

Value of a Pharmacy-Adjudicated Community Care Prior Authorization Drug Request Service

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Background: Many veterans are eligible to receive prescriptions from community-based pharmacies. Swift and accurate review of prior authorization drug requests by the US Department of Veterans Affairs (VA) pharmacy is necessary to mitigate treatment delays, medication misuse, adverse drug events, medication errors, and unnecessary cost to the health care system.

Methods: We performed a retrospective review of community care prior authorization drug requests to assess the direct cost savings achieved through a centralized process and to characterize submitted requests.

Results: The centralized community care pharmacy team demonstrated a cost savings of \$515,872.31 over 6 months and increased patient safety. Community care prior authorization drug requests had a 46.2% approval rate. Coordination of care took an average of 8 days.

Conclusions: Use of a centralized community care pharmacy team could result in significant annual cost savings for the VA. Considering the approval rate seen in this study, VA could allocate resources to educate community-based prescribers about its formulary to increase the approval rate and reduce administrative burden for VA pharmacies and prescribers.

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Veterans' access to medical care was expanded outside of US Department of Veterans Affairs (VA) facilities with the inception of the 2014 Veterans Access, Choice, and Accountability Act (Choice Act).¹ This legislation aimed to remove barriers some veterans were experiencing, specifically access to health care. In subsequent years, approximately 17% of veterans receiving care from the VA did so under the Choice Act.² The Choice Act positively impacted medical care access for veterans but presented new challenges for VA pharmacies processing community care (CC) prescriptions, including limited access to outside health records, lack of interface between CC prescribers and the VA order entry system, and limited awareness of the VA national formulary.^{3,4} These factors made it difficult for VA pharmacies to assess prescriptions for clinical appropriateness, evaluate patient safety parameters, and manage expenditures.

In 2019, the Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act, which expanded CC support and better defined which veterans are able to receive care outside the VA, updated the Choice Act.^{4,5} However, VA pharmacies faced challenges in managing pharmacy drug costs and ensuring clinical appropriateness of prescription drug therapy. As a result, VA pharmacy departments have adjusted how they allocate workload, time, and funds.⁵

Pharmacists improve clinical outcomes and reduce health care costs by decreasing medication errors, unnecessary prescribing, and adverse drug events.⁶⁻¹² Pharmacist-driven formulary management through evaluation of prior authorization drug requests (PADRs) has shown economic value.^{13,14} VA pharmacy review of community care PADRs is important because outside health care professionals (HCPs) might not be familiar with the VA formulary. This could lead to high volume of PADRs that do not meet criteria and could result in increased potential for medication misuse, adverse drug events, medication errors, and cost to the health system. It is imperative that CC orders are evaluated as critically as traditional orders.

The value of a centralized CC pharmacy team has not been assessed in the literature. The primary objective of this study was to assess the direct cost savings achieved through a centralized CC PADR process. Secondary objectives were to characterize the CC PADRs submitted to the site, including approval rate, reason for nonapproval, which medications were requested and by whom, and to compare CC prescriptions with other high-complexity (1a) VA facilities.

COMMUNITY CARE PHARMACY

VA health systems are stratified according to complexity, which reflects size, patient population, and services offered. This study

was conducted at the Durham Veterans Affairs Health Care System (DVAHCS), North Carolina, a high-complexity, 251-bed, tertiary care referral, teaching, and research system. DVAHCS provides general and specialty medical, surgical, inpatient psychiatric, and ambulatory services, and serves as a major referral center.

DVAHCS created a centralized pharmacy team for processing CC prescriptions and managing customer service. This team's goal is to increase CC prescription processing efficiency and transparency, ensure accountability of the health care team, and promote veteran-centric customer service. The pharmacy team includes a pharmacist program manager and a dedicated CC pharmacist with administrative support from a health benefits assistant and 4 pharmacy technicians. The CC pharmacy team assesses every new prescription to ensure the veteran is authorized to receive care in the community. Once eligibility is verified, a pharmacy technician or pharmacist evaluates the prescription to ensure it contains all required information, then contacts the prescriber for any missing data. If clinically appropriate, the pharmacist processes the prescription.

In 2020, the CC pharmacy team implemented a new process for reviewing and documenting CC prescriptions that require a PADR. The closed national VA formulary is set up so that all nonformulary medications and some formulary medications, including those that are restricted because of safety and/or cost, require a PADR.¹⁵ After a CC pharmacy technician confirms a veteran's eligibility, the technician assesses whether the requested medication requires submitting a PADR to the VA internal electronic health record. The PADR is then adjudicated by a formulary management pharmacist, CC program manager, or CC pharmacist who reviews health records to determine whether the CC prescription meets VA medication use policy requirements.

