



Strategic Planning Committee
Value-Based Care Subcommittee

Executive Summary Status of Adoption – HL7[®]/NCPDP Pharmacist eCare Plan

February 2025

Purpose

Value-based healthcare represents a fundamental shift in healthcare delivery, where reimbursement is based on patient health outcomes rather than service volume (Tadrus, Trygstad & Kumbera, 2018). Under this model, providers receive compensation for helping patients improve their health, reduce chronic disease effects, and achieve better outcomes through evidence-based practices. This approach promotes quality-focused care delivery while optimizing healthcare resource utilization.

In 2019, the NCPDP Board of Trustees (BOT) initiated a strategic plan focusing on standards development and organizational excellence. One of the key areas of discussion and decision-making was how and where NCPDP should be focused to support (1) the growth of value-based care (2) the expanding scope of pharmacist practice and (3) the pharmacist role in value-based arrangements, providing care and coordinating with other members of the care team to deliver patient care.

This document provides a summary of the key initiatives undertaken by the NCPDP Strategic Planning Committee (SPC) Value-Based Arrangement (VBA) subcommittee and provides education and guidance on how the NCPDP Pharmacist eCare Plan (PeCP) can be utilized by healthcare stakeholders including providers, health systems and health plans to support value-based care initiatives.

Background

At the direction of the NCPDP BOT, the VBA subcommittee conducted extensive research and industry engagement to identify the necessary technical standards, workflows, and data elements for supporting pharmacist involvement in value-based arrangements.

A key initiative undertaken by the group was an NCPDP led Virtual Stakeholder Action Group (SAG) which was convened in October 2021. This SAG brought together industry experts to identify critical needs in the value-based care landscape. The group identified several interconnected requirements, including the need for efficient systems to review varied health plan criteria, enhanced pharmacy management system capabilities, and robust care coordination mechanisms. Stakeholders emphasized the importance of creating consistent, long-term standards for handling transactions, establishing credential protocols, and implementing comprehensive quality measurement systems. The group also highlighted opportunities to leverage existing tools and standards, including the dually balloted Health Level Seven (HL7®)/NCPDP Pharmacist eCare Plan Standard (PeCP), Telecommunication Standard F6, and Universal Patient Identifier.

Taking the feedback obtained from the virtual SAG, the subcommittee evaluated the PeCP and other NCPDP standards to confirm their validity in supporting pharmacists involved in value-based care arrangements and identified other initiatives for NCPDP to continue to focus on and further develop including the need for additional research related to pharmacist credentialing, a challenge identified by health plans during the SAG. Provider credentialing is mandatory for health plan VBA participation and currently, pharmacist credentialing faces challenges, such as the absence of a trusted centralized data source, universal credentialing sources, and a clear understanding of the need for such credentials by pharmacists.

Lee Ann Stember, NCPDP's President & CEO discussed the urgency and need to "EVOLVE, to change perceptions about what is possible, to acknowledge pharmacists' credentialed expertise, and sustain momentum behind the expansion of pharmacists' services in primary care and public health, as trusted patient care providers and the trained medication experts." (NCPDP, 2023).

Although this paper does not cover the topic of pharmacist credentialing, more information can be found on this topic by [clicking here](#).

Technical and Data Standards Analysis

Through comprehensive engagement with industry experts, the committee conducted an in-depth analysis of data requirements for value-based care delivery. This systematic evaluation identified **42 unique data points essential for effective care delivery and outcome measurement**. These elements include *administrative data such as patient and practitioner identification and site of care information, as well as clinical data including diagnoses, allergies, and test results*. The analysis also encompassed care coordination elements and quality measurement components necessary for successful value-based arrangements.

The committee's assessment of existing NCPDP standards revealed three primary standards which can support value-based arrangements: the NCPDP SCRIPT Standard, Telecommunication Standard, and the PeCP. Through detailed comparison and stakeholder input, the PeCP emerged as the predominant standard, offering the most comprehensive coverage of required data elements and supporting the broadest range of value-based care activities.

