018). Therefore, TRICARE spending captured in MEPS largely reflects spending on military retirees, spouses, and dependents of active duty personnel.[13]

Methodology. Our analysis proceeded as follows. First, we took the pooled file and kept only observations with either TRICARE or the VA as payers (none had both as payers). We linked the National Drug Code (NDC) included for observations in the MEPS data to a Medi-Span Generic Product Identifier (GPI),[14] to facilitate analysis at higher levels of aggregation, specifically by therapeutic class and by active ingredient. We excluded over-the-counter drugs. For some analyses, we restricted the observations to fills for single-source drugs.[15]

Next, we generated the following metrics (separately for TRICARE and the VA), applying the year-specific person-weights in the MEPS data, for each therapeutic class and active ingredient: total number of fills, total spending, and total days of supply.[16] We ranked classes and active ingredients by these metrics to facilitate a comparison between TRICARE and VA. We focused our analysis on days of supply.

Results. Our analysis revealed a significant overlap in the classes of drugs used in both programs. Table 1 compares the top 15 drug classes in terms of TRICARE volume between programs. Some classes—including thyroid agents and anticoagulants—were higher in terms of TRICARE ranking compared with VA ranking while other classes—including antidepressants and genitourinary agents—were higher in VA. However, we found an overall high degree of alignment between these top 15 drug classes by TRICARE volume and for lower-volume drug classes not listed in Table 1.

adalimumab (Humira) while VHA uses adalimumab exclusively.

- For inhaled corticosteroids to treat asthma and chronic obstructive pulmonary disorder, TRICARE uses fluticasone-salmeterol (Advair) at relatively higher rates while VHA uses budesonide-formoterol fumarate dihydrate (Symbicort). Other drugs in this class (e.g., albuterol and tiotropium) account for similar volume shares between programs.

We found other cases where the use of brand-name drugs seemed to be higher in TRICARE than in VHA:

- In diabetes drugs, linagliptin (brand name Tradjenta) and sitagliptin (brand name Januvia) accounted for a combined 6.4 percent of antidiabetic fills in TRICARE but only 1.3 percent of antidiabetic fills in VHA.
- Brand-name anticoagulants rivaroxaban (brand name Xarelto) and apixaban (brand name Eliquis) accounted for 44 percent of anticoagulant fills in TRICARE compared with 33 percent of fills in VHA (VA had higher rates of less-expensive warfarin fills).
- Solifenacin (brand name Vesicare) accounted for 60 percent of TRICARE urinary antispasmodics fills compared with 4 percent in VA (VA had much higher rates of generic oxybutynin fills in this class).
- Dronedarone (brand name Multaq) accounted for 14 percent of TRICARE antiarrhythmic fills and was not observed at all for VHA fills (generic amiodarone accounted for all TRICARE fills in this category).
- TRICARE had significant volume for lubiprostone (brand name Amitiza) to treat irritable bowel syndrome and memantine (brand name

Table 1
Top 15 Therapeutic Classes, by TRICARE Days of Supply, 2015–2016

Therapeutic Class	TRICARE Rank	TRICARE Days of Supply (Millions)	VA Rank	VA Days of Supply (Millions)
Antihyperlipidemics	1	729.16	1	767.88
Antihypertensives	2	599.40	3	668.37
Antidiabetics	3	402.79	4	489.56
Ulcer drugs	4	391.90	5	402.01
Beta blockers	5	368.25	6	373.24
Thyroid agents	6	361.63	13	184.67
Diuretics	7	321.39	8	351.02
Antidepressants	8	287.74	2	669.66
Antiasthmatic and bronchodilator agents	9	243.61	9	310.74
Calcium channel blockers	10	218.28	10	274.11
Anticonvulsants	11	197.07	11	265.59
Analgesics (anti-inflammatory)	12	180.60	17	103.69
Genitourinary agents (miscellaneous)	13	106.00	7	369.61
Anticoagulants	14	99.08	23	57.97
Minerals and electrolytes	15	83.23	15	112.64

SOURCE: RAND analysis of MEPS and Medi-Span data.

