



• Second Edition •

PQA SOCIAL DETERMINANTS OF HEALTH RESOURCE GUIDE

for improving
medication use quality





The information included in this guide was obtained from publicly available sources, published literature and in some cases through submission of intervention details directly to PQA and was current at the time it was gathered.

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ABOUT THIS GUIDE

The PQA Social Determinants of Health (SDOH) Resource Guide documents real-world SDOH services that are promising for improving the quality and safety of medication use. The guide focuses on SDOH screenings, referrals and interventions conducted by or involving pharmacists or pharmacies.

The first edition of the guide, published in January 2022, profiled 20 services. The second edition expands the guide to include 12 additional services and updated information about nine initiatives in the first edition. We also have included pharmacy-based or pharmacy-involved SDOH services launched or greatly expanded in response to COVID-19 and are being continued post-pandemic.

The guide covers services that address seven SDOH barriers, and many of the initiatives profiled address multiple barriers:

- Cost of Medications
- Cultural or Literacy Barriers
- Decent, Safe and Affordable Housing
- Food Security
- Screening for Unmet Needs
- Social Isolation
- Transportation

Meeting patients where they are, the SDOH initiatives come from numerous practice settings and take place at the local, state, regional or national level.

PQA is grateful for its member organizations' contributions to this guide. The guide's focus was determined at the 2020 PQA Leadership Summit. Participants identified the SDOH barriers where pharmacists are best positioned to provide screening, evaluation and services.

PQA welcomes your feedback on this guide and suggestions on SDOH service elements which can be highlighted in future guide editions. You can share feedback with PQA at anytime by emailing us at Education@PQAalliance.org.

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ACKNOWLEDGMENTS

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About PQA

PQA, the Pharmacy Quality Alliance, is a national quality organization dedicated to improving medication safety, adherence and appropriate use. A measure developer, researcher, educator and convener, PQA's quality initiatives support better medication use and high-quality care.

PQA's work includes a focus on the social determinants of health because addressing the complex circumstances in which individuals are born and live is important to advancing medication use quality and helping individuals achieve good outcomes.

A non-profit organization with more than 240 diverse members across healthcare, PQA was established in 2006 as a public-private partnership with the Centers for Medicare & Medicaid Services shortly after the implementation of the Medicare Part D Prescription Drug Benefit. PQA was created because prescription drug programs were a major area of health care where there was no organization or national program focused on quality improvement.

PQA members include pharmacies, health plans, health care providers, pharmacy benefit managers, biopharmaceutical companies, technology vendors, government agencies, associations, health information technology organizations, researchers, accrediting organizations and academia.

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Accountable Health Communities Model

Centers for Medicare & Medicaid Services (CMS)

Keywords: Community services, Medicare and Medicaid beneficiaries, navigation



TYPE OF SERVICE

Screening, Referral

BRIEF DESCRIPTION

The Accountable Health Communities (AHC) Model tests whether identifying and addressing Medicare and Medicaid beneficiaries' SDOH needs will impact health care costs and health care utilization. Community bridge organizations screen beneficiaries and connect them with community services to address SDOH needs.

KEY TAKEAWAY

AHC has screened nearly 500,000 beneficiaries, with early results indicating a 9% reduction in emergency department visits for Medicare fee-for-service beneficiaries.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation



SETTING

Multiple, including health systems and community organizations

LOCATION

United States

SCALE

National



TARGETED POPULATION

Medicare and Medicaid Beneficiaries

UPDATED

INTERVENTION DETAILS

CMS developed the AHC Model, which includes a 10-item screening tool to identify SDOH needs across five domains: housing instability, food insecurity, transportation difficulties, utility assistance needs and interpersonal safety. This tool is appropriate for use in multiple clinical settings, including pharmacies.

The AHC Model promotes clinical-community collaboration to identify unmet SDOH needs, refer individuals to community services, provide community services navigation assistance and encourage alignment of clinical and community services to ensure responsiveness to the needs of beneficiaries. From 2017 to 2022, 29 organizations implemented the AHC Model in collaboration with clinical delivery sites, community service providers, state Medicaid agencies and other stakeholders.

Implementation of the AHC Model involves collaboration between “bridge” organizations which are community services providers with clinical delivery sites to conduct SDOH screenings, make referrals to community services and assist eligible beneficiaries in navigating community services. Beneficiaries who report at least one core SDOH need and at least two emergency department (ED) visits in the 12 months prior to screening are eligible for navigation services.

OUTCOMES

Between 2017 and 2020, these organizations screened nearly 500,000 beneficiaries; 15% of these beneficiaries were eligible for community services navigation assistance. Seventy four percent of those eligible accepted community service navigation assistance for help with SDOH needs.

Those beneficiaries eligible for navigation assistance using the AHC model had three times more ED visits and two times more spending in the three years before screening than beneficiaries with one SDOH need but without two self-reported ED visits. Interim results from implementing the AHC model showed a 9% reduction in ED visits among Medicare FFS beneficiary enrollees. However, they did not see any Medicare savings or effect on other outcomes in the first year.

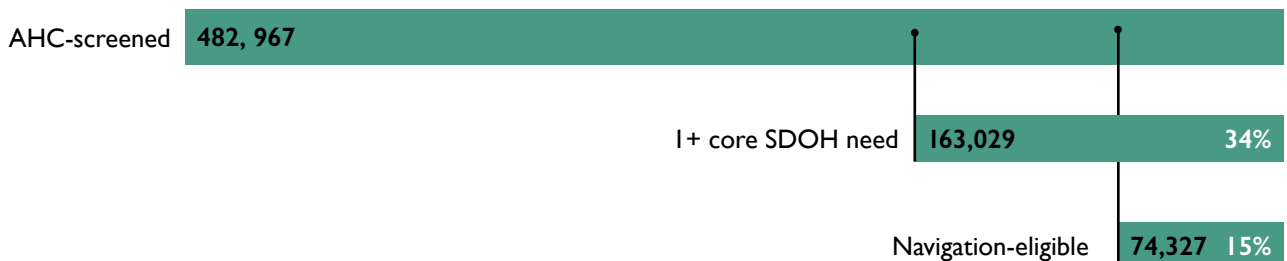
A 2022 study assessed self-reported ED utilization, SDOH needs and sociodemographic factors of AHC beneficiaries in the Greater Houston area. The most common SDOH need that beneficiaries identified was food insecurity (38.7%), followed by housing instability (29%), transportation (28%) and difficulty paying utility bills (26.7%). Multiple SDOH needs were strongly associated with frequent ED utilization.

Challenges and opportunities to advance screening, referral and navigation beyond the AHC model include addressing power imbalances between community-based organizations through continued funding of bridge organizations. Bridge organizations also identified opportunities to utilize technology to improve health equity by providing screening tools and referral resources that are culturally and linguistically appropriate for each beneficiary.

RESOURCES

- Centers for Medicare & Medicaid Services. “A Guide to Using the Accountable Health Communities Health-Related Social Needs Screening Tool.” August 2022. Accessed August 15, 2022.
- Centers for Medicare & Medicaid Services. “Accountable Health Communities Evaluation of Performance Years 1–3 (2017–2020).” 2021. Accessed August 15, 2022.
- Centers for Medicare & Medicaid Services. “Accountable Health Communities Model.” August 15, 2022. Accessed August 15, 2022.
- Centers for Medicare & Medicaid Services. “Advancing Screening, Referral, and Navigation Beyond the AHC Model.” 2021. Accessed August 15, 2022.
- Centers for Medicare & Medicaid Services. “The Accountable Health Communities Health-Related Social Needs Screening Tool.” October 20, 2021. Accessed August 15, 2022.
- Holcomb J, Highfield L, Ferguson G, et al. Association of Social Needs and Healthcare Utilization Among Medicare and Medicaid Beneficiaries in the Accountable Health Communities Model. *J GEN INTERN MED* (2022). doi.org/10.1007/s11606-022-07403-w

Navigation Eligibility of Screened Beneficiaries



Addressing Literacy Barriers through Simplified Multilingual Medication Education

First Databank

Keywords: Adherence, English proficiency, HCAHPS scores, hypertension, multilingual, visual disabilities



TYPE OF SERVICE

Intervention

BRIEF DESCRIPTION

Meducation® provides personalized medication instructions through tools such as pictograms, videos and language translations to combat barriers such as low health literacy, failing eyesight, limited English proficiency or reduced cognitive function.

KEY TAKEAWAY

Utilizing Meducation® technology has resulted in improved medication adherence and patient understanding of medication instructions in various healthcare settings. One hospital demonstrated a 70% improvement in 30-day readmission rates for high-risk patients with Meducation® medication instructions compared to standard medication instructions.



SDOH AREA ADDRESSED

Cultural or Literacy Barriers

SETTING

Various

LOCATION

Canada
United States

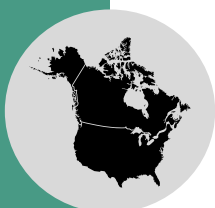


SCALE

National

TARGETED POPULATION

Individuals with limited health literacy or English proficiency or visual disabilities



INTERVENTION DETAILS

Low health literacy is a significant contributor to communication difficulties between healthcare providers, patients and caregivers. This can lead to medication errors, poor medication adherence and associated consequences, including hospital admissions.

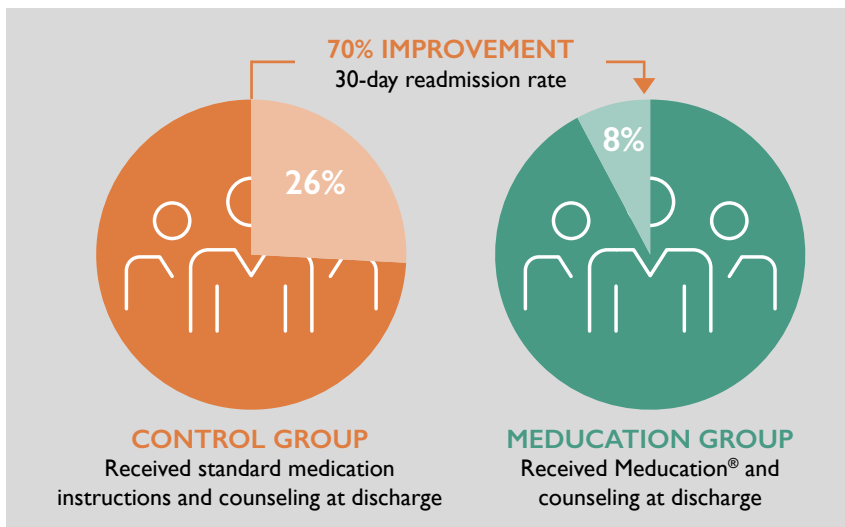
Meducation®, a proprietary cloud-based solution from First Databank, delivers simplified, patient-specific medication instructions for patients with low health literacy, limited English proficiency or visual challenges, using the electronic health record or pharmacy dispensing system to identify patients. Patient education is written at a 5th- to 8th-grade reading level, with large font sizes and in the patient's primary language. In addition to the medication information sheet, patients receive a visual medication calendar that utilizes the Universal Medication Schedule to help patients understand dosing regimens.

OUTCOMES

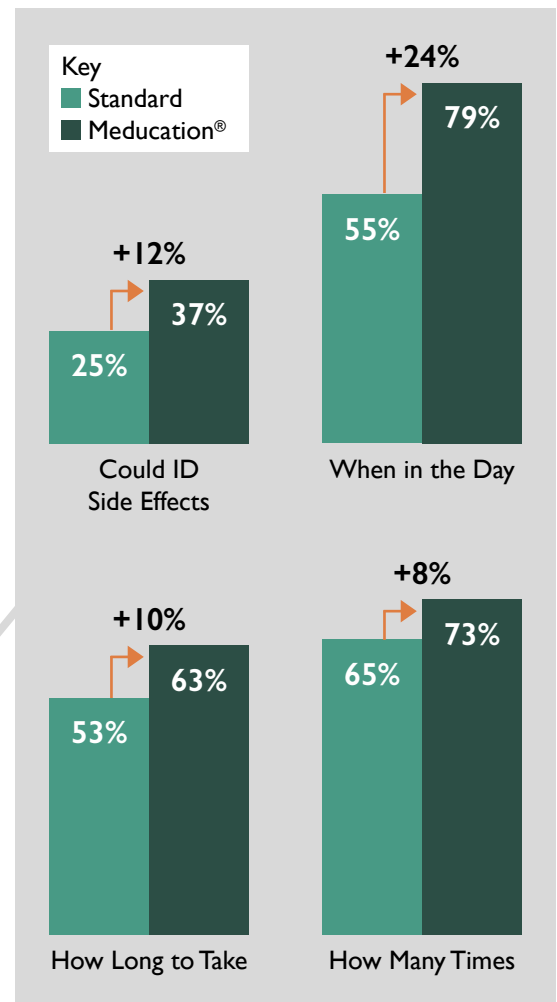
In 2014, a pilot project assessed the impact of Meducation® technology on adherence to antihypertensive medications. After six months, the medication possession ratio improved by 3.2%.

According to a study conducted at the University of the Sciences, patients were twice as likely to read Meducation® instruction sheets over the standard instructions. There was also a 52% increase in medication understanding and adherence after two weeks. Investigators assessed patients on the medication understanding categories of identifying side effects, time of day to take medication, frequency of doses and length of therapy.

Utilizing Meducation® technology has shown improvements in medication adherence, patient satisfaction and readmissions rates in hospitals. For example, at Zuckerberg San Francisco General Hospital, a pilot study demonstrated a 70% improvement in 30-day readmission rates for high-risk patients using Meducation® compared to standard medication instructions.



Two years after implementing Meducation®, Cape Canaveral Hospital's Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores increased from the 27th to the 76th percentile. Additionally, they reached the 92nd percentile for Communication About Medications at the end of year one of the program.



RESOURCES

- First Databank. Case Study Health First. Accessed November 15, 2021.
- First Databank. Meducation Helps Improve Medication Adherence by Addressing Low Health Literacy. 2019. Accessed November 19, 2021.
- First Databank. Zuckerberg San Francisco General Hospital Significantly Improves Readmission Rates with Simple Medication Instructions. 2019. Accessed November 19, 2021.
- Lee, C. "How Community Pharmacists Can Offer Clarity in the Time of COVID-19." LinkedIn. February 9, 2021. Accessed November 15, 2021.
- Meducation website. Accessed November 4, 2021.
- Zullig, L. L., McCant, F., Melnyk, S. D., Danus, S., & Bosworth, H. B. (2014). A health literacy pilot intervention to improve medication adherence using Meducation® technology. *Patient education and counseling*, 95(2), 288–291. doi.org/10.1016/j.pec.2014.02.004

In addition to the resources above, information about this intervention was obtained through correspondence between PQA and First Databank.

Allegheny County Racial and Ethnic Approaches to Community Health (REACH) Initiative

Allegheny County Health Department, Duquesne University Center for Integrative Health, multiple community-based organizations

Keywords: CDC, chronic disease prevention, community-based organizations, COVID-19, diabetes, hypertension, point-of-care testing



TYPE OF SERVICE

Screening, Referral

BRIEF DESCRIPTION

The Allegheny County REACH Initiative is a community-clinic linkage (CCL) model that allows community-based pharmacists to extend their reach outside traditional health care settings through screening, point-of-care testing and community service referrals.

KEY TAKEAWAY

By utilizing the CCL model, Allegheny County has reached Black communities and helped screen a total of 702 members, with roughly 72% of members referred to other primary care or social services.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation



SETTING

Community pharmacy

LOCATION

Allegheny County, PA

SCALE

Local



TARGETED POPULATION

Black adult community residents

UPDATED

INTERVENTION DETAILS

The REACH Initiative incorporates a community-based screening program for pop-up point-of-care testing for hypertension, diabetes, high cholesterol, cigarette smoking, food insecurity, along with counseling and referral to community services.

The project's leadership team conducted interviews with partner organizations to inform coalition strategies and improve the process for planning and development, implementation, community relationships and recommendations for continuing activities. This coalition consists of more than 25 partners and aims to increase access to healthy foods and physical activities. Community-based pharmacists conduct screenings for SDOH factors and chronic disease before making appropriate social and clinical services referrals. They also followed up with community members to support the CCL model of care access.

Between June and December 2021, REACH trained community spokespersons to answer questions about COVID-19 vaccines. Spokespersons canvassed the county providing education and resources to residents and connecting them to the VaxPgh (Where's MyVax) website. REACH also partnered with religious communities to offer additional education.

OUTCOMES

As of May 2020, community-based screenings led to referrals to clinical and social services outlined below. Between February 2019 and March 2020 in Allegheny County, the program provided health screening and linkages at 63 community events.

Duquesne University School of Pharmacy and the local YMCA offered health screenings and preventative care programs at no cost to participants. Duquesne University School of Pharmacy assisted with COVID-19 testing clinics, offered free chronic disease screenings and health management programs such as diabetes prevention and smoking cessation, and provided flu clinics at various sites.

Seven hundred and two Black community members received at least one health screening and 508 of those community members received a referral to at least one social or clinical service.

During the second half of 2021, the REACH program's efforts resulted in 1,000 residents receiving COVID-19 vaccine information through canvassing, over 1,400 social media posts and 2 million TikTok views.

Thus far the Alleghany REACH project has resulted in improved awareness of community resources, referral and tracking mechanisms, and coordination of services for individuals.

RESOURCES

Duquesne University School of Pharmacy. "Duquesne University School Of Pharmacy Partners With Allegheny County Health Department REACH For Allegheny Program." July 23, 2020. Accessed September 7, 2022.