The PeCP exemplifies the power of interoperability standards. Through collaboration between Health Level Seven (HL7®) and NCPDP, the PeCP facilitates seamless medication-related care plan exchange and provider communication. It is a standardized document that captures and shares patient health concerns, medication-related activities, plans, pharmacist interventions, and goals for patients. This plan supports the integration of pharmacists into the broader healthcare team, and the implementation framework comprises several integrated components designed to support comprehensive care delivery and coordination of care. The PeCP utilizes standardized documentation formats through HL7® CDA and (Fast Healthcare Interoperability Resources) FHIR standards, enabling comprehensive medication therapy management and structured care coordination workflows. Technology integration capabilities allow PeCP to work within existing healthcare systems while maintaining standardized data exchange protocols and supporting real-time communication.

November 2019 Pharmacist eCare Plan Development and
Workflow Analysis Report

Current Implementation Status

The adoption of the PeCP has achieved significant market penetration, with 3500 community pharmacies now utilizing the standard for patient care documentation and clinical data exchange. Current implementation includes 19 active deployments, with FHIR implementations showing predominance over C-CDA implementations. The standard has become a required functionality for Community Pharmacy Enhanced Services Network (CPESN) membership, demonstrating its importance in modern pharmacy practice. For the last six months of 2024, CPESN pharmacies submitted an average of 186,000 PeCPs per month. In addition to community pharmacies, retail health stores, including Kroger Health, have successfully integrated the PeCP into their workflows, validating its effectiveness in real-world healthcare settings.

Real-World Application and Impact

Community pharmacy adoption through CPESN has demonstrated the practical value of PeCP in care delivery and support of VBC. These implementations have shown improved care coordination, enhanced documentation capabilities, and more effective communication between healthcare providers. Kroger Health's experience with PeCP integration has revealed significant improvements in workflow efficiency and care team collaboration. Their implementation allows pharmacists to better manage patient care through standardized documentation of clinical activities, medication management, and care plans.

Kirat Shahiwala of Powerhouse Pharmacy and Texas Health Rx Pharmacy said "The Elevance program has been very rewarding for the pharmacist-in-charge and the rest of our pharmacy staff. Engaging the patient and working with them to improve their health is the reason my employees are here." (Shahiwala, 2024).

Kroger Implements Pharmacist eCare Plan In North Carolina

In one value-based program between CPESN pharmacies and CarelonRx (PBM owned by Elevance Health), pharmacists provided enhanced outreach and counselling services to high-risk Medicaid enrollees. The care provided was documented via the PeCP. A retrospective analysis showed a **statistically significant 46% decrease in inpatient hospital costs and overall medical utilization versus a control group of enrollees that were not engaged by the pharmacies** (Elevance Health, 2024). The study results follow a population in Iowa, but this program has since been expanded to multiple states and is driving adoption of clinical services and participation in value-based arrangements by community pharmacists across the country.

Other initiatives where PeCP could be utilized to support VBC agreements include:

- **Chronic disease management and closing gaps in care** – in areas such as diabetes, cholesterol, hypertension, maternal health and behavioral health
- **Acute treatment** - test-to-treat services for specific minor ailments such as influenza, COVID-19 and strep
- **Preventive Screenings and care** including tobacco cessation, Immunizations/Vaccinations, HIV testing, HIV PrEP, genomics and hormonal contraception
- **Care Planning and Care Coordination** - addressing transitions of care, gaps in care, screenings and referrals and SDOH/health equity
- **Medication Adherence** - Providing patients opportunities to engage with pharmacists to improve patient education and adherence—ultimately helping reduce costs by avoiding expenses like ER visits and additional drug costs improve medication adherence

Quality Measurement Evolution and PeCP Impact

As the healthcare system continues its transformation toward value-based care, the quality measurement landscape also continues to evolve.

There are three main types of quality measure that impact health plans and providers. These include State-specific quality measures and programs, The Centers for Medicare and Medicaid (CMS) quality measures and the National Committee for Quality Assurance (NCQA) quality ratings. Each of these governing bodies regulate different lines of business and programs, but all have at least one or more pharmacy and/or medication related measures. PeCP can be utilized to support quality measures with recent implementations showing concrete impact on key healthcare outcomes. PeCP provides standardized documentation supporting quality measure reporting across multiple domains that align with CMS's Universal Foundation of Quality Measures, NCQA HEDIS reporting and State-specific value-based programs.