Namenda) to treat dementia associated with Alzheimer's disease while VHA did not have any utilization for these brand-name drugs. Lubiprostone is not on the VHA formulary, while memantine is on the formulary but has prior authorization requirements.

Our findings suggest that increased harmonization between TRICARE and VHA could lead to cost savings. If TRICARE and VHA were to pursue harmonization, it is important to note that implementing formulary changes and changing prescriber behavior would be more challenging in TRICARE compared with VHA because many TRICARE prescribers are private providers while most VHA prescribers are VA employees.

Dispensing Directly Acquired Drugs Through Retail Pharmacies

Current TRICARE pharmacy policy aims to shift as much utilization as possible to mail-order services and direct dispensing because DoD has access to lower unit prices for drugs dispensed through these channels compared with those dispensed through the retail pharmacy channel. **DoD should explore whether it is possible to dispense directly acquired drugs (purchased at these lower unit prices) through retail pharmacies.**

The federal 340B drug pricing program offers a potential model and analog for such a strategy. Under the 340B drug pricing program, certain types of health care facilities (including federally qualified health centers and hospitals that treat significant share of uninsured and Medicaid patients) can purchase outpatient drugs at prices capped at federally set ceiling prices. The goal of the program is to provide these safety net facilities with access to lower drug prices so that they can increase their provision of services to low-income patients (Health Resources and Services Administration, 2020). Participating

Table 2
Top 15 Active Ingredients for TRICARE, Single-Source Drugs, by Days of Supply, 2015–2016

Active Ingredient	TRICARE Rank	TRICARE Days of Supply (Millions)	VA Rank	VA Days of Supply (Millions)
All single-source drugs	—	560.9	—	800.2
Fluticasone-Salmeterol (brand name Advair)	1	58.2	24	6.5
Albuterol[a] (brand names ProAir and Ventolin)	2	50.2	2	98.2
Insulin Glargine (various brand names)	3	40.7	4	56.7
Estrogens, Conjugated (brand name Premarin)	4	29.2	N/A	N/A
Rivaroxaban (brand name Xarelto)	5	27.8	18	9.2
Tiotropium (brand name Spiriva)	6	25.2	7	42.5
Dabigatran (brand name Pradaxa)	7	24.1	22	7.9
Solifenacin (brand name VESIcare)	8	20.8	N/A	N/A
Esomeprazole[b] (brand name Nexium)	9	20.0	N/A	N/A
Sitagliptin-Metformin HCl (brand name Janumet)	10	18.6	N/A	N/A
Sitagliptin (brand name Januvia)	11	17.4	26	5.5
Liraglutide (brand name Victoza)	12	16.6	19	8.9
Cyclosporine (various brand names)	13	14.9	38	1.9
Hydrocodone (various brand names)	14	13.3	10	30.7
Sildenafil[c] (brand name Viagra)	15	12.3	9	36.2

SOURCE: RAND analysis of MEPS and Medi-Span data.

NOTES: The days of supply and the ranks in the table are based on single-source drugs only; however, some active ingredients have a mix of single-source and multisource drugs across all fills in a given program, which may contribute to the observed differences in utilization of single-source drugs.

[a] = A mix of single-source and multisource drugs for the active ingredient in both TRICARE and VHA fills.

[b] = A mix of single-source and multisource drugs for the active ingredient in TRICARE only.

[c] = A mix of single-source and multisource drugs in the VHA only.

N/A = No VHA prescriptions were found.

providers can access these discounted prices regardless of whether drugs are distributed via the provider itself (e.g., through a hospital outpatient pharmacy) or via retail pharmacies working under contract with the provider (Health Resources and Services Administration, 2018; Health Resources and Services Administration, U.S. Department of Health and Human Services, 2010). The use of contract pharmacies by 340B-participating facilities to dispense prescriptions has grown rapidly. The total number of 340B contract pharmacies increased from 1,300 in 2010 to almost 20,000 in 2017 (GAO, 2018).