Elliott JP, Christian SN, Doong K, Hardy HE, Mendez DD, Gary-Webb TL. Pharmacist Involvement in Addressing Public Health Priorities and Community Needs: The Allegheny County Racial and Ethnic Approaches to Community Health (REACH) Project. *Prev Chronic Dis.* 2021;18:E07. Published 2021 Jan 28. doi:10.5888/pcd18.200490

Live Well Allegheny REACH website. Accessed September 7, 2022.

Urban League of Greater Pittsburgh. "Where's My Vax." 2022. Accessed September 7, 2022.

Pharmacist Roles in Intervention

Pharmacist oversight of community health screening and CCL



Pharmacists provided telephone follow-up with community members

Outcomes

132

Referrals to diabetes prevention program

179

Referrals to smoking cessation program

338

Referrals to established primary care provider

53

Referrals to Food Bank/Just Harvest

1,000

residents received COVID-19 vaccine information

Blood Pressure Screening and Education in Churches Serving Racial and Ethnic Minorities

Community churches, University of Illinois Hospital & Health Sciences System

Keywords: Adherence, completed study, federally qualified health center, health literacy, hypertension



TYPE OF SERVICE

Intervention

BRIEF DESCRIPTION

Members of four churches in predominantly racial/ethnic minority communities participated in screenings for high blood pressure (BP). Participants received educational materials, pharmacist consultations and home BP monitoring tools. Focus groups analyzing barriers and facilitators to BP control were conducted.

KEY TAKEAWAY

A significant improvement in the percent of patients with prescriptions for BP medications and self-reported adherence was observed in participants with stage 1 hypertension (BP \geq 140/90 and $<$ 160/100 mmHg). A significant decrease in BP was observed in participants with stage 2 hypertension (BP \geq 160/100 mmHg). Focus groups revealed that the most common facilitators were social support, learning to control hypertension and community resources.

SDOH AREAS ADDRESSED

Cultural or Literacy Barriers

SETTING

Non-traditional health care

LOCATION

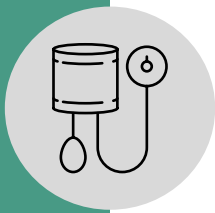
Chicago, IL

SCALE

Local

TARGETED POPULATION

Adults fluent in English or Spanish



NEW

INTERVENTION DETAILS

Health care professionals screened members of four churches in predominantly racial and ethnic minority communities for high BP. Adults with stage 1 or 2 hypertension watched an educational video, learned how to monitor their BP and received information on federally qualified health centers for primary care follow-up. Those with stage 2 hypertension also saw echocardiogram images showing reversible changes due to uncontrolled hypertension and received a pharmacist consultation. Each pharmacist consultation consisted of a medication review, drug interaction and medication adherence assessments, BP goal setting with monitoring frequency and basic BP education. Participants completed an in-person 3-month clinical follow-up to assess adherence, BP logs and hypertension knowledge.

At the end of the intervention, participants engaged in a focus group regarding facilitators and barriers to hypertension control.

OUTCOMES

Across four churches, 152 people were screened, with 89 positive for hypertension. Approximately 65% of study participants were female and over 95% of participants were Black or Hispanic. Of participants with stage 1 hypertension, 57% were taking BP medications or had previously been diagnosed with hypertension. The same was true for 70% of participants with stage 2 hypertension.

Of the participants with stage 1 hypertension, 31 of 46 followed up at three months. Of those participants, 36% had controlled BP with significantly improved medication adherence ($p=0.012$) between baseline and follow-up.

Of the participants with stage 2 hypertension, 29 of 43 followed up at three months. Mean systolic BP decreased by 15 mmHg and diastolic BP decreased by 7.5 mmHg ($p=0.001$). Of the participants that followed up, 55% decreased their BP to moderately elevated or stage 1 hypertension, and 31% achieved normal BP levels. The percentage of patients with BP prescriptions increased from 64% to 68%, while adherence remained unchanged.

Focus groups revealed that the most common facilitators to hypertension control were social support, learning how to control hypertension and community resources, including pharmacies where participants could check their BP. Even after the intervention concluded, the most common barriers were lack of knowledge about controlling hypertension, negative primary care experiences and a lack of disease awareness. Some confusion remained around BP fluctuations, what happens if participants miss medications and why so many medications exist to treat hypertension. Some participants desired to learn from patients who had already controlled their BP, and for the social support and education to continue after the study concluded.

RESOURCES

cTOUCH Study. "cTOUCH Hypertension Education- English." YouTube. April 10, 2017. Accessed June 23, 2022.

Heinert S, Escobar-Schulz S, Jackson M, et al. Barriers and Facilitators to Hypertension Control Following Participation in a Church-Based Hypertension Intervention Study. *American journal of health promotion: AJHP*, 2020;34(1), 52–58. doi.org/10.1177/0890117119868384

Prendergast HM, Escobar-Schulz S, Del Rios M, et al. Community Targeting of Uncontrolled Hypertension: Results of a Hypertension Screening and Education Intervention in Community Churches Serving Predominantly Racial/Ethnic Minority Populations. *Health promotion practice*, 2021;22(5), 714–723. doi.org/10.1177/1524839920933897

UI Health. "CTOUCH." Accessed June 23, 2022.

Outcome

Of the participants
with stage 1
hypertension

36%

had controlled BP
with significantly
improved
medication
adherence.

Outcome

Of the participants
with stage 2
hypertension

55%

decreased their
BP to moderately
elevated or stage
1 hypertension,
and 31% achieved
normal BP levels.

Building Pharmacy Capacity to Intervene on SDOH

Community Pharmacy Enhanced Services Network South Carolina (CPESN SC), University of South Carolina

Keywords: Certificate, chronic stress, ongoing study, psychosocial resiliency, risk assessment, training



TYPE OF SERVICE

Screening, Referral, Intervention

BRIEF DESCRIPTION

CPESN SC and the University of South Carolina implemented a program to train community pharmacy teams on key SDOH factors. The program also includes screening patients and an offer to connect patients to relevant SDOH resources.

KEY TAKEAWAY

This program utilizes community pharmacies as a critical access point and leverages their ability to deliver value-based care with training to identify and intervene with a patient's SDOH needs. Twenty-five pharmacies in South Carolina participated and completed 307 intervention plans in the initial four months. SDOH screening found the most prevalent SDOH factors to be social deprivation, health literacy, stress and coping deficits and food insecurity.



SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation



SETTING

Community pharmacy

LOCATION

South Carolina

SCALE

State

TARGETED POPULATION

Patients flagged by pharmacy database



INTERVENTION DETAILS

CPESN SC established this three-year program in 2019 and chose 25 of their 52 pharmacies to participate. The focus for each pharmacy will be training assistance, implementation, evaluation and scaling of SDOH services.

The University of South Carolina developed a training course entitled “Addressing Patient Barriers in the Social Determinants of Health,” covering food insecurity, social isolation, chronic stress and community resources. This course aims to train community pharmacy teams to identify SDOH needs and improve the pharmacy’s capacity to intervene on patients’ behalf regarding these SDOH factors.

In the first year, pharmacy staff complete the training course that identifies patients in need of SDOH screening. Using the data from these screenings, pharmacy staff recommend appropriate referrals. These SDOH factors link to SNOMED codes, and pharmacy staff complete eCare plans on the SDOH interventions.

This program formalizes many of the activities that registered pharmacists are already doing. It leverages the experience, skills and social trust of pharmacists to improve the health of their patients. Future plans include scaling the program to North Carolina.

OUTCOMES

Of 307 SDOH eCare Plans submitted, the SDOH factors identified most often were social deprivation, health literacy barriers, stress and coping deficits and food insecurity. This study is ongoing and aims to publish future analyses.

RESOURCES

American Public Health Association 2020 Annual Meeting. Building the Capacity of South Carolina Community Pharmacies to Intervene on the Social Determinants of Health. Abstract and Slide Deck. October 28, 2020. Accessed October 13, 2021.

Community Health Alignment Article. Building the Capacity of South Carolina Community Pharmacies to Intervene on the Social Determinants of Health. Accessed October 13, 2021.

Foster AA, Daly CJ, Logan T, et al. Addressing social determinants of health in community pharmacy: Innovative opportunities and practice models. *J Am Pharm Assoc* (2003). 2021;61(5):e48-e54. doi:10.1016/j.japh.2021.04.022

307 SDOH eCare Plans submitted

factors identified most often:

social deprivation

health literacy barriers

stress and coping deficits

food insecurity

Charitable Donation and Distribution of Medicine

Dispensary of Hope (DOH), over 50 medication donors, over 220 dispensing sites

Keywords: Adherence, ongoing study



TYPE OF SERVICE

Referral, Intervention

BRIEF DESCRIPTION

DOH receives donated medications from pharmaceutical manufacturers, then distributes them to partner dispensing sites that supply them at no cost to patients.

KEY TAKEAWAY

In 2016, DOH's collaboration with Saint Thomas Health resulted in a savings of \$650,000 per 1,000 lives attributed to the partnership. There was a 37% decrease in inpatient utilization, a 20% decrease in average cost per case and a 19% decrease in average length of stay.

A 2022 study of participating health systems identified over \$3,000 in cost savings per patient, a 20% reduction in hospital stays and a 27% reduction in utilization costs.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers

SETTING

Various

LOCATION

United States



SCALE

National

TARGETED POPULATION

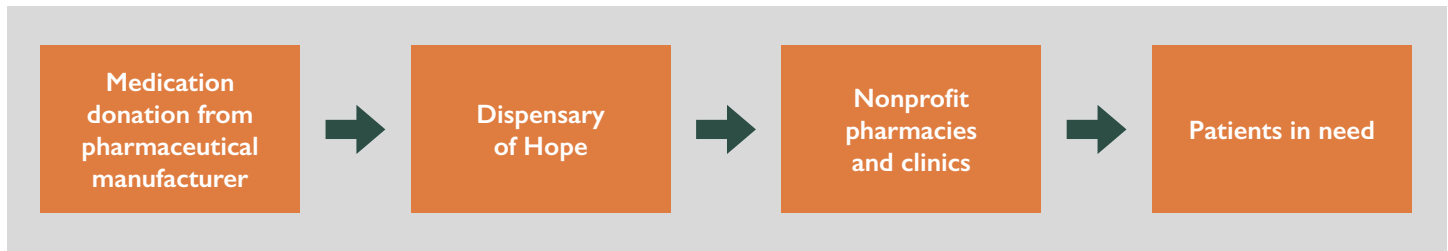
Uninsured patients at or below 300% of the Federal Poverty Level



UPDATED

INTERVENTION DETAILS

Dispensary of Hope (DOH) is a nonprofit licensed drug distributor founded in 2003 as an innovative collaboration between pharmaceutical manufacturers and dispensing sites. DOH partners with pharmaceutical manufacturers to obtain donated medications. DOH then distributes to health systems, clinics and pharmacies, allowing providers to order medications for their patients. Eligible patients receive these medications at no cost to them.



This direct pharmacy-related medication access intervention removes medication cost barriers for patients in need. Today, DOH distributes medications that are Track and Trace compliant under the Drug Supply Chain Security Act to ensure high-quality products for dispensing sites. DOH is also National Association of Boards of Pharmacy certified and licensed to distribute medication in all 50 states. Currently, they support over 220 dispensing sites in 36 states and the District of Columbia that provide over a million prescriptions per year to patients in need.

OUTCOMES

A 2016 white paper published by the Advisory Board Company analyzed data from Saint Thomas Health in Nashville, TN, one of DOH's partner dispensing sites. The analysis aggregated hospital billing data, DOH pharmacy enrollment data and medication dispensing data. Comparing data from DOH enrollees prior to and following access to medications, there was a 37% decrease in inpatient utilization, a 20% decrease in average cost per case, and a 19% decrease in the average length of stay. The study also identified annual savings to Saint Thomas Health of \$650,000 per 1,000 enrollees attributed to the partnership with DOH.

A 2022 RTI International Study analyzed outpatient pharmacy claims data from two DOH participating health systems, which includes 13 pharmacy sites in five states, to determine the medical costs of DOH patients compared to similar patients. The data from the first health system was analyzed from July 2016-December 2019 and revealed that patients who received DOH medications saved over \$3,000 annually with a 27% reduction in utilization costs and a 20% reduction in inpatient stays.

The second health system's data was analyzed from March 2014-December 2019. However, the changes in hospital costs and utilization were not statistically significant. Patients in this group had more comorbidities, which was likely associated with varying results compared to the first health system. This health system also served a more diverse population, with over 50% of patients identified as Black or African American.

RESOURCES

Advisory Board Consulting. *Dispensary of Hope White Paper: Gaining Pharmaceutical Efficiencies, Reducing U.S. Health System Cost, and Improving Health Outcomes by Providing Pharmaceuticals to Those in Need.* 2016. Accessed June 3, 2021.

Dispensary of Hope website. Accessed July 28, 2022.

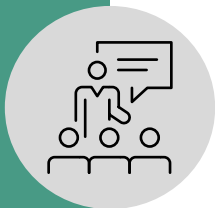
Dispensary of Hope. "2022 Study Reveals Better Health Outcomes and Significant Cost Savings." August 25, 2022. Accessed August 26, 2022.

In addition to the resources above, information about this intervention was obtained through correspondence between PQA and Dispensary of Hope.

Delayed Medication Pickup Outreach to Improve Adherence and Address Social Needs

Walgreens

Keywords: Adherence, personalized care, training



TYPE OF SERVICE

Screening, Intervention

BRIEF DESCRIPTION

Walgreens' Delayed Pickup Outreach provides targeted patient communication and resources to help improve medication access and adherence while uncovering barriers leading to prescription abandonment nationwide. To improve impact, specific pharmacy locations use health equity leaders to coach store-level team members about patient outreach. Efforts to expand coaching are in-progress to improve impact across the United States.

KEY TAKEAWAY

Implementation of Delayed Pickup Outreach through the Chicago Health Equity Incubator, a Walgreens community-centered pilot program, helps address health disparities and identifies cost, transportation and forgetfulness as the most common barriers to medication access and prescription abandonment.

SDOH AREA ADDRESSED

Cost of Medications
Screening for Unmet Needs
Transportation

SETTING

Community pharmacy

LOCATION

United States

SCALE

National

TARGETED POPULATION

Walgreens pharmacy patients nonadherent to medications



NEW

INTERVENTION DETAILS

Walgreens pharmacy team members provide targeted outreach to patients who have failed to pick up active prescriptions nine days after the refill is available at their local pharmacy. Team members contact patients to determine their specific needs and identify medication access barriers, including cost, forgetfulness, transportation and more. Team members offer resources like free, same-day delivery and digital tools which provide patients with important medication updates to address cost, transportation and health literacy barriers. Local pharmacy team members contact patients in their native language to address any language barriers they may experience.

OUTCOMES

Nationwide implementation of Walgreens' Delayed Pickup Outreach ensures engagement across communities, reduces barriers to medication access and improves understanding of causes of prescription abandonment. Specific efforts by the Chicago Health Equity Incubator, a Walgreens community-centered pilot program to address health disparities through evidence-based efforts and pharmacist-provided resources, resulted in more than 122,000 calls and 5,000 free, same-day deliveries from November 2020 to November 2021.

As of July 2022, team member coaching has expanded to 18 stores piloting Chicago Health Equity Incubator and 47 stores using an expanded care model in Texas, Arizona, New Mexico and Nevada. In the future, Walgreens aims to scale Delayed Pickup Outreach team member coaching chainwide with the Health Equity Regional Champions Network.

RESOURCES

The Wall Street Journal Business. "Leading the Fight to Address Health Inequities." 2022. Accessed September 14, 2022.

Walgreens Newsroom. "Taking a community-based approach to health equity." April 20, 2022. Accessed September 14, 2022.

In addition to the resources above, information about this intervention was obtained through correspondence between PQA and Walgreens.

Walgreens Team Member Role in Intervention

Medication is refilled in a local Walgreens pharmacy



If medication is not picked up from the pharmacy in nine days, a Walgreens team member contacts the patient to assess barriers to medication access.

Outcomes in the Chicago Health Equity Incubator

122,000

Delayed pickup outreach calls completed

5,000+

Free same day deliveries

Embedding Pharmacists in Primary Care Clinics to Increase Medication Access

Ascension Saint Thomas, AscensionRx Community Pharmacies, Dispensary of Hope

Keywords: Adherence, A1c control, chronic conditions, diabetes, interprofessional, telehealth



TYPE OF SERVICE

Screening, Intervention

BRIEF DESCRIPTION

Embedding pharmacists within clinics improve quality metrics for ambulatory care sensitive conditions by removing barriers to optimal medication use.

KEY TAKEAWAY

Ascension Medical Group Saint Thomas embedded pharmacists in clinics utilizing collaborative practice agreements and assisting patients in overcoming medication related barriers to care, including medication cost.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Screening for Unmet Needs

SETTING

Health system

LOCATION

Tennessee

SCALE

State



TARGETED POPULATION

Ambulatory clinic patients



UPDATED

INTERVENTION DETAILS

Throughout Ascension Medical Group (AMG) Tennessee, pharmacists are embedded within primary care clinics to support optimal medication outcomes for ambulatory patients.

Pharmacists that serve these clinics receive referrals from collaborating physicians and nurse practitioners to provide comprehensive medication management for patients with uncontrolled chronic conditions, such as diabetes and hypertension. This care is provided via a collaborative practice agreement, both in person and through telehealth modalities. It covers 20 disease states and areas of practice, including diabetes, hypertension, asthma, COPD and hepatitis C.

AMG has partnered with AscensionRx Community Pharmacies and Dispensary of Hope to provide patients with medications at reduced cost to resolve medication access issues. Embedded clinical pharmacy specialists are uniquely equipped to solve these medication access barriers as residency trained, board-certified clinicians who can assess and recommend safe and effective treatments and understand how to address medication access barriers.