If additional information is needed or an alternate medication is suggested, the pharmacist comments back on the PADR and a CC pharmacy technician contacts the prescriber. The PADR is canceled administratively then resubmitted once all information is obtained. While waiting

TABLE 1 Highest Annual Cost Community Care PADR

PADRs	No.	Total cost, \$
Nonapproved		
Dulaglutide	5	57,566.40
Calcium alginate dressing with silver	1	52,732.80
Cariprazine	5	46,422.00
Apremilast	1	27,885.60
Exenatide	4	20,866.56
Approved		
Tafamidis	2	197,904.60
Ustekinumab	1	141,610.80
Omalizumab	2	125,007.12
Dupilumab	4	121,736.40
Nintedanib	1	58,089.60

Abbreviation: PADR, prior authorization drug request.

TABLE 2 Community Care PADR Characteristics

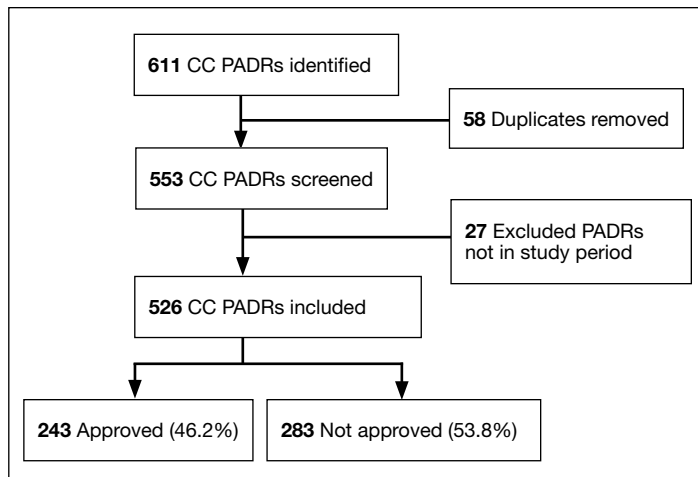
Criteria	No. (%)
Medications most frequently not approved	
Ondansetron orally disintegrating tablet	14 (4.9)
Esomeprazole	8 (2.8)
Insulin pen	8 (2.8)
Fluticasone/salmeterol	7 (2.5)
Bromfenac ophthalmic	6 (2.1)
Medications most frequently approved	
Azelastine	14 (5.8)
Empagliflozin	11 (4.5)
Insulin pen	10 (4.1)
Tadalafil	9 (3.7)
Pregabalin	8 (3.3)
Not approved PADRs by specialty	
Gastroenterology	56 (20)
Endocrinology	42 (15)
Neurology	42 (15)
Approved PADRs by specialty	
Neurology	41 (16)
Pulmonology	34 (14)
Endocrinology	32 (13)

Abbreviation: PADR, prior authorization drug request.

for a response from the prescriber, the CC pharmacy technician contacts that veteran to give an update on the prescription status, as appropriate. Once there is sufficient information to adjudicate the PADR, the outcome is documented, and if approved, the order is processed.

METHODS

The DVAHCS Institutional Review Board approved this retrospective review of CC PADRs submitted from June 1, 2020, through November 30, 2020. CC PADRs were excluded if they were duplicates or were reactivated administratively but had an initial submission date before the study period. Local data were collected for nonapproved CC PADRs including drug requested, dosage

FIGURE 1 Flowchart of Community Care PADR Selection Process

Abbreviations: CC, community care; PADR, prior authorization drug request.

and directions, medication specialty, alternative drug recommended, drug acquisition cost, PADR submission date, PADR completion date, PADR nonapproval rationale, and documented time spent per PADR. Additional data was obtained for CC prescriptions at all 42 high-complexity VA facilities from the VA national CC prescription database for the study time interval and included total PADRs, PADR approval status, total CC prescription cost, and total CC fills.

