

Addressing Patients' Non-clinical Risk Factors in Ongoing Management

The Role of Community Partnerships to
Advance Population Health Management



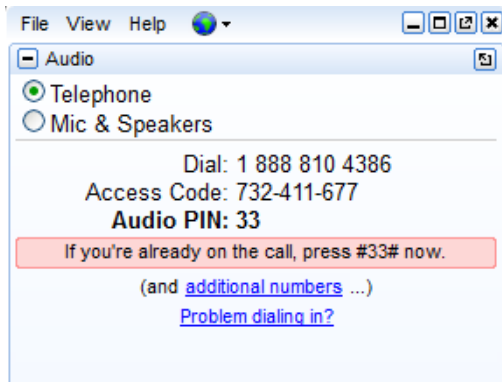
Darby Sullivan
Research Analyst
SullivaDa@advisory.com

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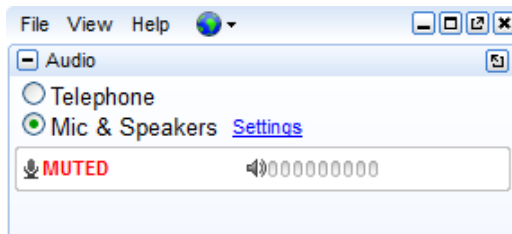
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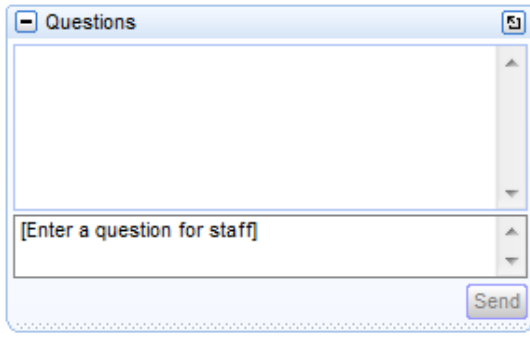


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1

The Impact of the Social Determinants of Health

2

The Role of Community Partnerships in Addressing Patients' Non-clinical Risk Factors