OUTCOMES

In the 2022 fiscal year, pharmacists at AMG Tennessee worked with patients with diabetes and reduced the percent of patients with hemoglobin A1c levels greater than 9%. Before the pharmacist intervention, nearly 14% of patients had an A1c greater than 9%, compared to 9% of patients after the intervention. Pharmacists closed over 200 statin use gaps among patients with diabetes or cardiovascular disease. Additionally, medication-access assistance referrals provided a value of over \$5.5 million through manufacturer-sponsored patient assistance programs.

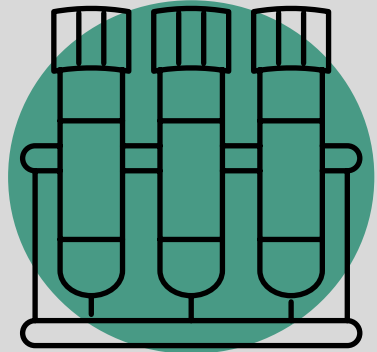
RESOURCES

AscensionRx website. Accessed August 18, 2022.

Tennessee Pharmacists Association Committee Spotlight. "ad hoc Collaborative Pharmacy Practice." June 5, 2020. Accessed August 18, 2022.

In addition to the resources above, information about this intervention was obtained through correspondence between PQA and Ascension Saint Thomas.

Before the pharmacist intervention, nearly 14% of patients had an A1c greater than 9%, compared to 9% of patients after the intervention.



Free Delivery Services to Increase Medication Access in Chicago

Walgreens

Keywords: Adherence, race



TYPE OF SERVICE

Intervention

BRIEF DESCRIPTION

In response to medication access barriers caused by the COVID-19 pandemic and simultaneous civil unrest, 117 Walgreens stores in Chicago, implemented free medication delivery services to improve patient prescription medication access.

KEY TAKEAWAY

Implementation of free medication delivery in Chicago, led to a 4.5% increase in medication refills in predominantly Black communities and a 3.9% increase in predominantly Hispanic communities compared with patients who did not use the delivery service.



SDOH AREA ADDRESSED

Cultural or Literacy Barriers
Transportation

SETTING

Community pharmacy

LOCATION

Chicago, IL



SCALE

Local

TARGETED POPULATION

Walgreens Pharmacy patients



NEW

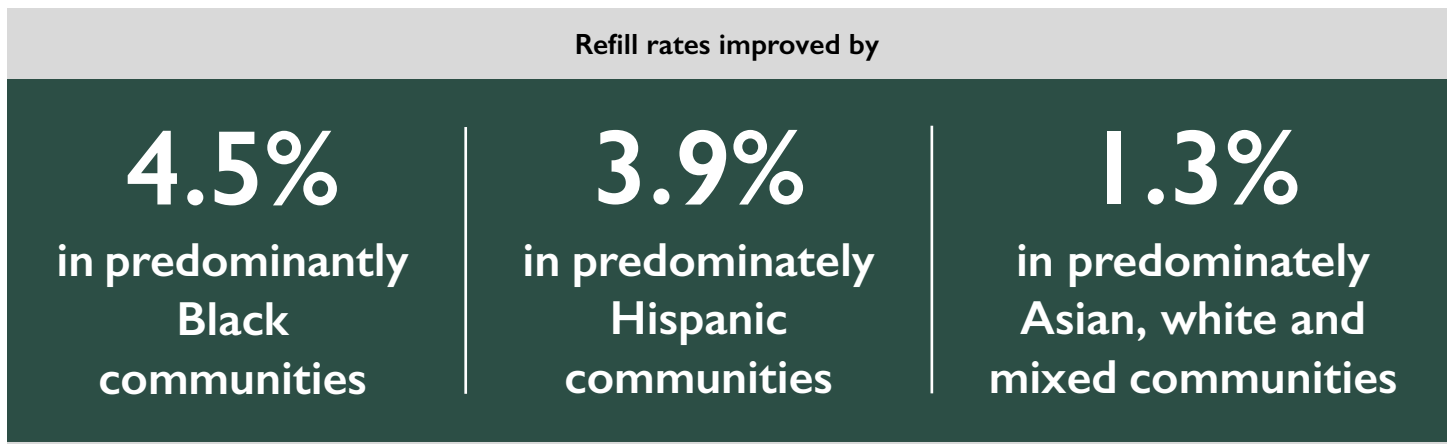
INTERVENTION DETAILS

In 2020, the COVID-19 pandemic and simultaneous civil unrest presented prescription medication access barriers for Walgreens pharmacy patients in Chicago. To improve medication access for patients, 117 Walgreens pharmacies offered free medication delivery to patients. To assess impact, medication refill rates from March-September 2019, the period before medication access barriers related to COVID-19 and civil unrest and program implementation, were compared with medication refill rates from March-September 2020, the period during program implementation.

Additionally, census data was used to determine the predominant race and ethnicity of communities served by respective Walgreens locations. Predominant race and ethnicity designations were determined if $\geq 55\%$ of the population identified as Black, Hispanic or Other. Other was defined as predominantly white, Asian or mixed neighborhoods.

OUTCOMES

From March-September 2019, the period before the program implementation, refill rates were lower at pharmacies located in predominantly Black (85.3%) and Hispanic (87.0%) neighborhoods when compared with those in 'Other' (90.1%) neighborhoods. Implementing free medication delivery increased medication refill rates by 4.5 times from March-September 2020 for patients at all 117 Chicago Walgreens locations, but the increase was most notable for patients in predominately Black neighborhoods. When compared to patients who did not utilize the delivery service, refill rates improved by 4.5% in predominantly Black communities, 3.9% in predominately Hispanic communities, and 1.3% in predominately Asian, white and mixed communities.



RESOURCES

Walgreens. "The power of preparation: Walgreens on the front lines in times of crisis." 2020. Accessed August 9, 2022.

Walgreens. "Walgreens Takes Further Action To Support Customers During COVID-19 Pandemic." March 12, 2020. Accessed August 9, 2022.

Walgreens website. Accessed August 9, 2022.

In addition to the resources above, information about this intervention was obtained through correspondence between PQA and Walgreens Specialty & Retail Pharmacy Operations.

Free Transportation to Medical Visits Provided by Health Plan

Blue Cross Blue Shield (BCBS) Institute, Lyft

Keywords: Adherence, COVID-19, health plan



TYPE OF SERVICE

Intervention

BRIEF DESCRIPTION

Nearly 4 million Americans struggle with healthcare access due to unreliable transportation. The BCBS Institute and Lyft partnered nationally to provide BCBS members free transportation to non-emergency medical visits.

KEY TAKEAWAY

The BCBS partnership with Lyft has shown an improvement in care coordination, prevention in emergency department visits, prescription pickup rates and a decrease in appointment no-shows.



SDOH AREA ADDRESSED

Transportation

SETTING

Health plan

LOCATION

United States

SCALE

National



TARGETED POPULATION

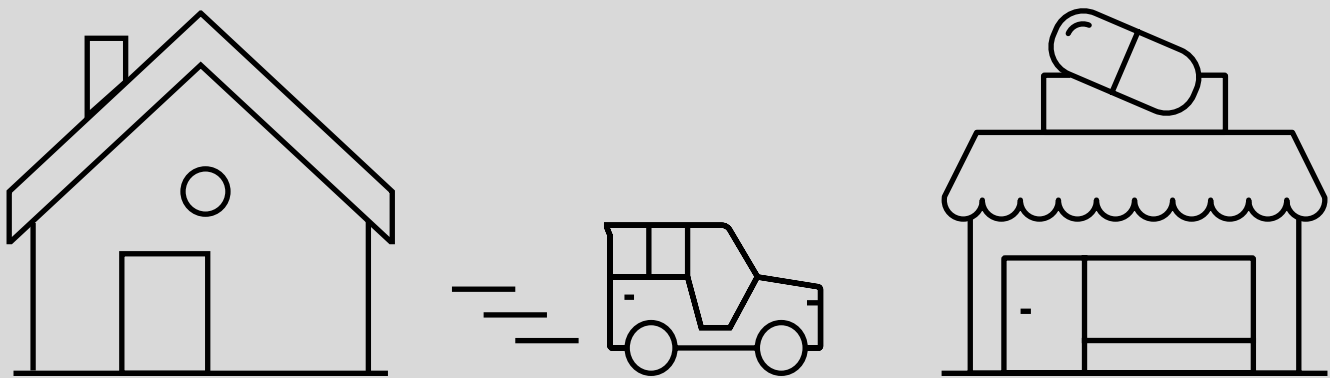
BCBS members



INTERVENTION DETAILS

In 2018, BCBS Institute partnered with Lyft to launch rideQ, which helps members living in areas with limited public transit access and low rates of vehicle ownership with free transportation to non-emergency medical visits. BCBS members of various state specific health maintenance organizations or preferred provider organization plans can self-enroll online in the rideQ program. Members, prescribers or care coordinators can organize individual rides with Lyft. BCBS Institute offers rideQ customer support staff who speak both English and Spanish to enrollees and care coordinators. In 2019, Blue Shield of California launched a year-long pilot program in Sacramento to expand eligible destination options for free member transportation. These destinations include physicians' offices, hospitals, pharmacies, labs and radiology visits and urgent care. Blue Shield of California notified members of their eligibility through personalized emails and letters. Additionally, providers at the Associated Family Physicians, Inc., who participated in the program, discussed rideQ with eligible members during medical appointments.

In 2021, BCBS of Massachusetts and BCBS of North Carolina leveraged their Lyft partnership to provide free rides to COVID-19 vaccination sites. Members could book rides through various channels, including visiting a community health center or contacting a dedicated call center.



OUTCOMES

The implementation of this model has shown an improvement in care coordination, prevention in emergency department visits and a decrease in appointment no-shows. An increase in pharmacy access through this program has resulted in a higher pickup rate for both initial and subsequent prescriptions.

While Blue Shield of California has assessed member adoption rates, consistency and frequency of use and the impact on members' overall health, the results have yet to be published. As of December 2019, BCBS has received high patient satisfaction ratings of 98%.

RESOURCES

Beaton, T. "BCBS Launches Institute to Address Social Determinants of Health." Health Payer Intelligence. March 15, 2018. Accessed November 15, 2021.

Blue Cross Blue Shield. "Blue Cross and Blue Shield and Lyft Join Forces to Increase Access to Health Care in Communities with Transportation Deserts." May 10, 2017. Accessed November 15, 2021.

Blue Shield California. "Non-Emergency Transportation Benefit Frequently Asked Questions." September 2020. Accessed November 15, 2021.

Manos, D. "How Blue Shield of California plans to use Lyft to aid its members." Health Data Management. September 24, 2019. Accessed November 15, 2021.

PQA National Forum. "Caring for the Whole Patient: Leveraging Pharmacists to Address Social Determinants of Health." YouTube. December 19, 2019. Accessed November 15, 2021.

PR Newsire. "Blue Shield of California Debuts rideQ Medical Transportation Program with Lyft in Sacramento for Eligible Members Who Need Rides to Doctor's Appointments." September 18, 2019. Accessed November 15, 2021.

Waddill, K. Payers Partner with Lyft to Expand Coronavirus Vaccine Access. Health Payer Intelligence. March 29, 2021. Accessed November 19, 2021.

HealthTag Initiative

Aetna, CVS Health, Unite Us

Keywords: Community based organizations, health plan, Medicaid, ongoing program, public health, rural



TYPE OF SERVICE

Referral

BRIEF DESCRIPTION

The CVS HealthTag Initiative leverages pharmacist-patient interactions to facilitate communication addressing SDOH factors. Using Aetna claims data analysis, CVS pharmacists provide personalized referrals to community services organized by Unite Us.

KEY TAKEAWAY

CVS Health has partnered with Unite Us and Aetna to provide personalized referrals to patients who may benefit from community services in 47 different locations.



SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Social Isolation
Transportation

SETTING

Community pharmacy

LOCATION

Louisiana
West Virginia



SCALE

Regional

TARGETED POPULATION

Medicaid beneficiaries





Eighty-six percent of the population lives [near] one of CVS’ 9,900 locations, so they are more likely to go to a pharmacy than go into a health care provider.

RJ Briscione, senior director for social determinants of health strategy at CVS Health



INTERVENTION DETAILS

CVS HealthTag Initiative is part of a more extensive series called Destination: Health which is operated by CVS Health. The HealthTag initiative is a collaboration among CVS Health, Aetna, and Unite Us. Unite Us is a social care coordination platform that connects patients to community-based organizations to meet their specific SDOH needs.

When Aetna Medicaid patients pick up their prescriptions at CVS pharmacies, pharmacists share information about resources available through Unite Us. Included with the medication bag are instructions for enrolling in Unite Us so that patients can access community services for housing, transportation, and nutrition. This program is personalized using Aetna Medicaid data to identify those who need these referrals.

The HealthTag program is in 32 stores in Louisiana and 15 stores in West Virginia with plans to expand.

OUTCOMES

This program is ongoing.

RESOURCES

Blank, C. “CVS Health, Aetna Realize Early Success with Social Determinants of Health Pilot Program.” Drug Topics. December 24, 2020. Accessed October 5, 2021.

Graham, G. “Addressing Social Determinants of Health at the Pharmacy.” US News. November 8, 2020. Accessed October 5, 2021.

Minemyer, P. “Aetna pilot harnesses CVS pharmacists to address Medicaid members’ social needs.” Fierce Healthcare. November 24, 2020. Accessed October 5, 2021.

Unite Us website. Accessed October 6, 2021.

Health Zones Addresses Multiple SDOH Areas

Community-based organizations, CVS Health, Uber Health

Keywords: Chronic conditions, community-based organizations, education, employment, mobile clinic, ongoing



TYPE OF SERVICE

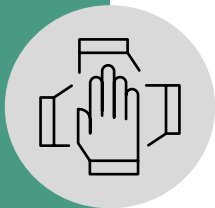
Intervention

BRIEF DESCRIPTION

Health Zones, a CVS Health strategy to address SDOH on a local level, has partnered with various community-based organizations to provide access to health care and social services and transportation via a partnership with Uber Health.

KEY TAKEAWAY

Health Zones focuses on local needs to build partnerships and solutions addressing SDOH barriers and improve overall wellbeing in underserved communities.



SDOH AREA ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Decent, Safe, and Affordable Housing
Food Security
Social Isolation
Transportation

SETTING

Non-traditional health care

LOCATION

Atlanta, GA
Columbus, OH
Fresno, CA
Hartford, CT
Phoenix, AZ

SCALE

Local

TARGETED POPULATION

Individuals from underserved zip codes in the cities above



NEW

INTERVENTION DETAILS

Launched in early 2022, CVS Health's five-year program, Health Zones, leverages partnerships with local community-based organizations to address six SDOH barriers: housing, education, access to food, labor and workforce, transportation and health care.

This strategy is used in five cities, focusing on underserved zip codes. CVS Health partners with community-based organizations to provide services such as food pantries, cooking and nutrition classes, maternal programs and pop-up clinics. Needs for additional services are assessed locally and provided in collaboration with community-based organizations.

In Phoenix, CVS Health is leveraging its program, Project Health, to deploy mobile clinics to provide screenings for body mass index, blood pressure and total cholesterol, followed by optional counseling about their individual risk with a nurse practitioner.

In Atlanta, Columbus and Hartford, CVS Health has partnered with Uber Health to provide individuals with transportation to access medical care, work or educational programs. CVS Health and Uber Health plan to expand this offering to additional cities in 2022.

CVS Health's 2021 investment of \$185 million to support over 6,500 affordable housing units nationwide is critical to the success of Health Zones. The housing directly impacts health and the ability to address other SDOH factors through the Health Zones initiative.

OUTCOMES

This program is ongoing.

RESOURCES

CVS Health. "Breaking down health barriers by building affordable housing." January 19, 2022. Accessed June 15, 2022.

CVS Health. "CVS Health and Uber Health collaborate to advance health equity in communities nationwide." January 19, 2022. Accessed June 15, 2022.

CVS Health. "Health Zones." Accessed June 15, 2022.

CVS Health. "How mobile health screenings increase access to care." January 19, 2022. Accessed June 15, 2022.

CVS pharmacy. "Project Health." Accessed June 15, 2022.

Diaz, N. "CVS launches 'Health Zones' initiative." Becker's Hospital Review. February 1, 2022. Accessed June 15, 2022.

Levy, S. "CVS Health, Uber to provide transportation for individuals in underserved communities." Drug Store News. January 19, 2022. Accessed June 15, 2022.



We've long known that access to reliable transportation can help address critical gaps in care that often disproportionately affect vulnerable communities. With the past two years of the pandemic only further highlighting today's health inequities, it's more important than ever for communities to have the tools they need to bridge care gaps and achieve better patient and population health outcome.

Caitlin Donovan, Global Head of Uber Health



HomeMeds: Evidence-Based, In-Home Medication Review and Intervention

Community-based organizations, Partners in Care Foundation (PICF)

Keywords: Adherence, chronic conditions, community-based organizations, comprehensive medication management, personalized care



TYPE OF SERVICE

Screening, Referral, Intervention

BRIEF DESCRIPTION

HomeMeds is an evidence-based program that identifies, assesses and resolves medication therapy problems for older adults through in-home, telephonic and online visits by trained health coaches. Clinical pharmacists, geriatric nurse practitioners or physicians review patient medication therapy problems and communicate findings and recommendations with the patient and their care team.

KEY TAKEAWAY

Implementation of HomeMeds resulted in improved medication use overall, improved use of cardioprotective medications and reduced medication therapy duplication 6-12 weeks after the initial visit.

SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Screening for Unmet Needs
Social Isolation
Transportation



SETTING

Nontraditional health care



LOCATION

United States

SCALE

National

TARGETED POPULATION

Older adults and people with chronic conditions treated with medications



NEW

INTERVENTION DETAILS

The Partners in Care Foundation (PCIF) trains health coaches that include nurses, social workers, mental health therapists, pharmacists and community health workers to conduct in-home, telephonic or online comprehensive medication assessments. Patients may be interviewed about medication adherence, adverse effects, home safety, functional needs and psychosocial factors. Throughout the evaluation, the patient's information is input into the HomeMeds web-based software. Following the health coach evaluation and documentation, an individualized care plan is created that includes patient education and social services as needed.

Community based organizations arrange for a pharmacist, geriatric nurse practitioner or physician to review medication therapy problems for patients identified through the HomeMeds computerized risk assessment analysis. If needed, medication therapy interventions are recommended to the patient and their care team. Follow-up is provided as needed by the pharmacist or provider after the initial visit. In addition to addressing medication-related needs, health coaches can connect patients to community programs to address social needs.

OUTCOMES

Implementation of HomeMeds resulted in improved medication use overall with 50% of patients experiencing improvement in medication problems; improved use of cardioprotective medications, with 55% of patients experiencing improvement in cardiovascular medication problems; and reduced medication duplication with 71% of patients stopping duplicative therapy 6-12 weeks after their initial visit.

From December 16, 2019, to February 15, 2020, 78% of HomeMeds visits resulted in identification of medication concerns with referral to a clinical pharmacist.

Additionally, patients discharged from University of California, Los Angeles (UCLA) Ronald Reagan Medical Center who received a HomeMeds visit had a significantly lower probability of hospital readmission within 30 days when compared with patients who did not receive a HomeMeds visit.

RESOURCES

National Council on Aging. "Evidence-Based Program: HomeMeds." September 2020. Accessed September 7, 2022.

Partners In Care Foundation. website. Accessed September 7, 2022.

Sorensen A, Grotts JF, Tseng CH, et al. A Collaboration Among Primary Care-Based Clinical Pharmacists and Community-Based Health Coaches. *J Am Geriatr Soc.* 2021 Jan;69(1):68-76. doi: 10.1111/jgs.16839.

Woosley, R. L., Simmons, J., Sefilyan, et al. (2021). Linking technology to address the social and medical determinants of Health for Safe Medicines use. *Journal of Patient Safety*, 18(2). doi.org/10.1097/pts.0000000000000876

Outcome

From December 16, 2019,
to February 15, 2020,

78%

of HomeMeds visits
resulted in identification
of medication concerns
with referral to a clinical
pharmacist.

Identifying and Addressing Medication Access Barriers Through Pharmacist-Led Case Management

IngenioRx, Inc.

Keywords: Adherence, chronic conditions, medication complexity, ongoing study



TYPE OF SERVICE

Screening, Referral, Intervention

BRIEF DESCRIPTION

The IngenioRx pharmacist-led case management program identifies members facing barriers to medication access through care assessments. Following identification, pharmacists conduct SDOH screenings to intervene on social needs or refer members to community partners.

KEY TAKEAWAY

As part of ongoing efforts to integrate SDOH initiatives into its clinical programs, IngenioRx's case management program utilizes standard tools and referral pathways to address medication access barriers and social needs.



SDOH AREAS ADDRESSED

Screening for Unmet Needs
Cost of Medications
Transportation

SETTING

Health plan

LOCATION

United States



SCALE

National

TARGETED POPULATION

IngenioRx patients experiencing barriers in medication access



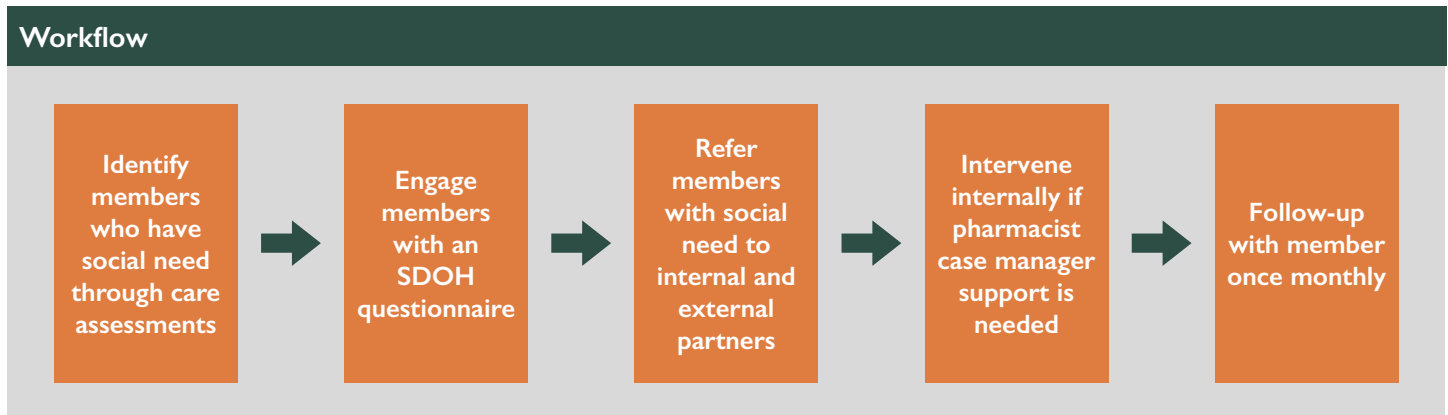
NEW

INTERVENTION DETAILS

IngenioRx, Inc., the pharmacy benefits manager for Elevance Health, offers a concierge service that follows members throughout their medication journey. This pharmacist-led case management program aims to improve medication access for members who are nonadherent to medications. Among members who qualify for the services are those who receive pharmacy benefits through IngenioRx and receive low-income subsidies or have complex chronic conditions. Using telephonic communication and text messages, a team of pharmacists works with members to assess barriers to care.

Member encounters include standardized care assessments to identify social needs, and pharmacists may ask additional standardized SDOH questions to garner further details. Pharmacists remove barriers to care by utilizing internal and external referral pathways followed by interventions by pharmacists and community partners. For example, pharmacists might use or refer members to *findhelp.org*, formerly known as Aunt Bertha, to identify local social needs resources or arrange for home delivery of a member's medications. Additional partnerships with community pharmacies are in development.

The program provides member follow-up at least once monthly.



OUTCOMES

This program is ongoing.

RESOURCES

Elevance Health. "Advancing Health Equity: What Is Pharmaco-equity?" June 28, 2022. Accessed August 29, 2022.

In addition to the resource above, information about this intervention was obtained through correspondence between PQA and IngenioRx, Inc.

Improving Medication Adherence Among Minority Patients

Arine, MedArrive, SCAN Health Plan, University of Southern California School of Pharmacy

Keywords: Adherence, chronic conditions, health plan, training



TYPE OF SERVICE

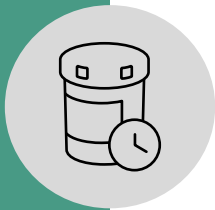
Screening, Intervention

BRIEF DESCRIPTION

SCAN Health Plan implemented targeted patient outreach and interventions completed by trained pharmacists and healthcare navigators to improve medication adherence for Black and Hispanic members.

KEY TAKEAWAY

Eighteen months after implementation, SCAN Health Plan reduced medication adherence disparities by 35% for Black and Hispanic patients. This led to over 700 minority patients adhering to their cholesterol, blood pressure, and diabetes medications.



SDOH AREAS ADDRESSED

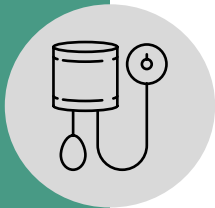
Cultural or Literacy Barriers
Screening for Unmet Needs
Transportation

SETTING

Health plan

LOCATION

Arizona
California
Nevada



SCALE

Regional

TARGETED POPULATION

Black and Hispanic SCAN Health Plan members



NEW

INTERVENTION DETAILS

In 2020, SCAN Health Plan analyzed cholesterol, blood pressure and diabetes medication adherence quality scores and identified racial and ethnic disparities among Black and Hispanic members when compared with white, non-Hispanic members. Based on the analysis, SCAN Health Plan implemented an initiative to improve medication adherence for Black and Hispanic members. SCAN Health Plan defined medication adherence based on the CMS requirement of 80% proportion of days covered (PDC) for diabetes, cholesterol and blood pressure medicines.

Baseline Adherence by Racial/Ethnic Group

Measure	White (%)	Black (%)	Hispanic (%)
Adherence to cholesterol medications	86	83	81
Adherence to oral diabetes medications	86	81	84

The \$1 million initiative used incentive-based employee bonuses, member interviews, member focus groups, Black and Hispanic staff recruitment and training and multi-team support to impact member adherence. Training included an emphasis on cultural humility, which was critical in building trust with members and supporting them in improving medication adherence. Additionally, ten percent of senior leadership's annual bonuses were directly linked to the adherence scores of minority patients to boost involvement. Beyond SCAN Health Plan team member intervention, third-party vendors aided in the expansion of efforts. Arine pharmacists completed targeted outreach; MedArrive nurse practitioners completed home-based medication visits; and the University of Southern California School of Pharmacy improved medication education to members through fotonovelas, Spanish-language stories told through photographs depicting the importance of medication adherence.

OUTCOMES

Member interviews and focus groups revealed the top reasons behind medication nonadherence: lack of knowledge about prescription benefits and medication uses, transportation issues, medical professional distrust, language barriers and cultural beliefs.

A year and a half following implementation, SCAN Health Plan reduced its racial and ethnic medication adherence gap by 35% for Black and Hispanic patients. Through targeted, minority pharmacist-led patient outreach, SCAN Health plan aided 700 Black and Hispanic patients to reach at least 80% PDC for cholesterol, blood pressure and diabetes medications.

Implementation of this initiative demonstrates that cultural literacy training, open communication with members, culturally diverse pharmacists and care navigators and team-based approaches to care can impact medication adherence for minority patient populations.

SCAN is using similar strategies to improve diabetes care for Hispanic members, increase flu vaccinations among Black members and address other areas where inequities exist among their members.

RESOURCES

Jhavar, S., Batra, R., Dinh, M., et al. "How One Health Plan Reduced Disparities in Medication Adherence." *Harvard Business Review*. July 11, 2022. Accessed July 21, 2022.

Murphy, J. "Improving Population Health Can Start With Adjusting Traditional Pharmacy Solutions." *Pharmacy Times*. May 5, 2022. Accessed August 4, 2022.

Outcome

SCAN Health Plan reduced its racial and ethnic medication adherence gap by 35% for Black and Hispanic patients.

Incorporating SDOH into Telepharmacy Visits

University of North Carolina Eshleman School of Pharmacy

Keywords: Care coordination, completed study, comprehensive medication management, COVID-19, diabetes, patient assistance programs, rural, telehealth, telepharmacy



TYPE OF SERVICE

Screening, Referral, Intervention

BRIEF DESCRIPTION

This study examined the addition of SDOH screening and intervention to comprehensive medication management (CMM) telepharmacy services in rural primary care clinics. Investigators documented pharmacist-led SDOH interventions, assessed stakeholders' feedback on the services and impacts on patients with diabetes.

KEY TAKEAWAY

SDOH screening led to pharmacist intervention on multiple SDOH factors. Clinic stakeholders and patients were satisfied with the service.

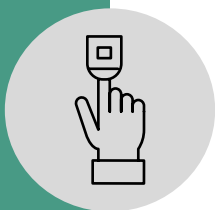


SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Food Security
Screening for Unmet Needs
Transportation

SETTING

Primary care clinic

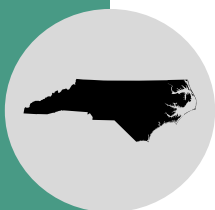


LOCATION

North Carolina

SCALE

State



TARGETED POPULATION

Adult patients with diabetes

INTERVENTION DETAILS

This exploratory study assessed the feasibility of including SDOH support within CMM telepharmacy visits. Patients with poorly controlled diabetes in four primary care clinics in rural and underserved North Carolina communities could participate in these visits. Participating clinics did not include SDOH services prior to the initiation of the study.

One part-time clinic pharmacist used a screening tool to assess patients' SDOH needs, including those resulting from COVID-19. The screening tool assessed factors which included employment, transportation needs and access to medications. The pharmacist collected further information on identified SDOH needs and initiated a brief intervention to address them. Interventions included patient education, providing medication coupons, sharing job resources and care coordination.

OUTCOMES

This part-time clinic pharmacist provided 200 telehealth visits for 66 patients over four months, all of which included screenings for SDOH needs. There were 37 needs identified across 27 patients, including employment, health literacy and access to medication. Eleven needs were addressed prior to screening, and the pharmacist provided support through brief interventions for the remaining 26.

The clinic team reported that the pharmacist's SDOH services were beneficial and were satisfied with the pharmacist's services. They noted challenges with a lack of reimbursement for the SDOH services.

Patients reported positive experiences with telepharmacy visits and increased confidence in having their SDOH needs met, including increased access to medications. Patients also reported increased diabetes quality of life.

RESOURCES

Livet M, Levitt J, Lee A, Easter J. The pharmacist as a public health resource: Expanding telepharmacy services to address social determinants of health during the COVID-19 pandemic. *Explor Res Clin Soc Pharm.* 2, 100032. doi: 10.1016/j.rcsop.2021.100032

Pharmacist-Provided SDOH Interventions

Patient Education

- Exercise
- COVID-19 Testing
- COVID-19 Vaccines
- Limiting Exposure to COVID-19

Referral to Community Resources

- Grocery delivery
- Medication coupons
- Job information

Care Coordination

- Referral to pharmacy offering delivery
- Patient assistance programs

Integrating SDOH into Comprehensive Medication Management

University of Minnesota College of Pharmacy

Keywords: Behavioral health, coaching, completed study, comprehensive medication management, health consultant, medication therapy problems



TYPE OF SERVICE

Screening, Referral

BRIEF DESCRIPTION

Two pharmacists, providing comprehensive medication management (CMM) in a behavioral health clinic, integrated SDOH into CMM visits. Pharmacists received introductory SDOH training and regular coaching calls to refine SDOH incorporation into CMM. Researchers conducted qualitative analyses to evaluate the pharmacists' experience with the initiative.

KEY TAKEAWAY

SDOH training and coaching calls helped increase pharmacists' awareness of SDOH factors experienced by their patients, and documenting SDOH factors helped form linkages between SDOH and medication therapy problems (MTPs). Pharmacists expressed that many SDOH factors identified would have come up naturally but found that recognizing and defining SDOH factors supported a clear understanding of impacts on patients' health status.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation



SETTING

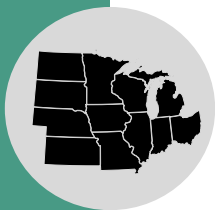
Outpatient behavioral health clinic

LOCATION

Midwest

SCALE

Local



TARGETED POPULATION

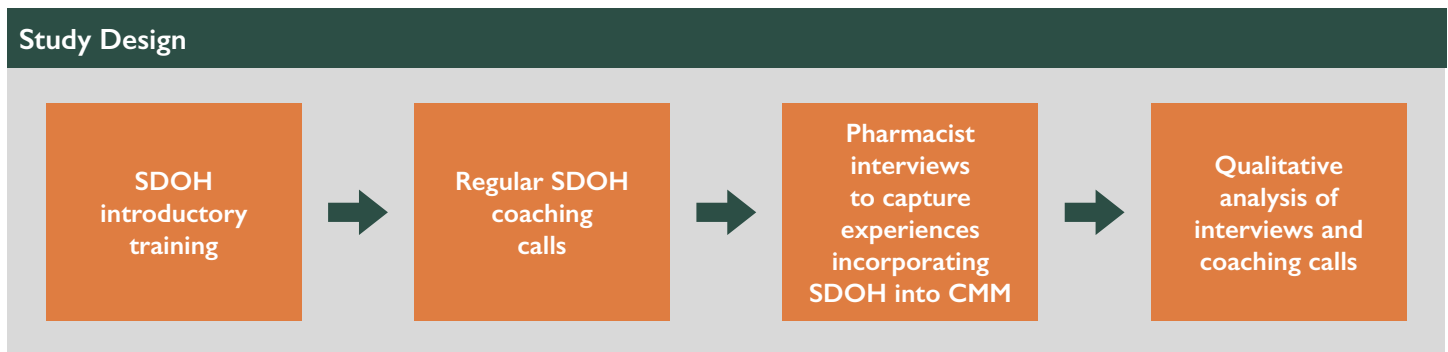
Patients receiving CMM at a behavioral health clinic

INTERVENTION DETAILS

In 2018, one outpatient behavioral health clinic selected two residency-trained pharmacists to receive a 45-minute introductory presentation on SDOH. They also received SDOH coaching calls from a consultant with expertise in quality improvement and implementation for the following ten months. These calls support the pharmacist to incorporate SDOH into CMM in-person or telephonic visits.

If SDOH factors arise during CMM visits, pharmacists ask open-ended questions to learn more about the specific factor(s). During their coaching calls, the pharmacists discuss SDOH factors to evaluate how SDOH may directly relate to MTPs, such as nonadherence.

After the study period, the pharmacists were interviewed to assess their experience incorporating SDOH into CMM visits. Coaching calls and interviews were recorded and qualitatively analyzed.



OUTCOMES

Descriptions of the experience and perceptions to incorporate SDOH into CMM visits were coded and linked to the Pharmacists' Patient Care Process steps, such as collecting information about the patient, assessing the information collected and developing a patient-centered plan.