TRICARE could explore the feasibility of similar contract pharmacy distribution arrangements. DoD would technically purchase drugs itself at low DoD direct acquisition prices. The DoD-purchased drugs would then be shipped to and dispensed by contracted retail pharmacies (such as chain pharmacies) instead of by MTFs or mail-order service.[11] The contracted pharmacies would, unlike MTFs, require an additional fee for stocking and dispensing the drugs paid by DoD. In addition, it would be necessary for contracted pharmacies to separately account for drugs dispensed to TRICARE enrollees (as contract pharmacies in 340B are required to do). Although dispensing directly acquired drugs through retail pharmacies could result in an additional dispensing fee compared with mail order, this strategy could result in considerable net

savings over the status quo because the DoD direct acquisition price is often lower than the net price negotiated by the TRICARE pharmacy support contractor (after rebates). This strategy also may be applied in a more targeted fashion in regions where access is a particular concern (e.g., after adoption of a narrower retail pharmacy network).

Coordinating Specialty Drug Coverage and Management

TRICARE uses a narrower network of retail specialty pharmacies for select specialty drugs as described earlier. Although TRICARE does not have a specific definition of what qualifies as a specialty drug, the program notes that these drugs are often expensive, injected, and used on a chronic basis (TRICARE, 2019b). In addition to specialty drugs dispensed via outpatient specialty pharmacies, TRICARE and other health insurers also cover specialty drugs under the medical (rather than pharmacy) benefit. For example, many specialty drugs infused in physician offices, hospital outpatient departments, or, in the case of TRICARE, at an MTF, would be covered as a health care service (rather than a prescription, even though a prescription was required to receive the drug). Many drugs can be either dispensed via retail pharmacies *or* administered by a provider.

The fact that specialty drugs can be covered under medical or pharmacy benefits is a coordination challenge throughout the U.S. health care system. It can also be a driver of spending growth. Prescribers may have financial incentives to administer drugs directly to patients because they can bill directly for drugs dispensed in offices or hospitals and retain a margin on these drugs. This margin is often based on the acquisition cost of the drug that incentivizes the use of high-cost specialty drugs. In addition, in most cases, administering a drug in a physician's office or hospital is more costly to insurers because the providers can separately bill for administration and other ancillary services. In TRICARE, specialty drugs can reach patients via MTFs and through community providers, and then for each of these options via pharmacies or other providers (such as hospitals, physician offices, or MTFs) Only some of these channels may be appropriate for some patients. For example, for a patient who must have a specialty drug infused, the retail specialty pharmacy channel is not an option.

These alternative channels have important cost implications for TRICARE. The TRICARE pharmacy support contractor has the most visibility on retail specialty pharmacy fills and can implement utilization management and other restrictions to ensure that patients are obtaining specialty drugs through this channel only when appropriate. But the contractor may have limited or no visibility on patients accessing specialty drugs via MTFs or via community providers, such as hospitals and physician offices. Ideally, the direct and purchased care components of TRICARE would coordinate to find the lowest-cost alternative to get expensive specialty drugs to patients.

Given the growth in specialty drug spending and the extremely high price tags for some specialty drugs, **TRICARE should estimate the cost of obtaining specialty drugs through different channels and explore whether there are opportunities to shift specialty drug administration toward the direct care system if, in fact, costs are lower in that setting.** The main challenge in this approach is combining and analyzing encounter data, claims data, and cost information from both the direct and purchased care components of TRICARE.

Conclusion

The purchased care component of TRICARE's broader pharmacy benefit involves a set of approaches to balance access and cost savings—including tiered formularies and pharmacy networks—which is common across most sources of prescription drug coverage. The unique aspect of TRICARE is the direct care (and, to some extent, mail-order service) component of the pharmacy benefit where TRICARE typically realizes lower prices. TRICARE is aggressively pursuing strategies to shift maintenance medication prescriptions to mail-order services where possible. We identified several opportunities for more foundational changes to the TRICARE pharmacy benefit, including narrowing of the TRICARE formulary and pharmacy network.