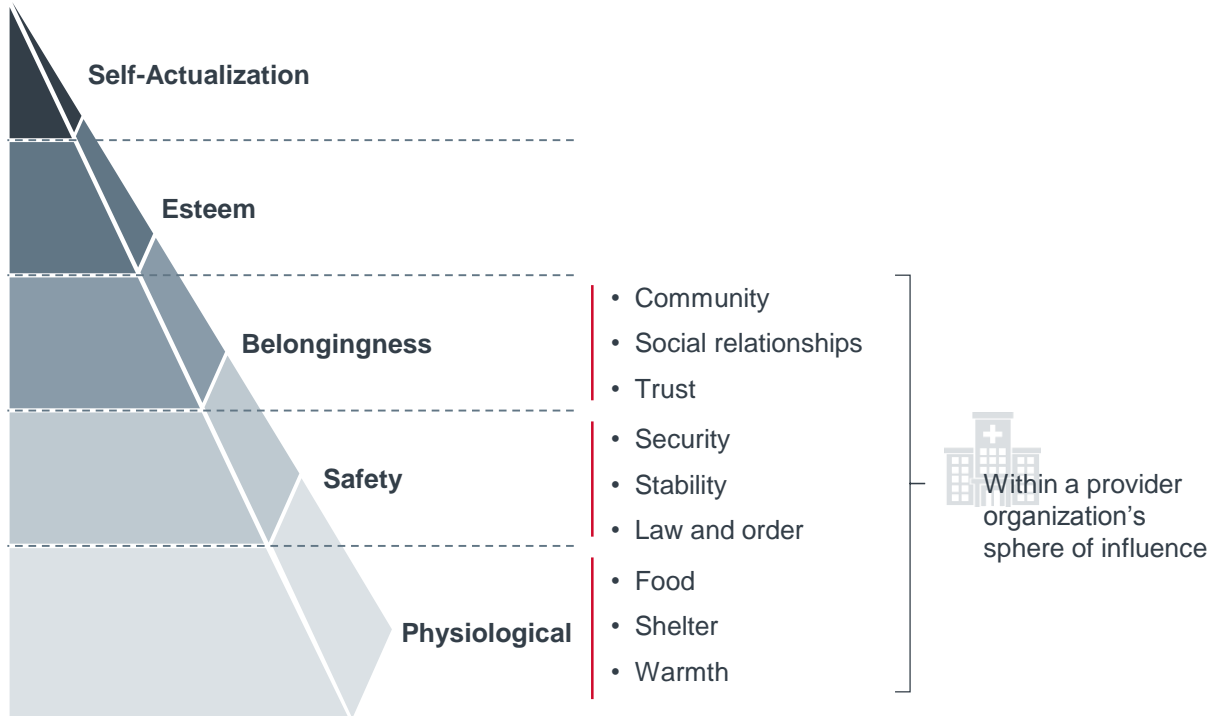
3

Key Considerations for Promoting Long-Term Sustainability

Key Drivers of Risk Are Often Non-clinical in Nature

Must Meet Certain Needs Before Care Can Inflect Positive Change

Applying Maslow's Hierarchy of Needs to Population Health Management



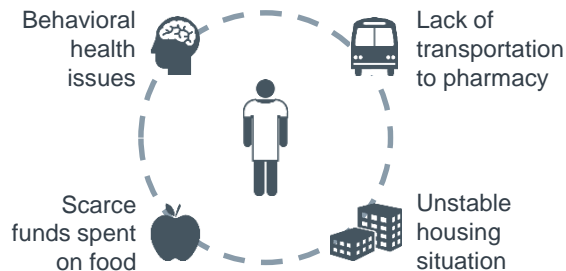
Social Needs Complicate Clinical Challenges

Holistic Approach Critical for Achieving Central Population Health Goals

Surface Underlying Non-clinical Problems Contributing to Worse Health Outcomes



High-risk patient's condition continuing to worsen because patient is not adhering to medication regimen



20%

Health outcomes resulting from social and environmental factors

High-Risk Patients Face Most Severe Social Needs

Care Teams Unable to Provide Full Range of Services Alone

Interlocking Social Determinants of Health Inform Clinical Outcomes



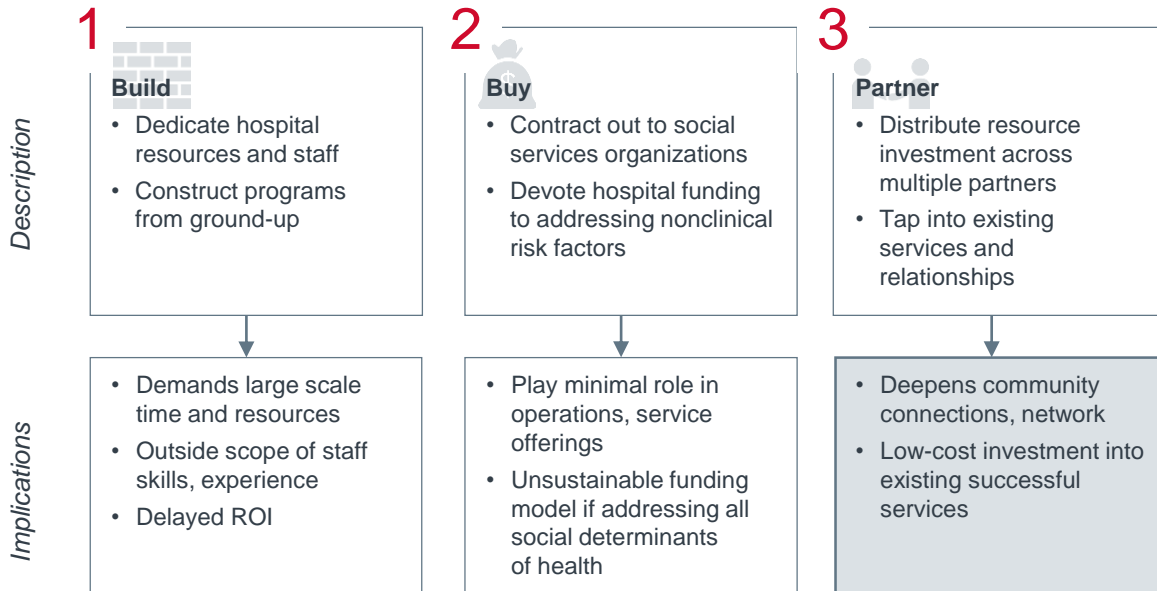
85%
Physicians reporting that unmet social needs lead directly to poorer health outcomes