Pharmacists felt it was best to ask open-ended questions about SDOH related to medication use. Initially, pharmacists struggled to link SDOH to MTPs but gained competency through coaching calls and experience. Pharmacists expressed that they may have identified these SDOH factors naturally, but the increased focus on SDOH increased understanding of overall health impact.

An additional study is needed on incorporating SDOH into healthcare visits, including CMM.

RESOURCES

Joint Commission of Pharmacy Practitioners. "The Pharmacists' Patient Care Process." 2021. Accessed November 17, 2021.

Pestka DL, Espersen C, Sorge LA, Funk KA. Incorporating social determinants of health into comprehensive medication management: Insights from the field. *J Am Coll Clin Pharm.* 2020; 3: 1038– 1047. doi.org/10.1002/jac5.1254

Medicare Part D Outreach Clinics Address Medication Costs and Provide Multilingual Education

First Databank, Thomas J. Long School of Pharmacy, University of the Pacific

Keywords: Adherence, English proficiency, Medicare beneficiaries, medication therapy problems, navigation



TYPE OF SERVICE

Intervention

BRIEF DESCRIPTION

The University of the Pacific Thomas J. Long School of Pharmacy Medicare Part D Outreach Clinics assists seniors in selecting clinically and financially beneficial Medicare prescription coverage and completing medication therapy management (MTM) and multilingual education at no cost to patients.

KEY TAKEAWAY

Over the past fifteen years, the clinics have assisted over 10,000 seniors with services, including Medicare Part D prescription drug plan selection, MTM, preventative care services and multilingual education. To date, this initiative has resulted in an estimated total savings of \$10 million for Medicare beneficiaries in northern and central California.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Transportation

SETTING

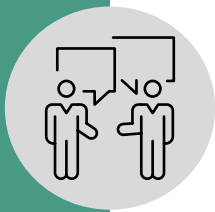
Non-traditional health care

LOCATION

Central and northern California

SCALE

Regional



TARGETED POPULATION

Medicare beneficiaries



NEW

INTERVENTION DETAILS

In 2007, the University of the Pacific's Medicare Part D Outreach Clinics began offering free, individualized services to aid seniors in selecting optimal prescription drug coverage. Three years after the clinics started, MTM services were added to optimize medication education, adherence and safety. This program leverages student pharmacists and provides them SDOH services training while educating Medicare beneficiaries and addressing literacy barriers through Meducation®, a cloud-based solution from First Databank offering medication education in nearly 30 languages.

Through a 12-step review of medications, diseases and socioeconomic factors, student pharmacists, under the direct supervision of a licensed pharmacist, work one-on-one with patients to provide education on the financial and clinical benefits of various Medicare programs. Continuity of care is maintained through standardized, interprofessional communication with the patient's medical team.

OUTCOMES

Over 10,000 patients have used the outreach clinics since 2007. Of those patients, 2,213 were low income, and 1,296 received care in a non-English language. The clinics have also provided 50,253 free health care screenings and services and 5,683 vaccinations.

This initiative led to an average cost savings of \$969 per Medicare beneficiary, with a total cost savings of \$10.12 million. Approximately 75% of patients who participated saw reduced out-of-pocket medication costs. The outreach clinics have hosted 156 events across 24 cities in California and 10 virtual events. Pharmacists and student pharmacists have identified 16,101 medication-related problems, and over 800 severe drug-related issues have been identified and communicated with physicians to improve medication safety.

The outreach clinics have resulted in improved patient knowledge for Medicare Part D plan options and medication education, adherence and safety for Medicare beneficiaries in California.



[The clinic] is making the pharmacist more capable of seeing the full humanity of the people they are serving and allowing the people they are serving to feel their humanity and to feel seen.

Clinic attendee



RESOURCES

- First Databank. Thomas J Long School of Pharmacy, University of the Pacific "Pharmacy School Classroom-to-Community Program Leverages FDB's Meducation® to Protect Seniors by Simplifying and Personalizing Medication Instructions." Accessed August 10, 2022.
- University of the Pacific. "Community Impact - Medicare Part D." Accessed August 12, 2022.
- University of the Pacific. "Medicare Part D Outreach Clinics." 2022. Accessed August 12, 2022.
- University of the Pacific. "Pharmacy faculty and students invest in local community health." December 2020. Accessed August 12, 2022.
- University of the Pacific. "Pharmacy school's Medicare Part D clinics close to milestone." October 2021. Accessed August 12, 2022.

Community Impact of the University of the Pacific's Medicare Part D Outreach Clinics since 2007

\$10.12 million
total cost savings for Medicare beneficiaries

1.2K
beneficiaries assisted in a language other than English

2.2K
low income beneficiaries served

Medication Care Coordination to Address Medication-Related Problems and Social Needs in Rural Washington State

Alliance for Integrated Medication Management (AIMM), Aging and Long-Term Care of Eastern Washington, Empire Health Foundation, Medication Review, Inc. (MRI), Rural Resources Community Action, The Washington State University School of Pharmacy

Keywords: Care coordination, chronic conditions, disease state management, telehealth



TYPE OF SERVICE

Screening, Intervention



BRIEF DESCRIPTION

The Medication Care Coordination (MCC) program enables community-based care coordinators to improve patient trust by communicating with and advocating for older patients through in-home visits and virtual communications. To implement the primary care provider's care plan, care coordinators virtually connect patients with clinical pharmacists to address medication-related problems and social determinants of health.

KEY TAKEAWAY

Care coordinators engage older adults to build patient trust and facilitate interdisciplinary health care team efforts to address social needs, resolve medication therapy problems and improve patient quality of life. In 2021, 80% of patients who completed the MCC program had medication barriers resolved.

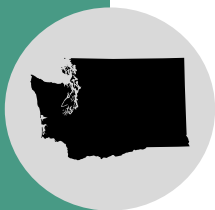


SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Screening for Unmet Needs
Social Isolation
Transportation

SETTING

Non-traditional health care



LOCATION

Eastern Washington State

SCALE

Regional

TARGETED POPULATION

Older adults in eastern Washington state

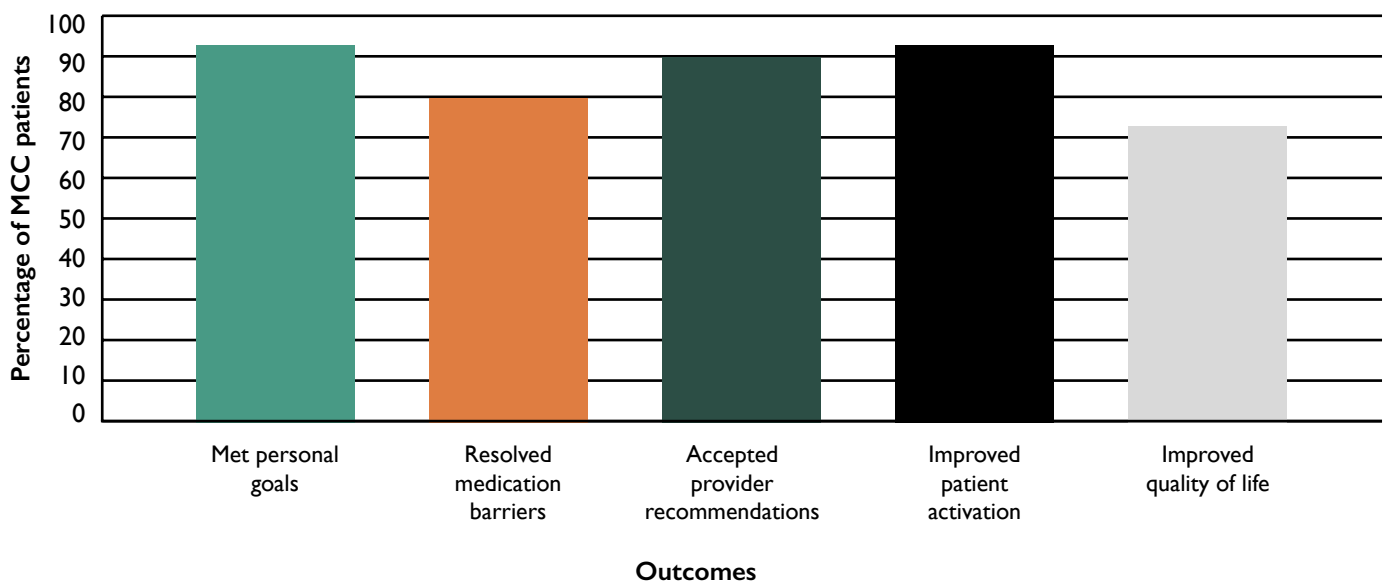
NEW

INTERVENTION DETAILS

Medication Care Coordination enables community-based care coordinators to engage older patients and build patient trust. Care coordinators aid patients with healthcare navigation through in-home visits and act as patient advocates when working with integrated, interdisciplinary healthcare teams. Care coordinators connect patients with MCC-trained clinical pharmacists through person-centered telehealth visits. Pharmacists conduct comprehensive medication reviews, educate patients about medications and identify areas of social need impacting appropriate medication use. Over a three-to-six-month period, care coordinators, pharmacists and physicians work together to address medication-related problems and address social determinants of health. They empower patients to better self-manage their care to support and supplement the primary care provider's care plan. The program supports patients who may have difficulty getting to their provider's office for care and provides insights into how they manage their medications at home.

OUTCOMES

Medication Care Coordination (MCC) Participant Outcomes



In the 2021 pilot study, older adults in the MCC program were, on average, prescribed 15 medications and had nine chronic conditions. One hundred ninety-nine patients were referred to the MCC program, with 99 enrolling and 59 completing the program. Of those patients who completed the program, 93% met personal goals, 80% resolved medication barriers, 90% accepted provider recommendations, 93% showed improved patient activation and 73% showed improved quality of life.

Future plans include the creation of a replication resource that provides information about team member training, data collection, data tracking and pharmacist documentation models.

RESOURCES

Sorensen, T. "Leveraging trust for behavior change: Interdisciplinary team connects with hard-to-reach patients, addresses medication and SDOH problems." GTMRx Institute Blog. Accessed September 19, 2022.

US Aging. "Aging Innovations and Achievement Awards Showcase: Honoring Successful Initiatives of USAging Members." July 2022. Accessed September 19, 2022.

Voices of Change, Alliance for Medication Management: Work in Washington State. SoundCloud. June 5, 2022. Accessed September 19, 2022.

Patient Assistance for American Indian Patients

Cass Lake Indian Health Service (IHS)

Keywords: Adherence, patient assistance program



TYPE OF SERVICE

Referral, Intervention

BRIEF DESCRIPTION

Cass Lake IHS launched the Patient Assistance Project in 2019, which utilized designated pharmacy staff to help patients access high-cost medications and reduce pharmacy medication costs.

KEY TAKEAWAY

Cass Lake IHS pharmacy enrolled at least 60% of eligible patients in patient assistance programs, resulting in increased medication access and an annual pharmacy cost savings of over \$80,000.



SDOH AREA ADDRESSED

Cost of Medications

SETTING

Critical access hospital and outpatient ambulatory care clinic pharmacy

LOCATION

Leech Lake Indian Reservation in Northern Minnesota

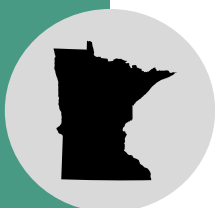


SCALE

Local

TARGETED POPULATION

American Indian population; patients uninsured outside of IHS services



INTERVENTION DETAILS

The Cass Lake Indian Health Service (IHS) pharmacy started the Patient Assistance Project in 2019 to help with high-cost medications. This project aims to help patients receive prescription medications and decrease the overall costs of medications for the pharmacy.

The Cass Lake IHS pharmacy is part of a federally funded public health service unit that serves the American Indian population, located on the Leech Lake Indian Reservation in Northern Minnesota. Many of their patients are low-income earners and live below the poverty line. Most patients qualify for public health assistance programs such as Medicaid; however, a portion of people remain uninsured for healthcare services outside of IHS. Located in a remote area, Cass Lake IHS patients also face the challenge of accessing healthcare facilities as this requires traveling and a mode of transportation. These factors make the facility an important access site that patients rely on to receive the healthcare and medications they need. Cass Lake IHS pharmacy staff provides medications to eligible patients at no cost.

Due to the complex health needs of their patients and as a result of new, expensive and required treatments, Cass Lake IHS pharmacy must decide on the best ways to obtain these prescription medications while remaining within their allocated funds. Pharmaceutical manufacturers offer patient assistance programs that provide high-cost medications for free to patients who do not have prescription coverage or cannot afford them. These programs have eligibility criteria that applicants must meet and require proof of income, lack of prescription coverage, or ineligibility for public assistance.

To reduce medication costs while still maintaining quality care, pharmacy staff assist patients in enrolling in patient assistance programs. Cass Lake IHS pharmacy designates specific pharmacy staff that identifies eligibility for each patient assistance program, gathers required documentation, fills out paperwork and submits the completed applications. Once approved for the patient assistance program, the manufacturer will mail the medications to Cass Lake IHS pharmacy. Patients pick them up along with their other prescriptions or pick up after a provider visit, where they also receive one-on-one counseling.

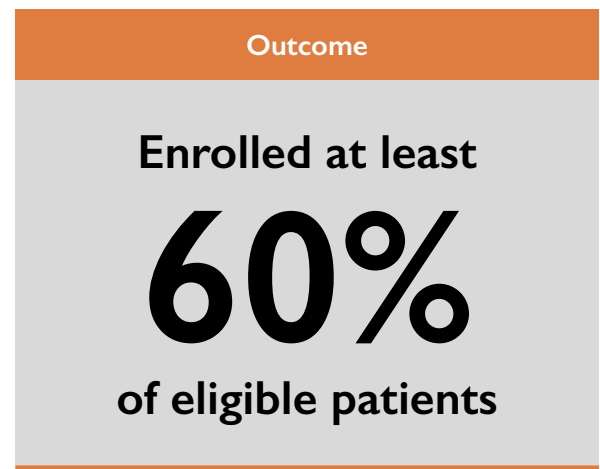
OUTCOMES

The pharmacy Patient Assistance Project to procure free medications from pharmaceutical patient assistance programs has increased access for needed high-cost medications for Cass Lake IHS pharmacy patients. It has also helped cover medication costs for the pharmacy so that pharmacy staff may continue to provide services to patients.

In 2020, Cass Lake IHS pharmacy achieved the goal of enrolling at least 60% of eligible patients in a patient assistance program, resulting in a pharmacy cost savings of \$80,021.52 or 2.29% of the annual budget. Therefore, a pharmacy-run Patient Assistance Project and pharmaceutical patient assistance programs have made a significant impact by allowing Cass Lake IHS to meet patients' prescription medication needs and defraying medication costs.

RESOURCES

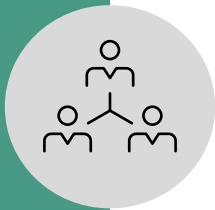
Information about this intervention was obtained through correspondence between PQA and the Cass Lake Indian Health Service. For more information about Cass Lake IHS, visit: www.ihs.gov/bemidji/healthcarefacilities/casslake/



Pharmacist-Managed Prescription Delivery and Home Visitation Service

Ohio Northern University (ONU)

Keywords: Disease state management, MTM, ongoing study, personalized care, point of care testing, preventative health, rural, students



TYPE OF SERVICE

Screening, Referral

BRIEF DESCRIPTION

Healthwise Pharmacy, operated by ONU's College of Pharmacy, utilizes home visits as a means to increase access to care and deepen the understanding of the community patient population and their healthcare needs.

KEY TAKEAWAY

Rural communities face access barriers, including those related to workforce shortages and transportation. This ongoing study is assessing pharmacists' roles in addressing SDOH factors in rural communities and evaluating the impact those services have on hospital readmissions and point of care testing values.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation



SETTING

Rural community pharmacy

LOCATION

Hardin County, OH

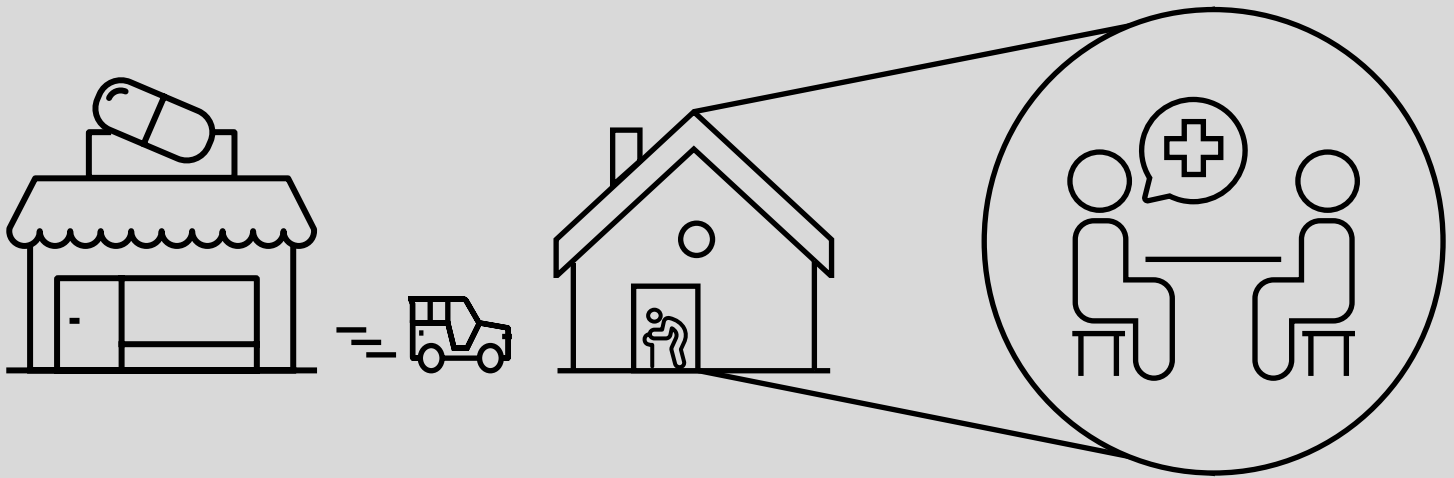
SCALE

Local



TARGETED POPULATION

Adult ONU Healthwise Pharmacy patients with at least one chronic disease state such as diabetes, hypertension or dyslipidemia



INTERVENTION DETAILS

Individuals in Hardin County, Ohio, may elect to participate in home visitation services from pharmacy personnel and agree to additional follow-up throughout this study. Participants complete an SDOH survey assessing their socioeconomic needs. Pharmacy personnel review the individual's needs and determine priority areas to address. Home visitation services include medication therapy management (MTM) and education conducted by a pharmacist and a student pharmacist. If appropriate, pharmacists will conduct point of care testing for chronic conditions. This study is assessing pharmacists' roles in addressing SDOH factors in rural communities and evaluating the impact SDOH services have on hospital readmissions and point of care testing values.