These suggestions are motivated by our observation that TRICARE appears to provide a more generous benefit than many other sources of prescription drug coverage, particularly with regard to formulary breadth. We recognize that several of the suggestions in this report may face significant implementation challenges. We suggest TRICARE explore the feasibility and potential impact of these approaches.

Appendix: Typical Financial Arrangements Between Patients, Insurers, PBMs, Drug Manufacturers, and Distributors

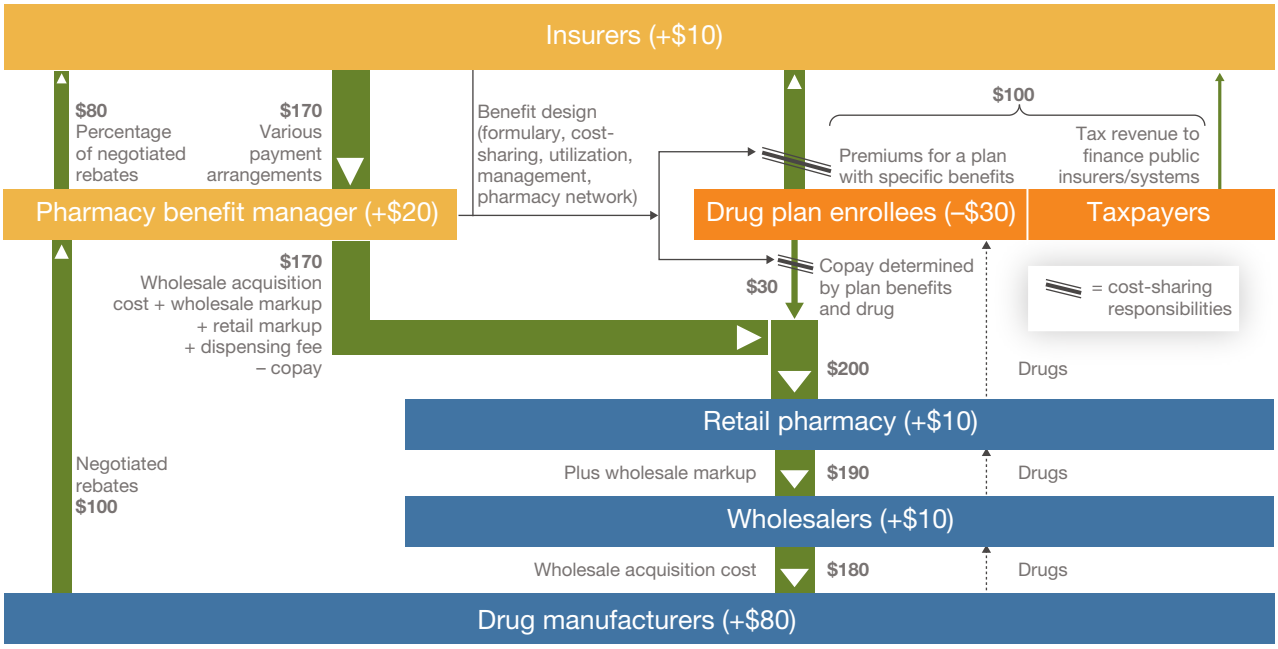
Although prescription drug coverage, distribution, and payment are complex, there are common stakeholders and relationships across payers and health systems. Figure A.1 illustrates these relationships using a hypothetical drug with a $200 list price distributed via a retail pharmacy. The example assumes a net price (i.e., a price after rebates) of $100. The figure shows payments using green arrows of varying widths representing the relative magnitudes of payments. The amount retained by each actor as a payment (and the drug) flows through the distribution channels to the patient is noted in the labels inside the colored bars in the figure.

