

# Optimizing the Clinical Pharmacist Practitioner (CPP) To Improve Access and Quality Care Department of Veterans Affairs Veterans Health Administration

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## Executive Summary:

This Fact Sheet highlights the critical role of the Clinical Pharmacist Practitioner (CPP) within the Department of Veterans Affairs (VA) as an advanced practice provider (APP) in Primary Care and describes how full integration of the CPP significantly impacts access and quality of care for our Veterans.

## Key Takeaways

VA CPP are highly trained APP that provide comprehensive medication management (CMM) services under a global, practice area based scope of practice or privileges with prescriptive authority as described in [VHA Handbook 1108.11 Clinical Pharmacy Services](#).

- Published evidence demonstrates that CPP improve clinical outcomes and lowers the overall cost of care.
- CPP are a critical part of the solution for provider shortages in the primary care setting.
- Increase in access can be achieved by diverting appointments from primary care at a lower cost, in areas where capacity is needed to meet Veteran Care demand or where it may be difficult to locate and hire physician providers.
  - The VA has developed a comprehensive overview of the CPP practice in the Patient Centered Medical Home called the Patient Aligned Care Team (PACT).
    - For a typical panel of 1,200 patients, PACT Primary Care Providers (PCP) only have enough appointment slots to see a patient 2.0 times per year. PACT CPP can help contribute to achieving an optimal revisit rate goal for a PACT PCP's panel of 1.7 for in person visits per year.
    - Primary Care leaders strive for the CPP to see a minimum of 15% of patients from the PCP panel. This creates an additional 2-3 week of appointments slots for the PCP.
    - Implementation of the VA Gold Status Practice Diffusion of Excellence (DOE) Project "Improving Access to Primary Care Utilizing CPP" within the VA has shown:
      - 27% of PCP return appointments can be averted with CPP integration
      - 850 new appointment slots opened per quarter
      - Applying the outcomes of this project, the increase in access VA wide would result in over a quarter of a million newly opened appointments annually.



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## Background

Providing access to high quality care is a top priority for the Veterans Health Administration (VHA) with a focus on providing the Veteran with the right care, at the right time and right place, by the right provider. However, substantial shortages of providers in primary exist across the nation and VA.<sup>1</sup> For nearly 45 years, CPP have demonstrated their impact on improving medication safety, quality of care and clinical outcomes for Veterans as an APP. Non-optimized prescription medications cost patients and payors over \$528 billion in additional healthcare expenses annually.<sup>2</sup> Comprehensive medication management (CMM) is a patient-centered approach to optimizing medication use and improving clinical outcomes delivered by a clinical pharmacist working with the patient, physicians and other members of the healthcare team.<sup>3</sup> McFarland et al. conducted a summative review, which included multiple studies from the VA, that evaluated the impact of pharmacist performing CMM on achievement of the quadruple aim of healthcare which was to provide better care, reduce costs, improve the patient experience, and improve clinician well-being.<sup>4</sup> Specifically, CPP demonstrated improvement in clinical and humanistic components of patient care related to patient satisfaction, adherence, and knowledge of their medications. In a 2008 literature review of economic impact of a CPP, a more focused effort was made to quantify the benefit-to-cost ratio. Among studies reporting data necessary to determine a benefit-to-cost ratio (n=15), the pooled median value revealed that **for every \$1 invested in a CPP, \$4.81 was achieved in reduced costs or other economic benefits.**<sup>5</sup>

## VHA and the Clinical Pharmacist Practitioner (CPP)

Within VHA, PACT CPP have practiced in advanced patient care roles since before 1995 working autonomously, but collaboratively, under a scope of practice that contains prescriptive authority as delineated in [VHA Handbook 1108.11 Clinical Pharmacy Services](#). The CPP Scope of Practice is the VA version of a collaborative practice agreement. The VA PACT CPP practices comprehensively with a focus on integrating CMM using a whole health approach of care in primary care (e.g., diabetes, hypertension, dyslipidemia, COPD, heart failure, pain). As of May 2024 VA, employs more than 11,337 clinical pharmacists, of which 5,964 (52.6%) possess a scope of practice with prescriptive privileges allowing them to practice as an APP. These VA CPP are highly trained with the majority having a Doctor of Pharmacy degree (Pharm.D.).

- Approximately 80.2% of VA CPP have residency training, 53.8% have board certification or another certification such as geriatrics or diabetes. In total 88.3% have advanced clinical practice training and/or certification.
- VA CPPs recorded over **6 million patient care visits** in fiscal year 2023 with an essential role in improving access to care and significantly enhancing team performance and improving quality of care for Veterans.