Aligning with CMS policy direction on quality care and measurement, PeCP supports:

- Outcome-based measures with focus on health disparities
- Enhanced documentation of pharmacist interventions impacting:
 - Clinical outcomes
 - Patient experience
 - Access to care
 - Care coordination
- Integration of social determinants of health data
- Cross-stakeholder quality alignment initiatives

In addition, the standard's structured format enables consistent data collection supporting both current measures and any future digital quality measurement requirements including:

- Digital measure specifications requiring FHIR-enabled data exchange
- CMS's Health Equity Index for Health equity analysis and improvement
- Enhanced focus on pharmacy quality measures, which will carry increased weight in future CMS Star Ratings
- Integration with emerging quality frameworks and measurement systems
- Population health analytics
- Real-time quality improvement initiatives

The standard's demonstrated success in supporting value-based care delivery, combined with its alignment to future quality measurement frameworks, positions PeCP as a crucial tool for pharmacists participating in value-based arrangements. As both CMS policy and quality measurement systems evolve toward more integrated, digital, and equity-focused approaches, PeCP provides the structured documentation needed to measure and improve outcomes while reducing administrative burden.

Fact Sheets Jan 15, 2021

Contract Year 2022 Medicare Advantage and Part D Final Rule (CMS-4190-F2) Fact Sheet

Medicare Part D

Share



In the June 2, 2020 Federal Register, the Centers for Medicare & Medicaid Services (CMS) issued the Contract Year 2022 Medicare Advantage and Medicare Cost Plan Program and Medicare Cost Plan Program subset of the proposals for the final rule. That final rule focused on the provisions intended to implement the provisions from the Bipartisan Budget Act of 2018 (the Bipartisan Budget Act (Cures Act)). That final rule implemented other provisions.

In this second, and revised, final rule, CMS is implementing provisions with a few exceptions. The provisions which are added to the provisions adopted in the final rule that most provisions.

The changes final rule will result in approximately \$1.5 billion in savings to the Medicare Drug Management Program to reduce drug spending.

Establishing Pharmacy Performance Measures Reporting Requirements

Under the Part D program, plans currently do not have to disclose to CMS the measures they use to evaluate pharmacy performance in their network agreements. CMS has heard concerns from pharmacies that the measures plans use to assess their performance are unattainable or otherwise unfair. The measures used by plans potentially impact pharmacy reimbursements.

Therefore, starting January 1, 2022, CMS is requiring Part D plans to disclose pharmacy performance measures to CMS, which will enable CMS to better understand how such measures are applied. CMS will also be able to report pharmacy performance measures publicly to increase transparency on the process and to inform the industry in its new efforts to develop a standard set of pharmacy performance measures.

Click to view the full Fact Sheet

“...we believe that publishing a list of currently used pharmacy performance measures will promote the development of consensus-built standards by the industry that are transparent and equitable across various pharmacy types and patient populations, and support value-based care.”

-Department of Health and Human Services & Centers for Medicare & Medicaid Services (2021)

Click to view the Final Rule

National Initiatives Supporting PeCP Advancement and Integration

The Health Information Technology Advisory Committee (HITAC), established through the 21st Century Cures Act, plays a pivotal role in shaping national health IT policy. In 2023, HITAC's Pharmacy Interoperability and Emerging Therapeutics Task Force identified PeCP as a key solution for advancing pharmacy care delivery. Through their comprehensive review, the task force generated 34 recommendations which were submitted to the Assistant Secretary for Technology Policy / Office of National Coordinator (ASTP/ONC) supporting enhanced pharmacy interoperability. Throughout the recommendations, PeCP was highlighted as a central component for standardized care plan exchange.

