



## COMPLETED GRANT SYNOPSIS

**Title:** Removing barriers to organizational change in community pharmacies:  
An analysis of the successes and challenges of implementing enhanced services

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### Objectives

- 1) To develop and administer a survey that assesses experiences with CPESN implementation to 268 community pharmacies.
- 2) To analyze survey findings to identify the key factors that influence successful implementation of enhanced services in community pharmacies.
- 3) To translate research about effective implementation of enhanced services into community pharmacy practice through the creation of two learning modules.
  - 3a) To produce one learning module about managing organizational change in community pharmacies implementing enhanced services.
  - 3b) To produce a second learning module about integrating enhanced services into community pharmacy workflow.

### Methods

Design	<ul style="list-style-type: none"> <li>• Cross-sectional, mixed-methods study during 2016</li> <li>• Administered survey to 268 community pharmacies</li> <li>• Interviewed 40 community pharmacists responsible for CPESN implementation within their pharmacy</li> </ul>
Study endpoints	<ul style="list-style-type: none"> <li>• Implementation effectiveness, which was measured as the number of comprehensive medication reviews conducted and the reach of comprehensive medication reviews (how many eligible patients received the intervention)</li> </ul>

### Results

This mixed methods study evaluated the organizational factors that contributed to or hindered successful implementation (i.e., the quality and consistency of implementation) of the Community Pharmacy Enhanced Services Network (CPESN) program in NC. For this study, from the quantitative analysis we found:

- Community pharmacies that had a clinical pharmacist on staff were significantly more likely to be effective at implementing the CPESN program.
- Community pharmacies that had a strong climate for implementation were significantly more likely to be effective at implementing the CPESN program. Implementation climate included three factors: 1) having leadership set consistent expectations for staff participation in CPESN; 2) having sufficient resources and staffing for implementation; and 3) providing rewards for staff participation in CPESN.

From the qualitative analysis we found:

- Community pharmacies that had previously partnered with physicians on other enhanced service programs were more successful with CPESN implementation.
- Community pharmacies that had developed relationships with care managers and public health agencies were more successful with CPESN implementation.
- For many pharmacies participating in CPESN, the CPESN project was the first time the pharmacy had developed partnerships with physicians and care managers outside of routine patient care.

To disseminate the findings from this study, we have several publications and conference presentations and posters. To disseminate this work to practitioners, we developed an online learning module available on the UNC School of Pharmacy website.

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

[www.CommunityPharmacyFoundation.org](http://www.CommunityPharmacyFoundation.org) and submit your inquiry through [Contact Us](#).

**Learning Module:** Leading Pharmacy Change (<https://changemgmt.media.unc.edu>)

- Module 1: The Stages of Change. This module describes the four stages of implementing a change that includes how to explore, prepare, launch, and maintain new services.
- Module 2: Value Stream Mapping. This module explores how value stream mapping can be used in pharmacies to make common processes more efficient.

**Publications:**

**Turner, K., Weinberger, M., Renfro, C., Ferreri, S., Powell, B.J., Trogdon, J, Marks, N., Trygstad, T., Shea, C.** (Revise and Resubmit) Stages of the innovation implementation process: Moving community pharmacies from a drug dispensing to population health management model. *Medical Care Research & Review*. [Publication pending]

Turner, K., Weinberger, M., Renfro, C., Ferreri, S., Trygstad, T., Trogdon, J., & Shea, C. M. (2018). The role of network ties to support implementation of a community pharmacy enhanced services network. *Research in Social and Administrative Pharmacy*.

Turner, K., Trogdon, J. G., Weinberger, M., Stover, A. M., Ferreri, S., Farley, J. F., ... & Shea, C. M. (2018). Testing the organizational theory of innovation implementation effectiveness in a community pharmacy medication management program: a hurdle regression analysis. *Implementation Science*, 13(1), 105.

**Conference Presentations:**

Turner, K., Weinberger, M., Renfro, C., Ferreri, S., Trogdon, J, Trygstad, T., Shea, C. (2018, May 27) Outer and inner context of community pharmacies in a medication management services network. Oral presentation at *Nordic Implementation Conference*, Copenhagen, Denmark.

Turner, K., Shea, C.M., Renfro, C., Ferreri, S., Weinberger, M., Trygstad, T. (2017, December 4) Stages of innovation implementation process: Piloting a Medicaid population health management intervention in community pharmacies. Oral presentation at *10<sup>th</sup> Annual Conference on the Science of Dissemination and Implementation in Health*, Washington, D.C.

**Poster Presentations:**

Turner, K. Trogdon, J., Weinberger, M., Ferreri, S., Farley, J., Ray, N., Patti, M., Renfro, C., Shea C.M. (2018, March 16). Identifying pharmacy characteristics associated with effective implementation of a Medicaid community pharmacy care management intervention. Poster presentation at the American Pharmacists Association Conference. Nashville, TN.

**Conclusion**

Overall, we found that pharmacies in the CPESN program varied in their ability to successfully implement CPESN. Pharmacies that had clinical pharmacists, more non-dispensing hours, and a stronger implementation climate were more successful with CPESN implementation. Implementation climate was dependent upon factors such as pharmacy leadership setting clear expectations for employee participation in CPESN and providing employees with sufficient time and resources to implement CPESN (e.g., having pharmacy technician support). Therefore, community pharmacies implementing enhanced services may need implementation assistance to ensure that implementation is consistent across pharmacies.