### Key Facts:

- CPP are authorized in the VA as Advanced Practice Providers (APP) with a Scope of Practice that includes medication prescriptive authority.
- Strong published evidence exists that CPP improve access and outcomes and lowers cost of care.
- CPPs are a critical part of the solution for provider shortages in both primary and specialty care settings.



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## Primary Care, Patient Aligned Care Teams (PACT) and the CPP

Access to primary care services across the country continues to be at a high demand with a significant shortage expected to continue through 2033.<sup>1</sup> VHA Workforce Management & Consulting projects predict a physician shortage that could hit 139,000 by 2033 leading to further vulnerabilities in medication related outcomes as well as overall gaps in access to care. PACT modernization is focused on preparing the VA to overcome these projected gaps by focusing on reinforcing prevention to more readily meet the Veteran where they are and improve overall chronic disease management care. In addition, the modern PACT team allows all team members to work at the top of their education and training and optimizes workload distribution to improve care provided to Veterans. PACT modernization recognizes the unique knowledge, skills and abilities of the CPP workforce as medication and clinical experts and therefore will continue to elevate the CPP role as an advanced practice provider to increase CMM services for our Veterans.

Multiple studies have also documented provider burnout and “emotional exhaustion” with implementation of PACT.<sup>6,7</sup> CPPs have been integrated throughout the VA to provide clinical care services, particularly so in the primary care setting. The primary care medical home model in VA is known as a Patient Aligned Care Team (PACT) with each Primary Care Provider (PCP) typically caring for approximately 1,200 patients. CPPs in PACT provide comprehensive medication management (CMM) in between typical PCP visits to initiate, modify or discontinue medications, as well as providing disease management in foundational and high-volume areas such as diabetes, hypertension, anemia, chronic obstructive pulmonary disease (COPD), heart failure, hyperlipidemia, low complexity mental health and pain management.

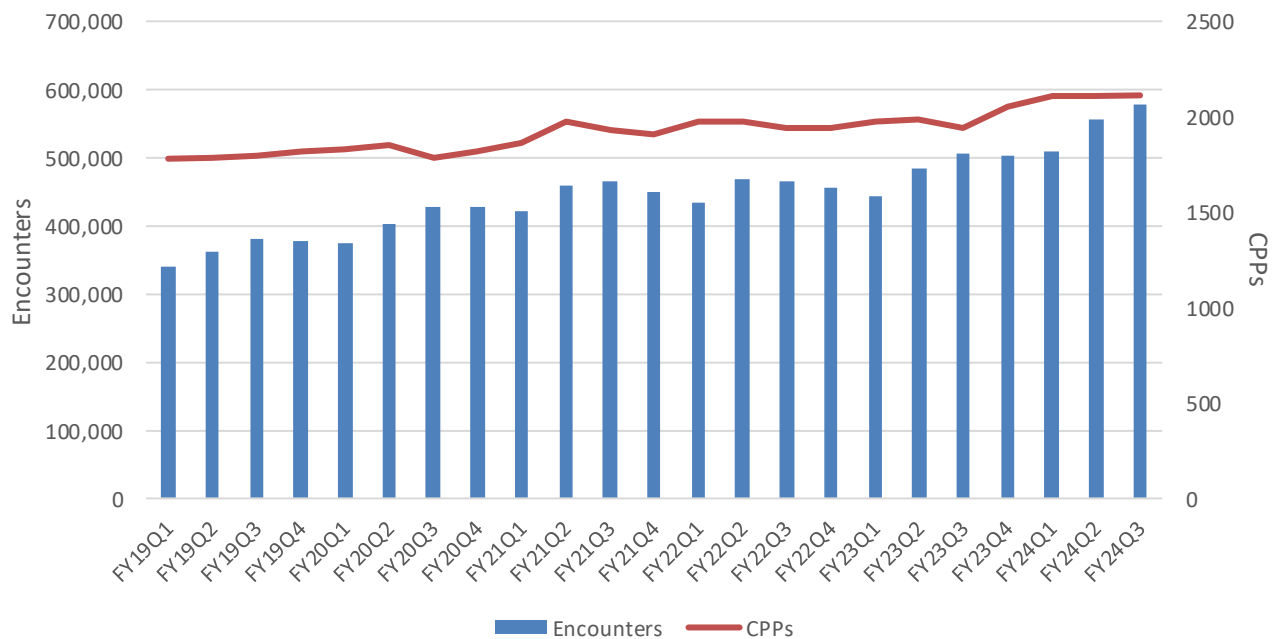
The [VHA Handbook 1100.10 Patient Aligned Care Team \(PACT\)](#) sets staffing requirements for discipline specific team members, which requires a minimum one full time PACT CPP for every 3,600 primary care patients (1 full time PACT CPP for every 3 PCPs). Due to the important role of the PACT CPP to unburden the PCP and improve access to care, the amount of their full time equivalent (FTE) support is included in calculation of how many patients can be paneled to the primary care team.