Building on HITAC's recommendations, The Sequoia Project, in collaboration with Surescripts, launched a significant initiative to advance pharmacy interoperability. This partnership demonstrates growing industry recognition of PeCP's role in healthcare delivery.

As noted by ONC Senior Advisor Tricia Lee Rolle, PharmD, MS, PhD, "We're seeing growing interest across healthcare in solving interoperability challenges related to pharmacy data and clinical services integration." (The Sequoia Project, 2024)

These industry-wide initiatives support PeCP's position as a vital tool for enhancing patient care delivery. The convergence of national policy recommendations and industry initiatives creates a strong foundation for PeCP adoption. The Sequoia Project's community of practice is actively working to:

- Expand clinical interoperability across the healthcare ecosystem
- Develop practical solutions for pharmacy data exchange
- Remove barriers to clinical service delivery
- Scale standardized care documentation

This coordinated approach between policy makers and industry leaders validates PeCP's importance in advancing healthcare interoperability while providing a clear pathway for continued development and adoption.

Pharmacy Interoperability Takes Center Stage in Joint Initiative Between The Sequoia Project and Surescripts

Final Report of the Health Information Technology Advisory Committee on Pharmacy Interoperability and Emerging Therapeutics

Strategic Roadmap: Advancing PeCP Through Standards Innovation

NCPDP has established focused work groups (WGs) to ensure comprehensive standards development supporting pharmacists' expanding role in value-based care delivery.

NCPDP's WG10 MTM and Pharmacist Clinical Services Task Group leads ongoing efforts to enhance PeCP capabilities, focusing on aligning with new USCDI versioning requirements while adapting to evolving industry needs. Key enhancements under development include improved granularity in care team information sharing, incorporation of health equity data, and integration of social determinants of health elements. These updates reflect NCPDP's commitment to maintaining PeCP's relevance and effectiveness in the changing healthcare landscape.

WG20 Admit, Discharge and Transfer (ADT) Task Group developed guidance for integrating ADT notifications into pharmacy practice, recognizing that timely information about patient care transitions is crucial for pharmacists participating in value-based arrangements (NCPDP, 2024). This guidance outlines implementation pathways and use cases showing how ADT notifications can enhance medication management, support care coordination and improve the patient experience.

Additionally, WG1, Telecommunication Task Group, addresses pharmacy services billing integration using the NCPDP S1 standard, WG14 Long Term and Post Acute Care (LTPAC) Task Group, focuses on consultant pharmacist interoperability needs. Additional work groups including WG19, NCPDP Standards Coordination, and WG20, Coordination of Care and Innovation, are concentrating on crucial elements including social determinants of health identification, USCDI data element standardization, and health equity considerations. Through this comprehensive approach, NCPDP ensures thorough coverage of emerging healthcare delivery requirements.

[Click to view a complete list of NCPDP WGs](#)

As the role of pharmacists continues to expand in value-based care delivery, the need for integrated pharmacy electronic health record systems becomes increasingly critical (Sullivan, 2022). Pharmacists require sophisticated tools that support comprehensive patient care documentation, seamless information exchange, and collaborative care delivery. Building on this growing need looking ahead, NCPDP will build upon foundational work completed in 2012 with HL7® on Pharmacy/Pharmacist Functional Profiles. These profiles establish core EHR building blocks and create essential pathways to full PeCP implementation. The vision encompasses seamless interconnection between pharmacy management systems and medical EHRs, creating a unified platform for care team collaboration. While some aspects remain in conceptual stages, NCPDP continues advancing this framework to achieve comprehensive system integration, ultimately supporting improved patient outcomes through enhanced care coordination. This work represents a crucial step toward realizing the full potential of pharmacy-based patient care within the broader healthcare ecosystem.