Drug plan enrollees shoulder almost all of the cost of prescription drug coverage, with the exception of some broader financing from taxpayers for public systems, such as Medicare, Medicaid, and TRICARE. Enrollees pay premiums to insurers that offer plans (developed and implemented with PBMs) with specific benefits that outline which drugs are covered and under what conditions, where prescriptions can be filled, and the cost-sharing responsibilities of the enrollee (represented by diagonal triple lines in Figure A.1). The total amount paid through premiums (and tax revenue) is $100 in the example illustrated in Figure A.1. The patient pays an additional $30 out-of-pocket cost.

The insurer and PBM pay $170 to the pharmacy that dispenses the drug—which along with the $20 out-of-pocket payment covers the $200 price that includes $10 markups at the wholesale and retail level over the $180 price for the drug leaving the factory.

FIGURE A.1

Overview of Prescription Drug Payments and Distribution in the U.S. Health Care System



NOTE: Dollar figures are provided as illustrative examples only and are not based on actual data or typical costs.

The most unique feature of prescription drug markets are rebates negotiated between PBMs. These rebates can approach 50 percent of list prices for brand-name drugs where there is competition between treatment alternatives. Manufacturers pay rebates to PBMs, which in turn transfer a share of rebates back to insurers. Although patients are not exposed to these interactions directly, they profoundly shape drug benefit design and bottom-line spending on prescription drugs in the United States. In the example in Figure A.1, the net cost of the hypothetical drug is $100 (i.e., the $200 retail price minus a $100 rebate). In this example, the PBM retains $20 of the rebate amount and passes the remainder back to the insurer. This rebate is used by the insurer to lower premiums, not lower the transactional price of the drug for the beneficiary. The insurer in the example retains $10 (i.e., the difference between $180 taken in from the beneficiary and via rebates and the $170 total outlay).

The relevance of the three main strategies used by health plans to control prescription drug costs—tiered formularies, preferred pharmacy networks, and mail-order pharmacy—can be explained in the context of Figure A.1:

- Tiered formularies impose additional barriers to coverage for nonpreferred drugs (i.e., a stronger role for insurers and PBMs in the diagonal triple lines in Figure A.1) to negotiate larger rebates from manufacturers (i.e., the payment from manufacturers to PBMs in Figure A.1).
- Preferred pharmacy networks limit distribution choices with the goal of lowering the margin retained by pharmacies ($10 in Figure A.1).
- Mail-order services bypass the retail pharmacy entirely, saving the retail pharmacy margin but creating new costs to maintain the mail-order program and distribution channel.

Notes

[1] Non-FAMP is the average price paid to the manufacturers by wholesalers for drugs distributed to nonfederal purchasers.

[2] FCP is 76 percent of the non-FAMP price and is the highest that price manufacturers can charge DoD, VHA, the Public Health Service, and the Coast Guard (known as the "Big Four").

[3] These additional retail refunds are implemented through Uniform Formulary Voluntary Agreement for TRICARE Retail Refunds (UF-VARR) (Military Health System, undated).

[4] Although dated, the Congressional Budget Office, 2005, describes how DoD direct acquisition prices are significant below the federal benchmark prices available to TRICARE in the retail channel.

[5] Beneficiaries may also fill their prescriptions at retail pharmacies that are not in the TRICARE network at a higher out-of-pocket cost, but almost none do so.

[6] Some nonformulary drugs are only covered through mail-order service; copayments remain at lower 2017 rates for dependent survivors of active duty service members and medically retired service members and their dependents (TRICARE, 2020b).

[7] We use the term *access* to refer primarily to coverage of drugs and where enrollees can receive drugs. Figure 2 distills several concepts related to access—including the number of drugs covered, utilization management, and how beneficiaries can receive fills—down to a single "Access to Drugs" dimension on the vertical axis for illustrative purposes. There are important distinctions between the sources of coverage in terms of these individual concepts. We discuss the cost of coverage and the share of drug costs paid by patients separately later in this report.

