



COMPLETED GRANT SYNOPSIS

Pharmacist eCare Plan Development and Workflow Analysis

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Objectives

The purpose of this project was to utilize and analyze the Pharmacist eCare Plan with community-based pharmacies through participating vendors and working with medical-side payers. This included the development and hosting of a related website for technical and promotional content.

Methods

Design	<ul style="list-style-type: none"> • Deliverable #1: Vendor and payer engagement, updates on any requirements for vendor engagements, follow-up and coordination with vendors during development and implementation process, review of SNOMED CT codes that may be needed for relevant payer engagement programs, and technical questions that may occur during this process. • Deliverable #2: Transform code maintenance and publication of code for vendors and new vendor entrants to adopt. Transforms are pieces of transaction code that allow vendors to move between formats (such as C-CDA and FHIR) and between standards (like eCare Plan and CCD). They greatly aid in the speed to adoption and creative use of standards. • Deliverable #3: eCare Plan Education, Promotion, Workflow Analysis and Promotion to extoll the virtues of the eCare Plan and educate about their use and value to pharmacists, pharmacies, payers, and other care team members.
Study endpoints	<ul style="list-style-type: none"> • 15 vendors transacting eCare Plans • 2 payers receiving eCare Plan data for payment and quality assurance • C-CDA transforms maintenance and publication • FHIR transforms maintenance and publication • C-CDA maintenance throughout grant period (maintenance required for any changes to the standard) • FHIR maintenance throughout grant period (maintenance required for any changes to the standard) • Website published • Transforms posted • Workflow Analysis

Results

Deliverable #1 – 15 vendors transacting eCare Plans and 2 payers receiving data.

- 11 vendors are currently sending pharmacist care plans to CPESN USA (as of 6/25/19): AZOVA, BestRx, Datascan, DocsInk, FDS, Liberty, Micro Merchant, PioneerRx, Prescribe Wellness, QS/1, STRAND
- 2 vendors are approved to send pharmacist care plans but have not yet sent any (as of 6/25/19): AssureCare, Pharmetika (have a pharmacy in Iowa that will be assisting with implementation),
- 6 vendors are actively working on an implementation of the pharmacist care plan (as of 6/25/19): Cost Effective Computers, Digital Business Solutions, DocStation, Habitnu, Kloudscript, and Omnicell

For further information and/or materials on this grant, please visit

www.CommunityPharmacyFoundation.org and submit your inquiry through [Contact Us](#). 1908|209

Payer programs that received data:

- Medicare Advantage Heart Failure Pilot Program: July 2018 – December 2018: pharmacies in four southern networks received per member per month payments for care plans developed for patients with heart failure. Payer analytics team received pharmacist care plan data for program evaluation purposes.
- Medicaid MCO High Risk Patients Program: January 2019 – ongoing: pharmacies in one southern network are providing pharmacy care management services to high risk patients of a Medicaid MCO and are receiving per member per month payments based on pharmacist care plans submitted. Payer care management team is receiving human-readable care plan data for care coordination purposes. Program likely to be expanded to other networks by mid-2019.
- Medicaid Payment Reform/Provider Network Program: August 2018 – ongoing: pharmacies in one northeastern network are providing pharmacy care management services documented via the pharmacist care plan to patients of a provider network and receiving per member per month and performance incentive payments.

Deliverable #2 – C-CDA and FHIR transforms maintenance

- The pharmacist care plan C-CDA to FHIR transforms ('the transforms') are a set of computer codes that can convert a pharmacist care plan from the older C-CDA format to the newer FHIR format. These transforms make the pharmacist care plan more interoperable and allow pharmacist care plans developed in a C-CDA based system to be imported into a FHIR based one. They were originally developed by the Lantana consulting group during the initial development of the pharmacist care plan standard. The transforms performed well and functioned correctly during initial tests, but maintenance is required when unforeseen issues arise that may not have been covered by initial tests.
- During the granting period there were several instances where issues arose with different vendor implementations and the transforms had to be evaluated to determine if changes to the transformation code were necessary. In all cases it was found that changes to the actual transform code were not necessary and other solutions could be implemented. For example, on 2/21/19 a vendor submitted a sample file in C-CDA format and the 'No known allergies' information in the sample care plan failed to be converted to FHIR by the transforms even though the C-CDA file was correctly formatted. The transforms were examined, and it was determined that the vendor could use a particular 'null flavor' and the transforms would detect it and substitute the appropriate SNOMED code, so the vendor was able to update their implementation and no changes to the transforms were required. The vendor's users are now able to identify a patient as having 'No known allergies' and that information can be imported into a FHIR-based pharmacist care plan system.
- The transforms have been made available to anyone who wants to use them on the eCare Plan Initiative website since its initial launch at this URL: <https://www.eCarePlanInitiative.com/transformation-tools>. We are aware of at least one vendor that accessed the transforms from that site and used them as part of their development process.

Deliverable #3 – Website, transforms posted and workflow analysis

- <https://www.eCarePlanInitiative.com/> was officially launched during the PQA webinar entitled "The Swiss Army Knife of Pharmacy Informatics: The Pharmacist Electronic Care Plan (eCare Plan)" that Troy Trygstad and Shelly Spiro presented on 1/10/2019.
- The transforms and other code/sample care plans to assist implementers has been made available on the website.
- Workflow analysis white paper will be published on the CPF website.

Conclusion

Care planning is an essential part of the healthcare system and it is vital for pharmacists to be able to document their patient care services in a standard way. Through this project, a robust number of pharmacy system vendors have started transacting care plans, an informational website was created and C-CDA and FHIR transforms have been published and are being maintained. Further information regarding care planning integration in workflow will be published on the CPF website. This grant allowed for continued groundwork and foundation to be laid for improved pharmacy health information technology use and implementation in the future.