



COMPLETED GRANT SYNOPSIS

Evaluating novel social determinant of health programs within community pharmacy using the RE-AIM framework

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Objectives

1. To develop a community health worker (CHW) toolkit outlining processes to be implemented in community pharmacy settings.
2. To analyze the feasibility, fidelity, and impact of a CHW embedded within community pharmacy practice.
3. To establish a prospective payment model for CHWs embedded in community pharmacies in coordination with local departments of health and managed care organizations.

Methods

Design

Objective 1

Developed a social determinants of health (SDoH) program toolkit outlining processes to be implemented in the community pharmacy setting. Completed an extensive review of literature to identify best practices of establishing a SDoH program. Alongside our collaborators, held focus group meetings to draft and compile a toolkit, with the following major sections: (1) Overview of SDoH, (2) New Roles for Pharmacy Staff in a SDoH Pharmacy, (3) Development of Key Skills for CHWs and SDoH Specialists, (4) Implementation Plan – Phase I, (5) Implementation Plan – Phase II, (6) Additional Considerations, (7) Pharmacy Spotlights, (8) Appendices (intervention forms and resources). This toolkit has undergone an extensive internal and external review process with pertinent stakeholders. The goal is to distribute the toolkit via multiple mechanisms that include: Community Pharmacy Foundation, CPESN USA, and as a supplement to the manuscript in *Journal of the American Pharmacists Association*.

Objective 2

This was a mixed methods study designed utilizing the RE-AIM Implementation Framework¹ domains, reach, effectiveness, and adoption, for retrospective evaluation of intervention processes. We plan to conduct future studies that address implementation and maintenance domains. In order to collect retrospective data, we conducted a Pre-Program Data Collection Form, Intervention Data Collection Form, and Post-Program SDoH Program Staff Perceptions Survey 3 months after initial implementation of the SDoH programs.

Objective 3

During this study the CPESN-NY pharmacies collaborated with a local independent physician association (IPA) to create a payment incentive model based on the number of referrals submitted to the IPA's case manager for further SDoH workup and resolution. The CPESN-MO pharmacy worked on collaborating with

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| | their state department of health as well as state hospital association to determine how community pharmacies could assist with the SDoH burden impacting its community. They discovered a possible SDoH intervention tracking mechanism when billing for patient care that involves ICD-10 utilization codes known as Z codes. The value of documenting and the role these codes play in the management of patient center SDoH factors is unknown currently. |
| Study Endpoints | Objective 2 Reach data points collected in this study included descriptors of each pharmacy, patients, and staff survey respondents. Effectiveness data points collected in this study included number of screenings completed, number of SDoH domains identified, and patient acceptance rates for consent and referral. Adoption data points collected in this study included SDoH program planning details by the pharmacy and the post-program staff perception survey. |

Results

Objective 1: The SDoH toolkit entitled, *Implementing a Social Determinants of Health Program – A Community Pharmacy Drive Toolkit*, has been created and is ready to be disseminated and utilized by other community pharmacies looking to implement SDoH programs.

Objective 2: Nine pharmacies participated from CPESN-NY utilizing an SDoH specialist model while 1 pharmacy from CPESN-MO utilized a CHW model. The position with the highest amount of full time equivalents (FTEs) to be dedicated to the SDoH program was technicians (1.10 FTEs) followed by staff pharmacists (0.77 FTEs). In addition, when reporting barriers of SDoH program implementation, 8 (88.9%) pharmacies responded that reimbursement for services would be an issue. Intervention data is shown in the table below. Staff appeared to be most comfortable with addressing environmental stability concerns (83.3% agreeing to comfortability) while least comfortable with economic stability (50.0% agreeing to comfortability).

| Screenings, interventions, and referrals completed by study model | | |
|---|----------------------------------|--|
| Intervention Component | SDoH Specialist Model (CPESN-NY) | Community Health Worker Model (CPESN-MO) |
| Screenings Generated | 48 | 28 |
| SDoH Challenges Identified | 33 (68.8) | 16 (57.1) |
| Affordability of Daily Needs ^a | 16 (48.5) | 9 (56.3) |
| Transportation | 7 (21.2) | 1 (6.3) |
| Healthcare System Navigation ^b | 5 (15.2) | 6 (37.5) |
| Health Care Management ^c | 5 (15.2) | --- |
| Referral Acceptance Rate^d | 11 (33.3) | --- |

Abb. SDoH, social determinants of health; CHW, community health worker; MO, Missouri; NY, New York

^a Affordability of daily needs includes: food assistance, housing and shelter, clothing and household goods, telephone access, monthly rent and bills

^b Healthcare system navigation include benefits navigation, health insurance navigation, doctor visit affordability, medication affordability

^c Health care management include general wellness, mental/behavioral health assistance

^d CHW programs did not have these results collected at time of study completion.

Objective 3: The CPESN-NY pharmacies were able to meet their predetermined milestones to achieve incentive-based payments. The IPA felt that the pilot was a success and is continuing to work with these pharmacies on an additional pilot that improves the workflow of the initial pilot while collecting additional data and providing further incentive-based payments. The CPESN-MO pharmacy is continuing to work with its state department of health and state hospital association to determine feasible reimbursement mechanisms for their SDoH program. Currently the program is being supported by grant dollars.

Conclusion

SDoH largely influences patients' overall health and wellbeing. Community pharmacies are local, accessible, community advocates who can successfully implement SDoH programs to help resolve patient SDoH challenges. The success of SDoH programs involves established patient relationships, community organization collaboration, and closed loop communication between organizations. One challenge facing many SDoH programs is the lack of reimbursement mechanisms for services provided. Continued research is needed to provide data to payers that these programs are effective and have an impact on resolving SDoH and improving patient outcomes. This will allow for more developed and

consistent reimbursement mechanisms, encouraging expansion of SDoH programs to many more community pharmacies.

References

1. Glasgow RE, Harden SM, Gaglio B, et al. RE-AIM Planning and Evaluation Framework: Adapting to New Science and Practice With a 20-Year Review. *Front Public Health*. 2019;7:64-64.