Recommendations & Path Forward

Analysis of PeCP adoption and implementation reveals several opportunities to advance pharmacy's role in value-based care delivery. The intent and goal of this white paper is to call out these opportunities and to educate key industry leaders and policymakers of the availability of this tool. Key findings and recommendations include expanding quality metrics measurement to better demonstrate the value of pharmacy-based care services, implementing standardized data formats to achieve seamless interoperability across healthcare systems, and developing comprehensive EHR Pharmacy/Pharmacist Functional Profiles to support broader integration of pharmacy services. NCPDP encourages active engagement from all healthcare stakeholders. We call upon:

Healthcare Providers/Health Systems to:

- Evaluate current systems for PeCP integration opportunities
- Prioritize implementation of standardized data exchange
- Invest in technology infrastructure supporting value-based care delivery

Healthcare Payers to:

- Increase adoption of value-based arrangements in member plans
- Include pharmacists in value-based arrangements
- Invest in technology infrastructure supporting value-based care delivery

State and Federal Regulators to:

- Consider pharmacy's expanding role as providers when developing value-based care policies
- Support standardization of quality metrics that demonstrate pharmacist value
- Leverage existing standards in regulation development to promote interoperability

Pharmacy Professionals to:

- Engage with NCPDP's standards development process through work group participation
- Share implementation experiences and best practices
- Champion PeCP adoption within their organizations and professional networks

Technology Partners to:

- Accelerate development of PeCP-compatible solutions
- Collaborate on interoperability initiatives
- Support seamless integration with existing healthcare systems

Conclusion and Industry Call to Action

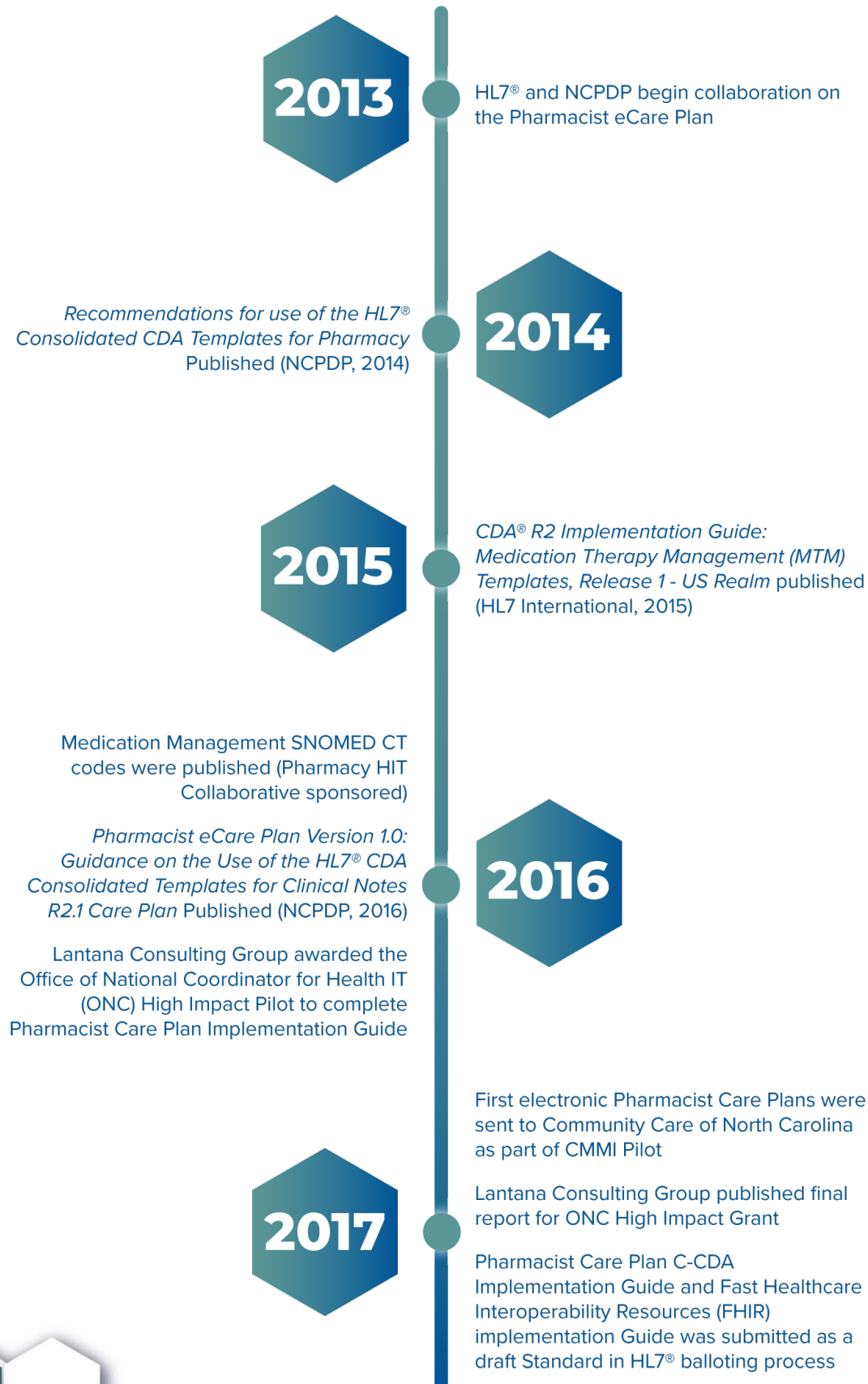
NCPDP's development and support of PeCP represents a crucial advancement in healthcare delivery standardization. Through careful standards development, stakeholder engagement, and continuous improvement, PeCP enables pharmacists to play an increasingly integral role in value-based care delivery. As healthcare continues its evolution toward value-based models, PeCP provides the necessary framework for standardized, efficient, and effective pharmacy care delivery.