OUTCOMES

This study is ongoing.

RESOURCES

Musser, M. "ONU health-care outreach efforts enhance quality of life." *The Lima News*. July 18, 2019. Accessed October 19, 2021.

Ohio Pharmacy Resident Conference, May 15, 2020. Implementation of a Pharmacist-Managed Prescription Delivery and Home Visitation Service in a Rural Community. Accessed October 8, 2021.

ONU Poster, December 2019. Healthwise Implementation of Pharmacist-Driven Prescription Delivery (December 2019). Accessed October 8, 2021.

Steiner, F. "Pizza inspires ONU prescription delivery service." *Ada Icon*. February 17, 2020. Accessed October 19, 2021.

Pharmacist Partnership with Local Barbershops to Reduce Blood Pressure in Black Men – Los Angeles

Cedars-Sinai Medical Center, University of California Los Angeles

Keywords: Barbershop, clinical trial, collaborative practice agreement, completed study, hypertension, race



TYPE OF SERVICE

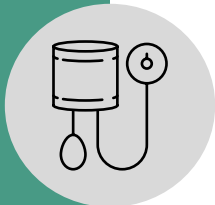
Intervention

BRIEF DESCRIPTION

In the Los Angeles Barbershop Blood Pressure Study (LABBPS), health promotion by local barbers encouraged access to specialty-trained pharmacists for communities often underrepresented in health care interventions.

KEY TAKEAWAY

The majority of Black men achieved goal blood pressure when pharmacists worked with trusted community members. The study demonstrated how increased accessibility to pharmacists could lead to positive patient outcomes.



SDOH AREAS ADDRESSED

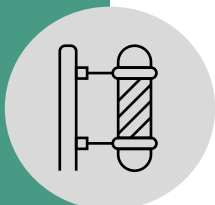
Cultural or Literacy Barriers

SETTING

Non-traditional health care

LOCATION

Los Angeles County, CA



SCALE

Local

TARGETED POPULATION

Non-Hispanic, Black males who were current clients of 52 local barbershops



UPDATED

INTERVENTION DETAILS

Uncontrolled hypertension is a significant problem among non-Hispanic Black men. For the LABBPS, barbers in Black barbershops encouraged meetings with specialty-trained pharmacists, who are certified as hypertension clinicians. In this study, non-Hispanic Black men with high systolic blood pressure (SBP) levels, defined as readings higher than 140 mmHg on two different screening days, were identified at 52 local, Black-owned barbershops. This study did not include women and those receiving dialysis chemotherapy.

In total there were 319 participants in a cluster-randomized trial where pharmacists prescribed drug therapy under a collaborative practice agreement with the participants' doctors.

In the intervention group, barbers encouraged pharmacist follow-up and measured SBP. Pharmacists met regularly with the participants and counseled them on guideline-driven antihypertensive therapies. In the control group, barbers discussed SBP and lifestyle modifications before encouraging participants to seek professional advice.

A barrier to implementation was the cost of pharmacist travel time. In a proof-of-concept study following LABBPS, virtual visits were substituted for in-person visits on a small scale in individuals demonstrating blood pressure control. Once participants achieved goal BP, they transitioned to monthly virtual visits with their pharmacist and barbers performed BP checks during the virtual visits.

OUTCOMES

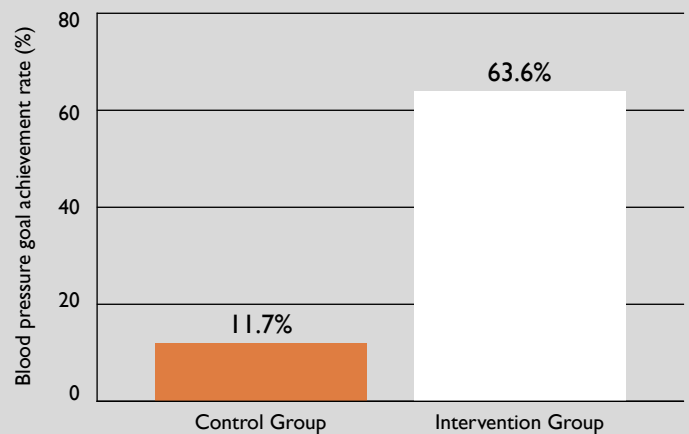
After the first six months of LABBPS, SBP decreased by 27 mmHg in the intervention group and 9.3mmHg in the control group. 63.6% of those in the intervention group achieved goal blood pressure vs. 11.7% of those in the control group. Health promotion by barbers resulted in larger blood-pressure reduction when coupled with medication management in barbershops by specialty-trained pharmacists. Results remained consistent after 12 months, and scaling similar programs would be cost-effective, according to researchers at Columbia University.

Nine participants completed the follow-up proof-of-concept study assessing virtual visits. After 12 months, 67% of participants achieved the guideline-recommended goal blood pressure. The number of in-person pharmacist visits per person decreased from 11 to 6.6 after incorporating virtual visits. Results demonstrate that once a patient-health care provider relationship is established, virtual visits can supplement in-person visits while producing similar efficacy as the in-person intervention while reducing cost.

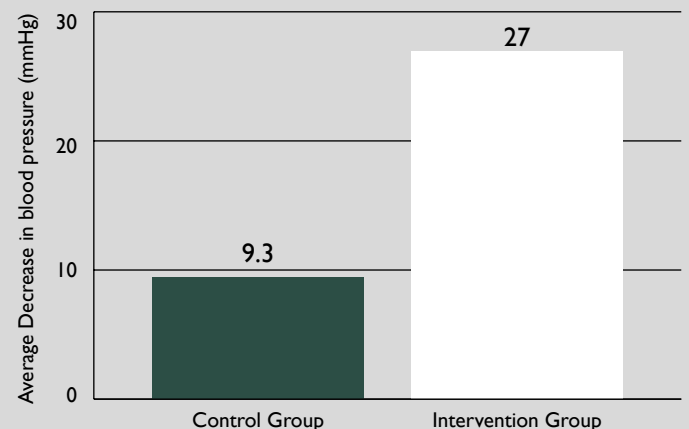
RESOURCES

Blyler CA, Ebinger J, Rashid M, et al. Improving Efficiency of the Barbershop Model of Hypertension Care for Black Men With Virtual Visits. *JAHA*. 2021;10:e020796. doi.org/10.1161/JAHA.120.020796

% of Patients who Achieved Goal Blood Pressure



Average Decrease in Blood Pressure



Cedars-Sinai. "Saving Lives in Black Barbershops." July 26, 2021. www.cedars-sinai.org/newsroom/saving-lives-in-black-barbershops/

Freakonomics, M.D. "Podcast Episode 6: Are Barbershops the Cutting Edge of Healthcare Delivery?" September 9, 2021. Accessed October 5, 2021.

Kazi DS, Wei PC, Penko J, et al. Scaling Up Pharmacist-Led Blood Pressure Control Programs in Black Barbershops: Projected Population Health Impact and Value. *Circulation*. 2021;143(24):2406-2408. doi:10.1161/CIRCULATIONAHA.120.051782

VCU Center for Pharmacy Practice Innovation. "Seminar: A Cluster-Randomized Trial of Blood Pressure Reduction in Black Barbershops." YouTube. March 7, 2020. Accessed October 5, 2021.

Victor RG, Blyler CA, Li N, et al. Sustainability of Blood Pressure Reduction in Black Barbershops. *Circulation*. 2019;139(1):10-19. doi:10.1161/CIRCULATIONAHA.118.038165

Victor RG, Lynch K, Li N, et al. A Cluster-Randomized Trial of Blood-Pressure Reduction in Black Barbershops. *N Engl J Med*. 2018;378(14):1291-1301. doi:10.1056/NEJMoa1717250

Pharmacist Partnership with Local Barbershops to Reduce Blood Pressure and Address Vaccine Hesitancy in Black Men – Nashville

Local barbershops, local pharmacy owners, local department of health, Vanderbilt University Medical Center (VUMC)

Keywords: Barbershop, clinical trial, collaborative practice agreement, completed study, COVID-19, hypertension, race



TYPE OF SERVICE

Intervention

BRIEF DESCRIPTION

VUMC partnered with local barbershops in Nashville to identify and treat patrons with hypertension and address vaccine hesitancy. Patrons met at least monthly with a pharmacist who, through a collaborative practice agreement, provided lifestyle and medication management and assessed self-reported health.

KEY TAKEAWAY

Twenty-seven patrons participated for at least six months, resulting in an average change in blood pressure of 158/95 mmHg to 128/76 mmHg. Before the study, only 15% of enrolled patrons reported their health as excellent/very good, which increased to 56% after six months.

SDOH AREAS ADDRESSED

Cultural or Literacy Barriers

SETTING

Non-traditional health care

LOCATION

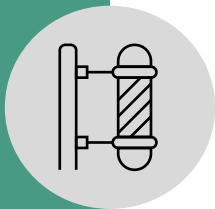
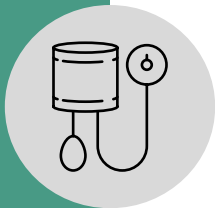
Nashville, TN

SCALE

Local

TARGETED POPULATION

Non-Hispanic black men (aged 35-79)



NEW

INTERVENTION DETAILS

After collaborating with researchers from the Los Angeles Barbershop Blood Pressure Study (LABBPS), VUMC recruited barbershops willing to be trained on the study's procedures and blood pressure screening techniques. Starting in 2020, the research study's staff offered free blood pressure screening to all adult black men entering one of eight local barbershops. Patrons with two separate blood pressure screenings greater than 140 mmHg were invited to participate in the study.

Unlike in California with LABBPS, Tennessee required physician visits to establish care, and the pharmacist could not practice independently. Once enrolled, patrons met monthly with the pharmacist, and barbers performed blood pressure readings during haircuts for additional monitoring. Some activities were performed using telehealth adaptations due to COVID-19, a feasible alternative to in-person visits. The pharmacist also addressed COVID-19 vaccine hesitancy during visits.

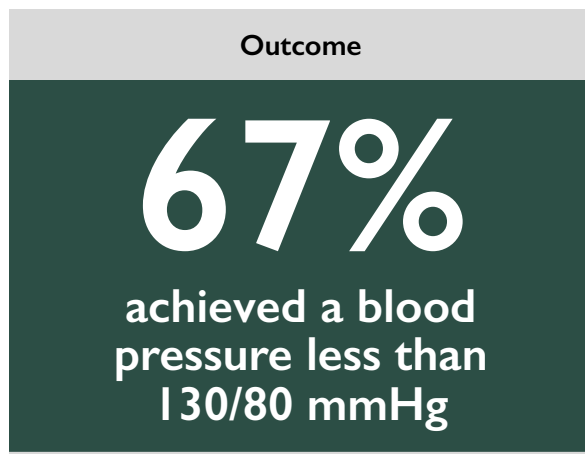
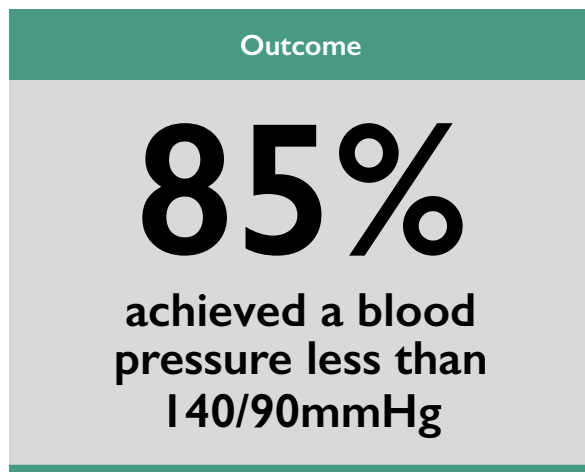
As COVID-19 vaccines became available in 2021, the pharmacist addressed misinformation and reservations about safety among the study participants. Listening to participants' concerns and sharing personal experiences proved to be key, especially for a population at high risk for COVID-19 complications and a well-founded mistrust of the medical system.

OUTCOMES

Eight local barbershops were recruited to participate in the study. Four hundred and nineteen patrons were screened for blood pressure, and 36 patrons were enrolled in the study. Twenty-seven patrons participated in the study for at least six months, resulting in 85% achieving a blood pressure less than 140/90mmHg and 67% less than 130/80 mmHg. Blood pressure changed from 158/95 mmHg to 128/76 mmHg on average. Prior to the study, only 15% of enrolled patrons reported their health as excellent/very good, which increased to 56% after six months ($p=0.002$).

RESOURCES

- Herbers, K. "Barbershops targeted to improve health of black men." VUMC Reporter. February 18, 2020. Accessed June 10, 2022.
- Lou, N. "BP Care in Black Barbershops Successfully Taken Up in Nashville." MedPage Today. September 29, 2021. Accessed June 10, 2022.
- Parrish J, Blyler CA, Okafor HE, et al. Abstract 53: Results of The Nashville Barber-pharmacist Hypertension Management Pilot Study. Hypertension, 78(Suppl_1). doi.org/10.1161/hyp.78.suppl_1.53
- Ramirez, A. "Vanderbilt Health Professionals Reach Out to Black Communities Ahead of Vaccine Rollout." Nashville Scene. January 12, 2021. Accessed June 10, 2022.



I feel like misinformation spreads a lot faster than the truth does, so that's another reason why I'm glad I'm out there, because I can actually talk to people about my experience. [I'm] not pushing anything on anyone, just letting you know that it's happened to me and that it's safe.

Jarod Parrish, the study's lead pharmacist



Pharmacist Support to Increase Medication Access in a Faith-Based Clinic

Faith Family Medical Center, Lipscomb University College of Pharmacy

Keywords: Adherence, health literacy, medication cost, patient assistance programs



TYPE OF SERVICE

Screening, Referral, Intervention

BRIEF DESCRIPTION

In a primary care clinic for under-insured and uninsured patients, a pharmacist helps increase patient access to medication through discount pharmacies, samples, coupons, therapeutic medication switching and patient assistance programs.

KEY TAKEAWAY

Faith-based health organizations help increase access to affordable health care in underserved communities. In 2021, this pharmacist-led initiative resulted in 461 patients receiving life-saving, high-cost medications, with an estimated cost savings of \$3.5 million, from national patient assistance programs.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Screening for Unmet Needs

SETTING

Primary care clinic



LOCATION

Nashville, TN

SCALE

Local



TARGETED POPULATION

Under-insured and uninsured working adults

UPDATED

INTERVENTION DETAILS

Faith Family Medical Center is a faith-based organization whose goal is to provide uninsured or under-insured community members with affordable primary medical care. The center aims to improve health outcomes by enabling individuals to seek medical care before disease advancement. The organization also provides wellness and health education services and resources to community members.

Within Faith Family Medical Center, there is a pharmacist-led initiative to help patients in need access expensive prescription medications. In addition to providing resources, such as coupons and samples, the pharmacist identifies national patient assistance programs, helps patients address complex medication assistance eligibility requirements and completes the applications, responds to information requests, tracks application status and orders medications. The pharmacist plays a crucial role in assisting patients, particularly those with less educational attainment and limited health literacy, in navigating national patient assistance programs administered by pharmaceutical companies.

Additionally, the pharmacist assists patients with ordering refills early, as there are longer lead times to receive medications than from a community pharmacy. One tool for success for this initiative is pharmacists' access to a fax machine as this is the most streamlined method for communicating with some patient assistance programs.

OUTCOMES

In 2021, this initiative led to 461 patients receiving life-saving, high-cost medications, with an estimated cost savings of \$3.5 million, from national patient assistance programs. Without the initiative, patients would not have been able to afford the medications, or they would have had to forego basic necessities, such as food and shelter. Participating patients reported better health outcomes, improved quality of life and a sense of personal dignity.

The intervention demonstrates how pharmacists can leverage compassionate understanding of patients' SDOH challenges and an understanding of health care navigational challenges like patient assistance programs to improve health status and outcomes.

RESOURCES

Information about this intervention was obtained through correspondence between PQA, Faith Family Medical Center and Lipscomb University College of Pharmacy. For more information about Lipscomb University College of Pharmacy, visit: www.lipscomb.edu/pharmacy and for more information about Faith Family Medical Center, visit: faithmedical.org.

This initiative has led to

461 patients receiving life-saving expensive medications,

estimated to cost \$3.5 million,
from national patient assistance programs.