[8] More specifically, VHA uses its formulary and utilization to steer prescribers and patients to relatively fewer preferred drugs.

[9] TRICARE's standard for convenient access requires that a network pharmacy must be within two miles for 90 percent of enrollees in urban areas, within five miles for 90 percent of enrollees in suburban areas, and within 15 miles for 70 of enrollees in rural areas. Medicare Part D requires plans to meet TRICARE's access standard (Centers for Medicare and Medicaid Services, 2011).

[10] We note that there are both single-source and multisource drug products for a small subset of active ingredients. As noted in the previous note, we restrict our analysis to single-source drugs. Therefore, when referring to top active ingredients, these are based on single-source drugs with the specified active ingredient. In the tables in this section, we note whether an active ingredient has a mix of single-source and multisource drugs.

[11] Note that this strategy would not require access to 340B program prices. We assume DoD receives favorable prices compared with the 340B programs.

[12] Some MTFs offer a broader scope of practice than others. MTFs may choose to include specific Extended Core Formulary therapeutic classes on-formulary if they provide a related specialty service. Other MTFs are not required to stock these specialty drugs.

[13] Active duty personnel are never subject to cost-sharing for covered drugs. Therefore, the mix of drugs used by active duty personnel may be different than the mix of drugs used by other TRICARE enrollees.

[14] GPI is a hierarchical classification system that describes the therapeutic class of drugs at higher levels and the specific active ingredient and presentation of a drug at lower levels. We used the highest-level therapeutic class assignment for each drug (the GPI-2 level) and the active ingredient-level assignment (GPI-8 or GPI-10, depending on whether the drug is a combination). In approximately 10 percent of cases, the NDC was missing from the MEPS data, precluding a match to a GPI. These observations were dropped from the analysis. A total of 20,869 drug fill observations across 2015 and 2016 with TRICARE or VA as a payer matched to a GPI and drug group.

[15] We use the multisource code variable in Medi-Span to identify single-source drugs by NDC. Drugs with a multisource codes of "N" (single-source) and "M" (considered single-source, co-licensed) are included in our main analysis, while those with codes of "Y" (considered generics) and "O" (original product, generics available) are excluded. Of the 20,869 observations that matched, 3,725 of them (18 percent) were for single-source drugs.

[16] The days of supply as reported in MEPS are self-reported and subject to some recall error. The information on days of supply was missing for about 20 percent of single-source drug observations that matched from MEPS to a GPI. We imputed values for days of supply by calculating the average ratio of days of supply to total payments (across all payers), separately for TRICARE and the VA, by NDCs and active ingredient levels (again, including only single-source NDCs for active ingredients with a mix of single- and multisource NDCs). In doing so, we winsorized (i.e., top-coded) the days of supply data at 90 days (69 observations had days of supply listed as more than 90), and we excluded (by converting to missing data) 26 instances where information on days of supply was listed as "take as needed." We imputed first by applying the NDC-level ratio to spending when information on days of supply was missing, and then by applying the active ingredient–level ratio when information on days of supply remained missing (indicating no observations with the same NDC with a payment by that payer [TRICARE or VA] with nonmissing data on days of supply). Ninety-six observations remained missing for days of supply after this process, not counting the 26 that were "take as needed." We again winsorized at 90 days the imputed data on days of supply, replacing 85 imputed observations that had imputed days of supply over 90 days.

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About This Report

The Military Health System provides health coverage—including prescription drug benefits—to an estimated 9.5 million beneficiaries in 2018 through the TRICARE program. This report describes the TRICARE pharmacy benefit and the trade-offs in TRICARE pharmacy policies between increasing access and controlling costs. It presents six approaches that TRICARE should explore further to improve access, control costs, or both, including a more selective formulary, narrower pharmacy networks, and further harmonization with other federal purchasers, such as the Veterans Health Administration. These approaches are worth exploring in light of the recompetition of the TRICARE pharmacy contract and the ongoing consolidation of authority and management for purchased care under the Defense Health Agency.

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