Direct cost savings were calculated by assessing the cost of requested therapy that was not approved minus the cost of recommended therapy and cost to review all PADRs, as described by Britt and colleagues.¹³ The cost of the requested and recommended therapy was calculated based on VA drug acquisition cost at time of data collection and multiplied by the expected duration of therapy up to 1 year. For each CC prescription, duration of therapy was based on the duration limit in the prescription or annualized if no duration limit was documented. Cost of PADR review was calculated based on the total time pharmacists and pharmacy technicians documented for each step of the review process for a representative sample of 100 nonapproved PADRs and then multiplied by the salary plus benefits of an entry-level pharmacist and pharmacy technician.¹⁶ The eAppendix (available online at doi:10.12788/fp.0296) describes specific equations used for determining direct cost

savings. Descriptive statistics were used to evaluate study results.

RESULTS

During the 6-month study period, 611 CC PADRs were submitted to the pharmacy and 526 met inclusion criteria (Figure 1). Of those, 243 (46.2%) were approved and 283 (53.8%) were not approved. The cost of requested therapies for nonapproved CC PADRs totaled \$584,565.48 and the cost of all recommended therapies was \$57,473.59. The mean time per CC PADR was 24 minutes; 16 minutes for pharmacists and 8 minutes for pharmacy technicians. Given an hourly wage (plus benefits) of \$67.25 for a pharmacist and \$25.53 for a pharmacy technician, the total cost of review per CC PADR was \$21.33. After subtracting the costs of all recommended therapies and review of all included CC PADRs, the process generated \$515,872.31 in direct cost savings. After factoring in administrative lag time, such as HCP communication, an average of 8 calendar days was needed to complete a nonapproved PADR.

The most common rationale for PADR nonapproval was that the formulary alternative was not exhausted. Ondansetron orally disintegrating tablets was the most commonly nonapproved medication and azelastine was the most commonly approved medication. Dulaglutide was the most expensive nonapproved and tafamidis was the most expensive approved PADR (Table 1). Gastroenterology, endocrinology, and neurology were the top specialties for nonapproved PADRs while neurology, pulmonology, and endocrinology were the top specialties for approved PADRs (Table 2).

Several high-complexity VA facilities had no reported data; we used the median for the analysis to account for these outliers (Figure 2). The median (IQR) adjudicated CC PADRs for all facilities was 97 (20-175), median (IQR) CC PADR approval rate was 80.9% (63.7%-96.8%), median (IQR) total CC prescriptions was 8440 (2464-14,466), and median (IQR) cost per fill was \$136.05 (\$76.27-\$221.28).

DISCUSSION

This study demonstrated direct cost savings of \$515,872.31 over 6 months with

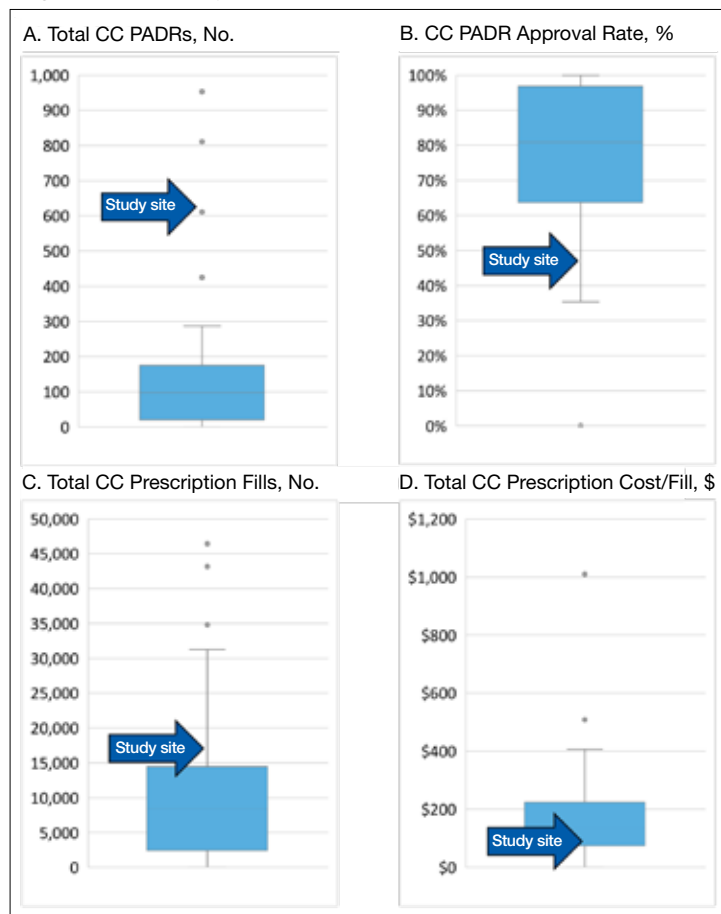
theadjudication of CC PADRs by a centralized CC pharmacy team. This could result in > \$1,000,000 of cost savings per fiscal year.