- As of June 2024, there are over 1,288 PACT CPPs VA-wide who have a “global” or practice area specific scope of practice and have dedicated assignment to a PACT team. This scope of practice authorizes prescriptive authority and allows the PACT CPP to be responsive to many chronic and acute care issues seen in the PACT setting when compared to a medication based or disease-based scope of practice. Staffing nationally for PACT CPP is at 81% of the recommended ratio of 1 PACT CPP per 3,600 Veterans.
- In FY23, PACT CPPs performed 1,929,250 encounters seeing over ½ a million Veterans in PACT indicating overall acceptance of CPP roles despite lower staffing allocations.
- PACT CPP have 80% of their direct patient care time allocated as a “bookable” appointment either face to face or virtually. It is critical to keep in mind that optimizing the role of PACT CPP and allocating appropriate CPP staff, support staff, space and infrastructure support will directly impact the integration of the CPP into PACT and improve access to primary care CMM services.

Since FY17, there has been a 12% increase in CPP practicing in primary care. Figure 1 shows the growth of patient care encounters by CPP practicing in PACT and the growth in the total number of CPP delivering care in the PACT setting.

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Figure:1 CPP Encounters in PACT



Note: Graph includes all CPPs delivering care in the PACT setting regardless of dedicated PACT team assignment.

## Key Facts:

- [VHA Handbook 1100.10](#) supports the role of PACT CPP with staffing requirements that recommend one CPP per 3,600 primary care patients, with an average panel size of 1,200 patients per primary care provider (PCP). PACT CPP support is a factor in determining modeled capacity for the PCP.
- Optimizing the roles of PACT CPP and allocating appropriate support staff, space and infrastructure support will directly impact the integration of the PACT CPP into the collaborative care team model. Ensuring this is the reality will improve access and optimize medication management services.

## PACT CPP Impact on Access:

For a typical panel of 1,200 patients, PCPs only have enough appointment slots to see a patient 2 times per year. In addition, the VHA has set a goal reduction in PCP re-visit rates to 1.7 visits per year in order to achieve open access for the PCP. PACT CPP can help contribute to achieving this optimal revisit rate and improve access to care leveraging PCP time for more acute and urgent patient care issues. The goal is to have a CPP utilization of 15-20% of the panels they support. A VHA Diffusion of Excellence Gold Status Practice entitled “Increasing Access to Primary Care using CPPs” assigned PACT



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CPP to PCPP to deliver CMM and demonstrated that 27% of PCP return appointments could be averted following CPP integration. Applying this across the entire facility equated to over 850 new appointments per quarter created for the primary care service.<sup>8</sup> Applying the increase in access VA wide would result **over a quarter of a million newly opened appointments annually**. In addition, substantial cost savings can be achieved with CPP implementation in primary care to increase access. The mean primary care physician salary with benefits equals \$231,400 with an average cost per 30-minute encounter of \$55.63. The average CPP salary with benefits is \$168,463 with an average cost per 30-minute encounter of \$40.50. This equates to \$15,130 saved per 1,000 primary care visits.

Figure 2: Cost Saving with a PACT CPP

Provider Type	Salary + 30% Benefits	Cost per 30-minute encounter
Primary Care Physician (PCP)	\$231,400	\$55.63
Clinical Pharmacist Practitioner (CPP)	\$168,463	\$40.50