Pharmacy and Community-Based Organization Collaboration to Address SDOH

Community-based organizations (CBOs), community pharmacies, Pharmacy Society of Wisconsin

Keywords: Adherence, care coordination, community-based organizations, grant, medication management, ongoing study



TYPE OF SERVICE

Screening, Referral

BRIEF DESCRIPTION

This initiative promotes collaboration between community pharmacies and CBOs to develop communication tools that address SDOH barriers to medication access and adherence.

KEY TAKEAWAY

Community pharmacies and CBOs will collaborate to develop a best practice model for the Flip the Pharmacy SDOH Change Package.



SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Screening for Unmet Needs

SETTING

Community pharmacy

LOCATION

Madison, WI

SCALE

Local



TARGETED POPULATION

Community pharmacy patients with medication access barriers



INTERVENTION DETAILS

The Pharmacy Society of Wisconsin supports partnerships between community pharmacies and CBOs to address health literacy and other SDOH barriers related to medication access and adherence.

Initiative Objectives

Establish collaboration between CBOs and community pharmacies with vulnerable patient populations. The collaboration's goal is to address SDOH and communication barriers to medication access and adherence.



Create a standardized communication tool to be used by CBOs and pharmacists. This tool will screen for SDOH factors, support care coordination and promote utilization of medication therapy management services.



Build a best practice model or plan for CBOs and pharmacies that will be included in the Flip the Pharmacy Behavioral Health/SDOH Change Package, similar to previously created Diabetes/SDOH Change Packages.

OUTCOMES

This study is ongoing.

RESOURCES

Community Pharmacy Foundation. "Facilitating Pharmacist-Community-based Organization Collaboration to Improve Medication Management by Addressing Social Determinants of Health." 2021. Accessed November 15, 2021.

Flip the Pharmacy. "What is a Change Package?" September 2021. Accessed November 17, 2021.

Pharmacy Screening for Unmet Social Needs

Towncrest Pharmacy

Keywords: Medication complexity, motivational interview



TYPE OF SERVICE

Screening, Referral, Intervention

BRIEF DESCRIPTION

Towncrest Pharmacy in Johnson County, Iowa, incorporated an SDOH screening tool into their comprehensive medication review (CMR) workflow. The screening is an 8-question verbal survey that a pharmacist or trained pharmacy technician can complete. Pharmacists map community resources to each question, so referrals are made based on the results.

KEY TAKEAWAY

Pharmacists or trained pharmacy technicians screen patients for SDOH factors. Staff identified the two primary factors as lack of transportation and cost of medications. One specific intervention was to decrease a patient's monthly prescription cost from \$100 to \$5.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation



SETTING

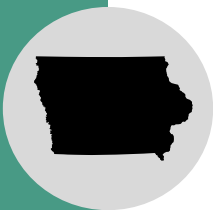
Community pharmacy

LOCATION

Iowa

SCALE

Local



TARGETED POPULATION

High-risk patients based on a medication complexity risk score

Patient Jane Doe couldn't afford medications, so she quit taking three of them

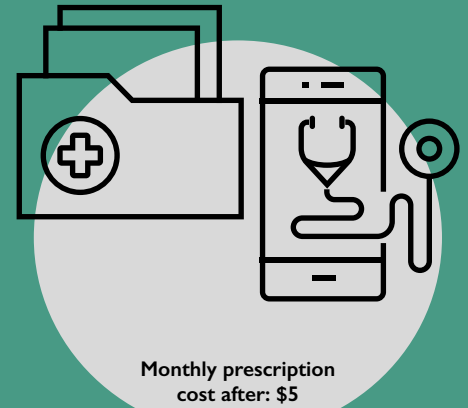


Monthly prescription cost before: \$100

Jane Doe goes to Towncrest Pharmacy and receives SDOH screening



Pharmacist works with Jane's prescriber to find affordable alternative therapies



Monthly prescription cost after: \$5

INTERVENTION DETAILS

Each CMR incorporates an 8-question verbal screening tool which is administered in approximately 5 minutes. A pharmacist or pharmacy technician can complete it. Pharmacists map each of the questions to community resources in collaboration with the county social services department. Referrals are made based on the results, both for medication access and general medical access issues.

Pharmacists are given additional training in motivational interviewing and ongoing education to adequately field responses from patients, especially regarding more challenging social issues such as abuse or substance use that may arise from the screening.

OUTCOMES

Towncrest identified that the two primary SDOH factors in their patient population were lack of reliable transportation and medication cost. While the pharmacy has a delivery service, they recognize the patient may have issues accessing other care, thus referring them to a county mobility coordinator to address transportation needs further.

For medication cost, the pharmacy has identified several key programs for patients, both at the county and state level, along with benefits investigation through a patient's insurance plan.

One participating pharmacist provided an example, where the screening identified a high-risk, complex patient with mental health issues. The patient could not afford some of her medications and had stopped taking three medications altogether due to a pharmacy bill of several hundred dollars. After discovering this, the pharmacist identified alternative medications with better coverage. The pharmacist recommended the medication changes to the prescriber, and recommended deprescribing two medications, with which the prescriber agreed. The patient's monthly pharmacy cost went from \$100 to \$5.

RESOURCES

Center for Health Care Strategies. "Building the Business Case and Value-Based Payment Models for Enhanced Medication Management." March 1, 2019. Accessed October 5, 2021.

Yard, R. "Screening for Unmet Social Needs: A Conversation with a Community Pharmacist." Center for Health Care Strategies. May 7, 2019. Accessed October 5, 2021.

Yard, R. "Towncrest Pharmacy: Social Determinants of Health Screening survey." Center for Health Care Strategies. May 7, 2019. Accessed October 5, 2021.

Produce Prescriptions to Address Diet-Related Chronic Disease

District of Columbia (DC)-area clinics, DC Greens, Giant Food Stores, LLC

Keywords: Chronic conditions, community-based organization, diabetes, hypertension, ongoing program



TYPE OF SERVICE

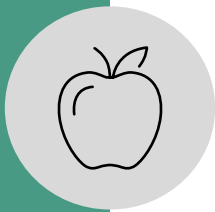
Screening, Intervention

BRIEF DESCRIPTION

Health care providers screen Medicaid patients for food-related chronic illness. Patients receive “produce prescriptions” for Giant grocery stores from their providers. The Giant Pharmacy, located in the Giant grocery store, provides pharmacists-led education and access to nutrition and wellness programs.

KEY TAKEAWAY

The initial pilot program had 500 individuals participate. Of those participants, 72% filled at least one produce prescription; on average, 86% of prescriptions were used to purchase fresh produce. By 2022, the program has expanded to six Giant locations and 10 clinics.



SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Food Security
Screening for Unmet Needs

SETTING

Primary care clinic, grocery store pharmacy

LOCATION

Washington, DC



SCALE

Local

TARGETED POPULATION

Adult DC Medicaid members with qualifying conditions



NEW



From a pharmacy perspective, programs that incentivize individuals with free produce, both increase [medication] adherence and allow pharmacists to address any medication-related issues patients may be experiencing. From a retailer perspective, this program also increases foot traffic into the store and can drive further produce sales. It's a win-win.

Samir Balile, Giant Pharmacist



INTERVENTION DETAILS

Through DC Greens' Produce Rx program, providers at DC clinics screen patients for food-related chronic illnesses. Medicaid members 18 years and older with pre-diabetes, diabetes or hypertension are "prescribed" fresh produce at Giant's pharmacy. Patients exchange produce prescriptions for money on the patient's Giant Bonus Card. Patients use these cards to purchase fresh or frozen fruits and vegetables over the next 90 days and can contact their health care providers for additional 90-day refills.

Patients are also eligible for nutrition classes and wellness programs, including personalized consultations and nutrition classes. Integrating the pharmacy into the program emphasizes the food's critical role in patient health.

OUTCOMES

The program was initially launched in 2019 with 500 individuals enrolled. Early program results showed that 72% of participants filled at least one produce prescription since enrollment; on average, 86% of the prescriptions were used to purchase fresh produce. By 2020, participants had redeemed \$220,700 for fruits and vegetables.

Additional ongoing data analyses include a more robust evaluation of process and outcomes measures such as clinical markers, utilization patterns and quality of life.

RESOURCES

DC Greens. "For Produce Rx Participants." April 2022. Accessed August 5, 2022.

Giant. "Healthy Living." 2022. Accessed August 5, 2022.

Goldschmidt, B. "DC Greens' Produce Rx Program Expands to 3 More Giant Food Stores." Progressive Grocer. May 16, 2022. Accessed June 16, 2022.

The Lexicon. "Food is Medicine." Accessed June 16, 2022.

Trust for America's Health. "Produce Rx: Using Prescriptions to Improve Affordability of Healthy Foods." Accessed June 16, 2022.

SDOH Impact on Statin Adherence

Balls Food Stores – Price Chopper Pharmacy

Keywords: Adherence, completed study, statins



TYPE OF SERVICE

Screening

BRIEF DESCRIPTION

This study evaluated the relationship between SDOH factors and statin medication adherence.

KEY TAKEAWAY

100% of patients with low statin adherence reported at least one SDOH factor, followed by 76% and 42% in the acceptable and high adherence groups, respectively. Patients most often reported lack of employment, financial difficulties, and food insecurity.



SDOH AREAS ADDRESSED

Cost of Medications
Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation

SETTING

Community pharmacy

LOCATION

Jackson County, MO



SCALE

Local

TARGETED POPULATION

Adult patients with two prescription fills on any statin medication in the previous six months



UPDATED

Childcare Education Housing Personal Safety Employment Food Transportation Utilities Finances

INTERVENTION DETAILS

From February 1-March 31, 2021, this study conducted anonymous surveys at three Balls Food Stores in Jackson County, Missouri, a medically underserved area. The aim is to identify factors that impact a patient's medication adherence and guide individualized medication use support.

This study utilized an adaptation of the SDOH survey from the "EveryONE" project by the American Academy of Family Physicians, which assesses housing, food, transportation, utilities, childcare, employment, education, finances and personal safety. Following the assessment of each SDOH factor, the patient identified if this specific SDOH factor affected their medication adherence. These surveys were administered on electronic tablets at the pharmacy with a randomized drawing incentive for those who participated.

Statin medication possession ratio was utilized to define low (0 – 0.79), acceptable (0.8 – 0.99) and high (≥ 1) adherence groups. Once placed in an adherence group, a message flags each patient's profile alerting pharmacy staff to offer the patient a survey at the point of sale.

OUTCOMES

Of the 1,019 individuals eligible for the SDOH survey, 67 completed it, a 6.5% response rate. SDOH barriers were indicated 124 times among those who completed the survey. Those with low adherence to statin medications identified that SDOH needs more often affect their ability to take medications than other patients.

Adherence Group	Patients completing survey (n)	Positive responses indicating an SDOH factor (n)	% Reporting at least 1 SDOH factor	% Reporting at least 1 SDOH factor adjusted*
Low	12	22	100	75
Acceptable	41	78	76	44
High	14	24	42	21

*Survey questions about prescription delivery and employment were excluded.

Lack of employment, financial difficulties and food insecurity resulted in the most positive responses indicating an SDOH factor. Financial difficulties, food insecurity and housing instability had the greatest self-reported effect on medication adherence.

Critical lessons were learned after study implementation, such as the need to focus on increasing intervention after SDOH screening and increasing methods for survey completion. Pharmacists needed additional resources and time for patients with SDOH concerns beyond the cost of medications. Additional screening methods are needed to effectively reach and assess patients who do not physically pick up medications from the pharmacy themselves.

RESOURCES

American Academy of Family Physicians. "Social Needs Screening Tool." 2018. Accessed August 9, 2022.

Devereux, D. "Role of Social Determinants of Health in Statin Adherence within Community Pharmacy." APhA Foundation Incentive Grant 2021. Accessed August 9, 2022.

Devereux, D. "The Role of Social Determinants of Health in Adherence of HMG-COA Reductase Inhibitors in the Community Pharmacy Setting." Midwest Pharmacy Residents Conference Abstracts. Page 22. May 12, 2021. Accessed October 19, 2021.

In addition to the resource above, information about this intervention was obtained through correspondence between PQA and Balls Foods Price Chopper Pharmacy.

SDOH Screening within Medication Therapy Management Services

Humana, OutcomesMTM

Keywords: Adherence, chronic conditions, education, employment status, health plan tool



TYPE OF SERVICE

Screening

BRIEF DESCRIPTION

OutcomesMTM and Humana implemented an SDOH screening tool in community pharmacies across the United States. This screening tool includes nine questions to assess a patient's overall needs.

KEY TAKEAWAY

Approximately 9,800 patients received SDOH screenings over six weeks. The most commonly reported SDOH factors were social isolation, food insecurity and transportation barriers. Patients who completed these screenings showed an average \$1,500 in decreased medical spending.



SDOH AREAS ADDRESSED

Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Social Isolation
Transportation

SETTING

Community pharmacy



LOCATION

United States

SCALE

National



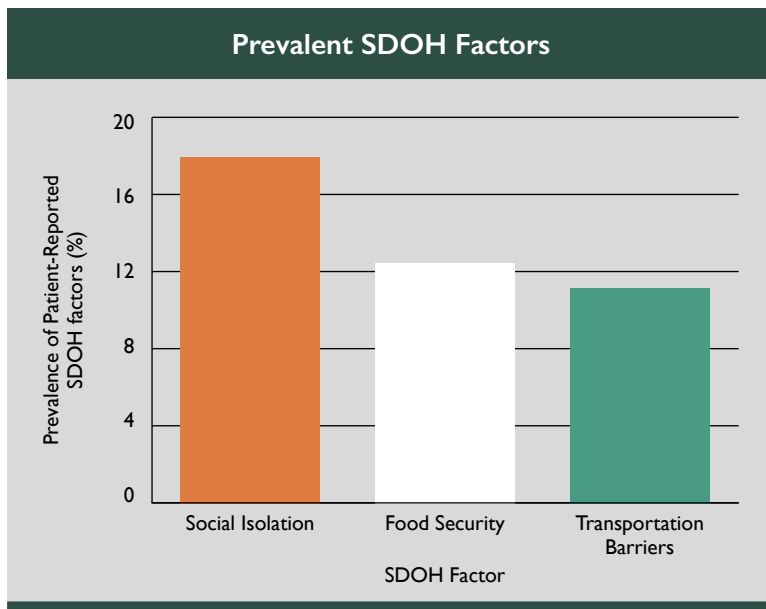
TARGETED POPULATION

Humana Medicare Advantage Prescription Drug (MAPD) plan members

INTERVENTION DETAILS

Humana MAPD members identified as non-adherent to chronic medications from November 15 to December 31, 2019, were screened for SDOH factors both face-to-face or via telehealth modalities by pharmacists. These chronic conditions included atrial fibrillation, chronic obstructive pulmonary disease (COPD), depression, diabetes, hyperlipidemia, hypertension and osteoporosis. Final analysis included individuals who remained enrolled in Humana's MAPD contract and have a chronic condition as part of a two-month post-study period. Pharmacists recorded interactions in OutcomesMTM. The OutcomesMTM platform tracked survey responses and shared information from the pharmacy with health plans.

Pharmacists implemented a nine-question screening tool in over 2,100 pharmacies. This screening identifies patients who need interventions or referrals with the ability to access an embedded tool from Humana directly. This tool is searchable by zip code to identify local resources available to address their needs and refers patients with immediate needs to resources such as Aunt Bertha or the 211 Helpline.



Patients who complete the screening show an average \$1,500 decrease in medical spending, which is statistically significant. There is also an average increase of \$500 per member in the pharmacy spend; however, researchers acknowledged that increased adherence leads to increased pharmacy spending.

Pharmacist feedback regarding implementing an SDOH survey screening tool highlights the need to adjust the survey questions for specific patient populations. For example, asking Medicare patients about school or job training was often not relevant.

RESOURCES

- Aunt Bertha website. Accessed November 3, 2021.
- Helpline Center website. Accessed November 3, 2021.
- Hippensteele, A. "Pharmacists' Role in Tackling Social Determinants of Health." Pharmacy Times. May 18, 2020. Accessed October 22, 2021.
- Ientile, G. "Pharmacists Play Valuable Role in Addressing Social Determinants of Health." Drug Topics. June 11, 2020. Accessed October 22, 2021.
- PQA Annual Meeting 2020 Presentation. "Tackling Social Determinants of Health by Leveraging Community Pharmacies in a National, Scalable Model." May 13, 2020. Accessed October 22, 2021.

In addition to the resources above, information about this intervention was obtained through correspondence between PQA and Cardinal Health/OutcomesMTM. For more information about Cardinal Health/OutcomesMTM, visit: outcomesmtm.com.

OUTCOMES

Between November 15 and December 31, 2019, pharmacists completed over 17,000 screenings.

The most prevalent SDOH factor reported by patients was social isolation, with 18% of patients reporting this over the past 12 months. Furthermore, 12.5% reported issues with food security and 11.2% reported transportation barriers. COPD and depression were both associated with a higher occurrence of SDOH factors than other patient demographics.

SDOH screening in patients with depression or COPD was associated with a statistically significant increase in medication adherence, defined as a proportion of days covered greater than or equal to 80%. SDOH screening in patients with hyperlipidemia and hypertension was associated with a statistically significant decrease in medication adherence.

Patients who complete the screening show an average \$1,500 decrease in medical spending



SDOH Specialist Model in New York Community Pharmacies

Community Pharmacy Enhanced Services Network New York (CPESN NY), Independent Practice Association, University of Buffalo

Keywords: Community based organization (CBO), SDOH specialist, training



TYPE OF SERVICE

Screening, Referral

BRIEF DESCRIPTION

SDOH specialists employed by pharmacies serve as liaisons to an Independent Practice Association (IPA), connecting patients to resources to address SDOH factors.