The CC PADRs observed at DVAHCS had a 46.2% approval rate; almost one-half the approval rate of 84.1% of all PADRs submitted to the study site by VA HCPs captured by Britt and colleagues.¹³ Results from this study showed that coordination of care for nonapproved CC PADRs between the VA pharmacy and non-VA prescriber took an average of 8 calendar days. The noted CC PADR approval rate and administrative burden might be because of lack of familiarity of non-VA providers regarding the VA national formulary. The National VA Pharmacy Benefits Management determines the formulary using cost-effectiveness criteria that considers the medical literature and VA-specific contract pricing and prepares extensive guidance for restricted medications via relevant criteria for use.¹⁵ HCPs outside the VA might not know this information is available online. Because gastroenterology, endocrinology, and neurology specialty medications were among the most frequently nonapproved PADRs, VA formulary education could begin with CC HCPs in these practice areas.

This study showed that the CC PADR process was not solely driven by cost, but also included patient safety. Nonapproval rationale for some requests included submission without an indication, submission by a prescriber that did not have the authority to prescribe a type of medication, or contraindication based on patient-specific factors.

Compared with other VA high-complexity facilities, DVAHCS was among the top health care systems for total volume of CC prescriptions (n = 16,096) and among the lowest for cost/fill (\$75.74). Similarly, DVAHCS was among the top sites for total adjudicated CC PADRs within the 6-month study period (n = 611) and the lowest approval rate (44.2%). This study shows that despite high volumes of overall CC prescriptions and CC PADRs, it is possible to maintain a low overall CC prescription cost/fill compared with other similarly complex sites across the country. Wide variance in reported results exists across high-complexity VA facilities because some sites had low to no CC fills and/or CC PADRs.

FIGURE 2 Community Care PADR Characterization for High-Complexity Veterans Affairs Facilities



Abbreviations: CC, community care; PADR, prior authorization drug request.

This is likely a result of administrative differences when handling CC prescriptions and presents an opportunity to standardize this process nationally.

Limitations

CC PADRs were assessed during the COVID-19 pandemic, which might have resulted in lower-than-normal CC prescription and PADR volumes, therefore underestimating the potential for direct cost savings. Entry-level salary was used to demonstrate cost savings potential from the perspective of a newly hired CC team; however, the cost savings might have been less if the actual salaries of site personnel were higher. National contract pricing data were gathered at the time of data collection and might have been different than at the time of PADR submission. Chronic medication

prescriptions were annualized, which could overestimate cost savings if the medication was discontinued or changed to an alternative therapy within that time period.

The study's exclusion criteria could only be applied locally and did not include data received from the VA CC prescription database. This can be seen by the discrepancy in CC PADR approval rates from the local and national data (46.2% vs 44.2%, respectively) and CC PADR volume. High-complexity VA facility data were captured without assessing the CC prescription process at each site. As a result, definitive conclusions cannot be made regarding the impact of a centralized CC pharmacy team compared with other facilities.

CONCLUSIONS

Adjudication of CC PADRs by a centralized CC pharmacy team over a 6-month period provided > \$500,000 in direct cost savings to a VA health care system. Considering the CC PADR approval rate seen in this study, the VA could allocate resources to educate CC providers about the VA formulary to increase the PADR approval rate and reduce administrative burden for VA pharmacies and prescribers. Future research should evaluate CC prescription handling practices at other VA facilities to compare the effectiveness among varying approaches and develop recommendations for a nationally standardized process.

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Ethics and consent

The Durham Veterans Affairs Health Care System Institutional Review Board approved this study.

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APPENDIX Calculations for Determining Direct Cost Savings

Cost of requested therapy
Cost of requested therapy = (daily drug acquisition cost) × (duration of therapy)
Cost of recommended alternative therapy
Cost of recommended alternative therapy = (daily drug acquisition cost) × (duration of therapy)
Duration of therapy was annualized or as stated if < 1 year
Cost of review for all CC PADRs
Cost of review for all CC PADRs = (cost per PADR) × (total PADRs)
Cost per PADR = (average time to completion) × (salary plus benefits)
Direct cost savings
Direct cost savings = (sum of requested therapies for CC PADR nonapprovals) – (sum of recommended alternative therapies for CC PADR nonapprovals) – (cost of review for all CC PADRs)

Abbreviations: CC, community care; PADR, prior authorization drug request.