% Visits Converted from PCP to CPP	\$ saved per 1000 visits
100%	\$15,130

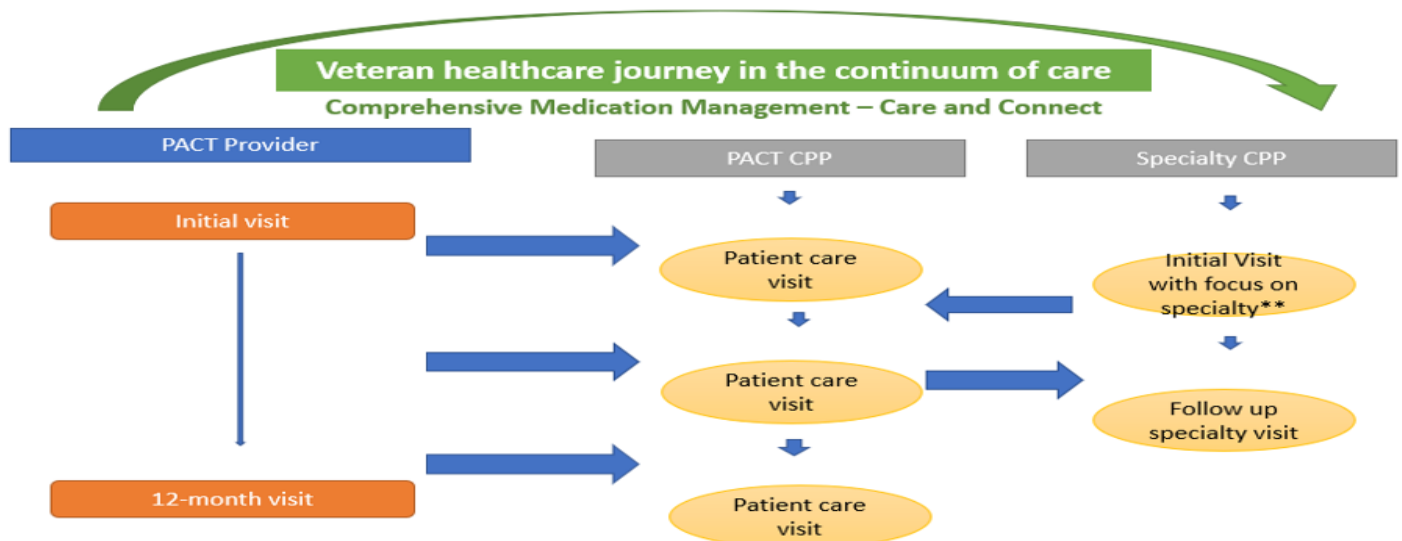
Simply put, the advanced role of the CPP improves access and reduces the burden on the PCP for chronic disease follow up by:

- Reducing PCP revisit rates by providing CMM for chronic disease states
- Improving PCP next third available appointments by offloading CMM patient visits
- Reducing new patient wait time for Veterans seeking primary care within individual PACT panels
- Increasing same day access to CPP care for chronic disease state management

It is important to note that specialty care access also benefits from PACT CPPs as focused CMM services often alleviates the need for specialty care referral.

Figure 3: How CPP Improve Access and Accelerate Patient Goal Attainment

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Optimizing PACT CPP to see patients between PCP visits increases patient access for CMM services.

## Key Facts:

For a typical panel of 1,200 patients, PCPs only have enough appointment slots to see a patient 2 times per year. PACT CPP can help contribute to achieving an optimal revisit rate goal for a PCP panel of 1.7 Face-to-Face visits per year.

- By optimizing CPP services, the CPP should see 15-20% of patients from the panel of Veterans they support. The Diffusion of Excellence program validated that 27% of PCP return appointments were averted following CPP integration. Applying this across the entire facility equated to over 850 new appointments per quarter created for the primary care service.
- Applying the increase in access VA-wide would result over 250,000 newly opened PCP appointments annually.
- A cost saving of \$15,130 per 1,000 patient visits can be achieved with utilization of a CPP.
- CPP integration reduces primary care provider burden.

## Conclusion

There is strong published evidence that primary care CPPs improve access, clinical outcomes and cost effectiveness when properly deployed for direct patient care. The practice of clinical pharmacy within the VA, has set the standard for what the clinical pharmacist practicing at the top of their license can achieve. Specifically, CPPs in the VA focus on practice areas that can directly impact improvements in access, quality and safety. It is critical to note that the VA CPP plays a key role in unburdening direct patient care providers by offloading CMM visits and reducing revisit rates. To facilitate the expedited

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access to CMM services for high demand clinical care areas across the country, the CPP should be leveraged to maximize the ability of every healthcare system to accomplish this objective. An opportunity exists to encourage health care leaders to use the processes and system of care integrating the CPP within the VA to address access and quality care issues within their healthcare system. Integrating the CPP must be endorsed as a top priority to improve access and quality of care across the nation.

**Questions related to this Fact Sheet may be directed to VHAPBM Ask PBM Clinical Pharmacy Practice Office**  
[VHAPBMAskPBMCPPPO@va.gov](mailto:VHAPBMAskPBMCPPPO@va.gov).

## Relevant VHA Directives/Handbooks:

1. VHA Handbook 1108.11, Clinical Pharmacy Services; July 1, 2015.  
[https://www.va.gov/vhapublications/ViewPublication.asp?pub\\_ID=3120](https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3120)
2. VHA Handbook 1100.10(1), Patient Aligned Care Team (PACT) Handbook; February 5, 2014.  
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