The time for action is now. Join NCPDP in advancing pharmacy care delivery by:

- Becoming an NCPDP member to participate in standards development
- Contributing expertise through work group participation
- Implementing PeCP in your practice or organization
- Sharing success stories and implementation experiences
- Advocating for broader PeCP adoption within your professional network

Together, we can transform pharmacy care delivery and improve patient outcomes through standardized, interoperable health information exchange. Visit www.ncdp.org to learn more about membership and engagement opportunities.

Appendix | Timeline of PeCP-Related Events



NCPDP and HL7® Pharmacist Care Plan C-CDA Implementation Guide and FHIR Implementation Guide reconciled ballot comments

ONC lists Pharmacist eCare Plan in Interoperability Standards Advisory Tool

2018

Lantana Consulting Group incorporates Relevant Medication Management value sets to Pharmacist Care Plan C-CDA and FHIR Release

Four implementation guides prepared for PeCP Standard for Trial Use HL7® balloting process

NCPDP/HL7® Pharmacist eCare Plan C-CDA template and FHIR Implementation Guides (IGs) completed balloting at HL7® and NCPDP

2019

NCPDP and HL7® jointly submit the IGs to the American National Standards Institute (ANSI) for accreditation and publication

2020

NCPDP Foundation awards grant to University of Tennessee Health Science Center College of Pharmacy for research project to demonstrate the clinical value of integrating the NCPDP/HL7® Pharmacist eCare Plan in pharmacy and medical systems

NCPDP Stakeholder Action Group (SAG) held

Joint presentation with PQA regarding collaboration on VBA

Educational Summit held to determine additional items to support clinical and data reporting requirements for VBA

2021

Data analyses and comparison of common VBA data elements completed

Second NCPDP Stakeholder Action Group held

Initial engagement with health plan industry and development of NCPDP Strategic Planning Committee Health Plan Subcommittee

2022

Pharmacist Credentialing presentation at NCPDP 2023 Virtual Educational Summit.

Pharmacist eCare Plan presentation at NCPDP 2023 Virtual Educational Summit

Creation of a credentials data element for use in ePrescribing transactions to facilitate compliance with state rules that require prescriber's professional designation on a prescription

2023

Comparison of USCDI and VBA data elements and work to inform USCDI updates to address VBA data needs completed in NCPDP's WG19 - USCDI Data Element Review Task Group

Begin coordination within NCPDP's WG10 - MTM TG and with HL7® to update Pharmacist eCare Plan to version R5

Pharmacist Credentialing Executive Summary Published

Continued efforts to support pharmacists involved in VBA and a framework progressing within NCPDP WGs and TGs

2024

2025

Development of Pharmacist eCare Plan Executive Summary

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