KEY TAKEAWAY

From October to December 2020, IPA and community pharmacies collaborated, resulting in a 23% acceptance rate of patient referrals for community-based social services. From late 2020 to early 2021, 68.8% of patients screened using the SDOH specialist model identified SDOH challenges.



SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Transportation

SETTING

Community pharmacy

LOCATION

Albany, NY

SCALE

State



TARGETED POPULATION

Patients who identify SDOH needs via prompting questions



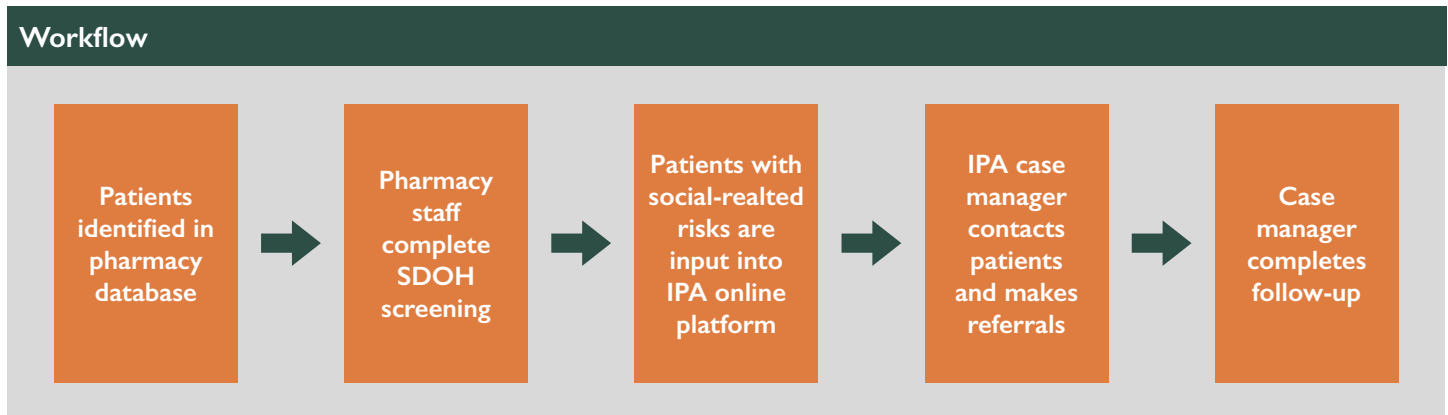
UPDATED

INTERVENTION DETAILS

This program was initiated in 2020 in New York to establish a working connection between eight independently owned CPESN NY pharmacies and an Independent Practice Association (IPA), a regional organization that connects patients to local resources and follow-up.

Pharmacy technicians and delivery drivers serve as the SDOH specialist and receive training via a National Community Pharmacists Association module. SDOH specialists liaise with the IPA and can lead the SDOH program, educate other staff members on identifying and screening patients, assess screenings for intervention opportunities, implement patient-specific plans, refer patients to non-pharmacy resources and follow up with patients.

Pharmacies make referrals to an IPA via the IPA's technology platform, using information from the pharmacy database, asking prompting questions, which can trigger a more in-depth assessment to better understand specific needs via an SDOH screening tool. In this model, the IPA is responsible for identifying patient-specific community resources, connecting patients to those resources and following up with patients.



OUTCOMES

In preliminary data collected between October and December 2020, pharmacists made 48 total referrals, and 11 patients accepted the referrals. The most common referrals were for transportation and food insecurity.

From late 2020 through early 2021, SDOH specialists completed 48 screenings. Thirty-three (68.8%) patients screened identified SDOH challenges, with patients identifying affordability of daily needs (48.5%) and transportation concerns (21.2%) as the most common. Eleven patients (33%) accepted referrals for additional services.

The University of Buffalo is a project collaborator and is working to develop potential reimbursement models based on patient care workflows that address social needs. The goal is a hybrid of fee-for-service and value-based reimbursement model.

In addition to the SDOH specialist model, the University of Buffalo, CPESN NY and collaborators conducted a study to determine the feasibility of a community health worker model to address SDOH. Pharmacy staff were trained as community health workers and referred patients to community resources. Publication of the results is in progress.

RESOURCES

Cunningham, S. "Quality Forum Review: Implementing Sustainable SDOH Programs in Community Pharmacies." PQA Blog. June 15, 2021. Accessed October 26, 2021.

Foster AA, Daly CJ, Logan T, et al. Addressing social determinants of health in community pharmacy: Innovative opportunities and practice models. *J Am Pharm Assoc* (2003). 2021;61(5):e48-e54. doi:10.1016/j.japh.2021.04.022

Foster AA, Daly CJ, Logan T, et al. Implementation and evaluation of Social Determinants of health practice models within Community Pharmacy. *Journal of the American Pharmacists Association* 2022; 62(4), 1407–1416. doi.org/10.1016/j.japh.2022.02.005

Jacobs, D, Daly, C, Allen, M. et al. Implementing a Social Determinants of Health Program: A Community Pharmacy Driven Toolkit. University at Buffalo School of Pharmacy and Pharmaceutical Sciences. 2021. Accessed September 20, 2022.

PQA Quality Forum Video. "Implementation of Sustainable SDOH Programs in Community Pharmacies." YouTube. April 22, 2021. Accessed October 26, 2021.

Robinson, M. "Pharmacies ideal location for community social needs screening." *UB Now*. August 3, 2022. Accessed September 15, 2022.

In addition to the resource above, information about this intervention was obtained through correspondence between PQA and the University of Buffalo.

University and Local Churches Partner to Increase COVID-19 Vaccination in Black Communities

Congregations Organized for Prophetic Engagement (COPE), Inland Empire Concerned African American Churches (IECAAC), Loma Linda University

Keywords: COVID-19, churches, race, vaccinations



TYPE OF SERVICE

Intervention

BRIEF DESCRIPTION

To increase COVID-19 vaccination rates among Black San Bernadino County, CA, residents, Loma Linda University partnered with churches to educate faith leaders and community members about vaccinations and vaccinate community members in a mobile clinic.

KEY TAKEAWAY

Loma Linda University's mobile vaccination effort immunized 417 community members by working with trusted churches in the community. Of those vaccinated, 351 were Black.



SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Transportation

SETTING

Non-traditional health care

LOCATION

San Bernadino County, CA



SCALE

Local

TARGETED POPULATION

Black adult San Bernadino County, CA residents unvaccinated for COVID-19



NEW

INTERVENTION DETAILS

When mass COVID-19 vaccination clinics proved ineffective in reaching Black community members, Loma Linda University partnered with Inland Empire Concerned African American Churches (IECAAC) and Congregations Organized for Prophetic Engagement (COPE) to create a three-part approach to increase vaccination rates in San Bernadino County, CA. The approach focused on engaging Black pastors, community education on COVID-19 vaccination by a Black pharmacist and vaccination administration.

The partnership enlisted 20 churches and held a faith summit to engage and educate local pastors about the COVID-19 pandemic and COVID-19 vaccinations. Pastors actively advertised educational webinars hosted by a Black, infectious disease trained, intensive care unit pharmacist. Pastors managed registration and appointments for community members through a completely paper-based registration process, which eliminated technological access barriers. The pharmacist ensured each vaccination vial was appropriately transported to the site and drawn up accurately to establish trust among community members. The mobile vaccination clinic was in the parking area of an IECAAC-affiliated church.

OUTCOMES

	Loma Linda University mass vaccination clinic (n=23,170)	Mobile vaccination community clinic (n=417)	San Bernardino County population (n=2,180,085)
Black	833 (3.6%)	351 (84.2%)	168,946 (7.8%)

Loma Linda University's partnerships with churches resulted in 417 vaccinations through mobile vaccination clinic efforts. Of those vaccinated during the mobile vaccination clinic, 351 identified as Black or African American. Mass vaccination sites at Loma Linda University also had an increase in the percentage of Black patients, increasing from 3% to 3.6%.

Thus far, Loma Linda University's COVID-19 three-part approach has resulted in increased preventable disease education and improved community engagement in predominantly Black communities in San Bernadino County, CA.

Partnerships between IECAAC, COPE and the California state government led to the expansion of vaccination efforts and integration into other places of worship. Thirteen additional pop-up clinics at places of worship with funding from the Public Health Institute occurred in various sites in California following the implementation of the Loma Linda University mobile vaccination efforts in Black communities. Future directions of this initiative aim to expand vaccination efforts to other preventable conditions.

RESOURCES

Abdul-Mutakabbir, J. C., Casey, S., Jews, V., et al. A three-tiered approach to address barriers to COVID-19 vaccine delivery in the Black Community. *The Lancet Global Health*, 9(6). doi.org/10.1016/s2214-109x(21)00099-1

Office of Governor Gavin Newsom. "As Vaccine Eligibility Expands Statewide, California Partners with Nearly 200 Places of Worship to Ramp Up Equity-Centered Outreach." April 16, 2021. Accessed August 5, 2022.

Potts, D. "Partnership with Black churches increases COVID-19 vaccine delivery among historically at-risk population". Loma Linda University Health. March 22, 2021. Accessed August 5, 2022.

Williams, J. "Faith Meets Science to Boost Vaccine Equity." *US News and World Report*. August 3, 2021. Accessed August 5, 2022.

Utilizing Community Health Workers in Pharmacies to Address SDOH in Missouri

Community Pharmacy Enhanced Services Network Missouri (CPESN MO), Health in the Heartland, Local community organizations, Missouri Department of Health

Keywords: Community health workers, health department, training

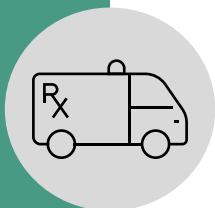


TYPE OF SERVICE

Screening, Referral

BRIEF DESCRIPTION

CPESN MO pharmacies partnered with local community organizations including Health in the Heartland, Saint Louis University, and Missouri's Department of Health to create a bidirectional referral program. Pharmacy staff completes an initial SDOH screening while delivering or dispensing prescriptions. Community health workers (CHW) then provide SDOH support, plus COVID-19 education and vaccines.



KEY TAKEAWAY

In 2019, pharmacy delivery drivers completed 1,400 SDOH screenings and CHWs made 200 referrals. In 2020 and 2021, 57.1% of patients screened identified SDOH challenges, and all screened patients expressed interest in additional pharmacy programs. CHWs provided nearly 15,000 COVID-19 vaccines in 2021 and 2022.

SDOH AREAS ADDRESSED

Cultural or Literacy Barriers
Decent, Safe and Affordable Housing
Food Security
Screening for Unmet Needs
Transportation



SETTING

Community pharmacy

LOCATION

Southeast Missouri



SCALE

Local

TARGETED POPULATION

Individuals filling prescriptions at Missouri community pharmacies

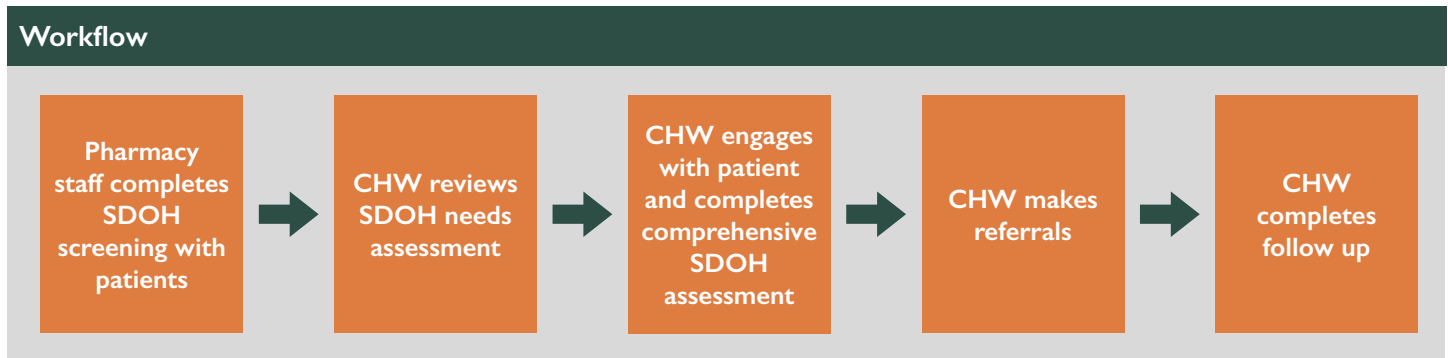
UPDATED

INTERVENTION DETAILS

In 2019, CPESN MO pharmacies launched a bidirectional referral program between pharmacies, local community organizations and the Missouri Department of Health. Additionally, CPESN MO pharmacies created a resource book outlining local resources that address SDOH.

All pharmacy staff completed in-house and National Community Pharmacist Association training modules. Interested pharmacy technicians completed additional state-mandated CHW training. In these pharmacies, the CHW-trained pharmacy technicians lead the SDOH program and can also provide service coordination, informal counseling, health education and care management.

Pharmacy delivery drivers and staff screen patients via an SDOH needs assessment tool. Then CHWs review the needs assessment, perform more comprehensive SDOH needs assessments, refer patients to services and follow up with patients.



During the COVID-19 pandemic, efforts expanded with the creation of the COVID-19 Response Network Project in partnership with local community organizations to build vaccine confidence and increase vaccination rates in underserved communities. Thirty CHWs provided culturally appropriate COVID-19 education and vaccination information through social media, home visits, community events, youth camps and more.

OUTCOMES

In 2019, a pilot study was conducted. CPESN MO pharmacies completed 1,400 SDOH screenings when delivering prescriptions. Additionally, CHWs made 200 referrals. This study estimated an annual savings of more than \$87,000 in out-of-pocket prescription costs.

From Fall 2020 until Spring 2021, 57.1% of patients screened identified SDOH challenges, 56.3% identified affordability of daily needs and 37.5% had concerns navigating the health care system. All participants were interested in additional pharmacy programs, 85.7% in self-monitoring blood pressure, 25% in chronic disease self-management and 25% in vaccinations.

The COVID-19 Response Network Project resulted in 84,201 educational touchpoints and 14,771 vaccinations administered through outreach events between June 2021 and May 2022.

Key lessons learned include the benefits of CHWs to highlight the connection between clinical and social needs, the importance of training CHWs and pharmacy personnel, the need for community partnerships, the importance of reflection opportunities and the need for continued engagement with CHWs beyond project completion.

RESOURCES

- Cunningham, S. "Quality Forum Review: Implementing Sustainable SDOH Programs in Community Pharmacies." PQA Blog. June 15, 2021. Accessed August 16, 2022.
- Foster AA, Daly CJ, Logan T, et al. Addressing social determinants of health in community pharmacy: Innovative opportunities and practice models. *J Am Pharm Assoc* (2003). 2021;61(5):e48-e54. doi:10.1016/j.japh.2021.04.022
- Foster AA, Daly CJ, Logan T, et al. Implementation and evaluation of Social Determinants of health practice models within Community Pharmacy. *Journal of the American Pharmacists Association* 2022; 62(4), 1407–1416. doi.org/10.1016/j.japh.2022.02.005
- PQA Quality Forum Video. "Implementation of Sustainable SDOH Programs in Community Pharmacies." YouTube. April 22, 2021. Accessed August 16, 2022.
- 2019 Annual MPA Conference & Expo. "Community Health Workers and Community Pharmacies: The Perfect Match." Missouri Pharmacist Association. September 12, 2019. Accessed August 16, 2022.

In addition to the resources above, information about this intervention was obtained through correspondence between PQA, CPESN MO, St. Louis University and local community organizations.

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TYPE OF SERVICE

Screening

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ACRONYM LIST

ACO	Accountable care organization
AHC	Accountable Health Communities
AIMM	Alliance for Integrated Medication Management
AMG	Ascension Medical Group
BCBS	Blue Cross Blue Shield
BMI	Body mass index
BP	Blood pressure
CBO	Community-based organization
CCL	Community-clinic linkage
CHW	Community health worker
CMM	Comprehensive medication management
CMR	Comprehensive Medication Review
CMS	Centers for Medicare & Medicaid Services
COPD	Chronic obstructive pulmonary disease
COPE	Congregations Organized for Prophetic Engagement
CPESN	Community Pharmacy Enhanced Services Network
DBP	Diastolic blood pressure
DOH	Dispensary of Hope
ED	Emergency department
FFS	Fee for service
FQHC	Federally qualified health center
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
ICU	Intensive care unit
IECAAC	Inland Empire Concerned African American Churches
IHS	Indian Health Service
IPA	Independent Practice Association
MAPD	Medicare Advantage Prescription Drug
MCC	Medication Care Coordination
MRI	Medication Review, Inc.
MTM	Medication therapy management
MTP	Medication therapy problem
NABP	National Association of Boards of Pharmacy
ONU	Ohio Northern University
PDC	Proportion of days covered
PICF	Partners in Care Foundation
REACH	Racial and Ethnic Approaches to Community Health
SBP	Systolic blood pressure
SDOH	Social determinants of health
SNAP	Supplemental Nutrition Assistance Program
SNOMED	Systemized Nomenclature of Medicine
UCLA	University of California, Los Angeles
VUMC	Vanderbilt University Medical Center

NEXT STEPS

PQA, the Pharmacy Quality Alliance, is a national quality organization dedicated to improving medication safety, adherence and appropriate use.

Give us Your Feedback

PQA welcomes your feedback on the format, impact and utilization of this guide. Please email all feedback to Education@PQAalliance.org.

Provide an Update

Please email Education@PQAalliance.org if you have updated information on any initiative that is included in this resource guide.

Inclusion in Future Issues

If you are working on SDOH initiative that PQA can consider for inclusion, please fill out this form.

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The information included in this guide was obtained from publicly available sources, published literature and in some cases through submission of intervention details directly to PQA and was current at the time it was gathered.



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