20%
Physicians who are confident in their ability to address unmet social needs

Source: "Health Care's Blind Side," Robert Wood Johnson Foundation, <http://www.rwjf.org/en/library/articles-and-news/2011/12/health-cares-blind-side-unmet-social-needs-leading-to-worse-heel.html>; Population Health Advisor interviews and analysis.

Partner for Sustainability and Efficacy

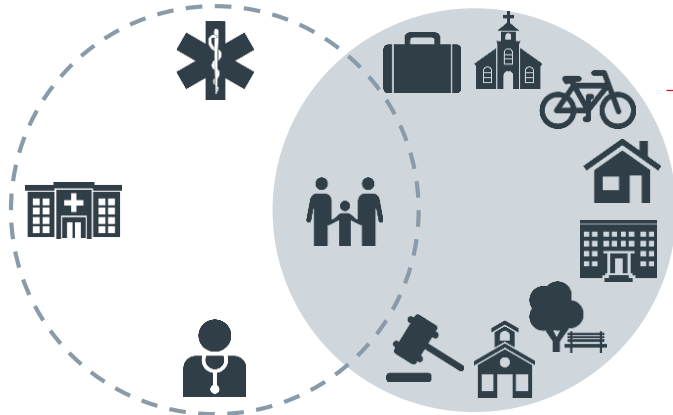
Don't Reinvent the Wheel to Address Non-clinical Needs



Broad Range of Partners To Choose From

Clinical-Community Linkages Improve Access to Funding and Services

Sphere of Patient Activity and Interactions



COMMON COMMUNITY PARTNERS

- Public health departments
- County mental health agencies
- School districts and universities
- Faith-based organizations
- Service leagues (e.g., Lions, Rotary)
- Environmental organizations
- Local agencies (e.g., housing and city planning departments)
- Non-profit service providers (e.g., Meals on Wheels, food banks)
- Local businesses (e.g., barber shops)
- Public safety providers (e.g., EMS)

3

Primary partners per project
(including hospital)

8

Average total number of
partners involved per project

\$149K

Average hospital match per
implementation site

CMS Signals Increasing Interest in Partnerships

Government Joins Payers and Private Companies in Efforts



Program in Brief: Accountable Health Communities Model

- **Overview:** Grant program awarded Fall 2016 to test impact of Medicare and Medicaid beneficiaries' non-medical needs on patient outcomes and total cost of care
- **Key Focus Areas:** Housing instability; food insecurity; utility needs; interpersonal violence; and, transportation needs
- **Eligible Applicants:** Community-based organizations, health care provider practices, hospitals and health systems, institutions of higher education, local government entities, tribal organizations, and for-profit and not-for-profit local and national entities
- **Use of Funds:** Funds cannot pay directly for any community services (e.g., housing, food) received by beneficiaries, but must be used to fund interventions intended to connect people to those offerings

\$157M CMS funding available to bridge clinical care and social services

3 Tracks Awareness, assistance, and alignment with community service

44 Total awards available to "bridge" organizations

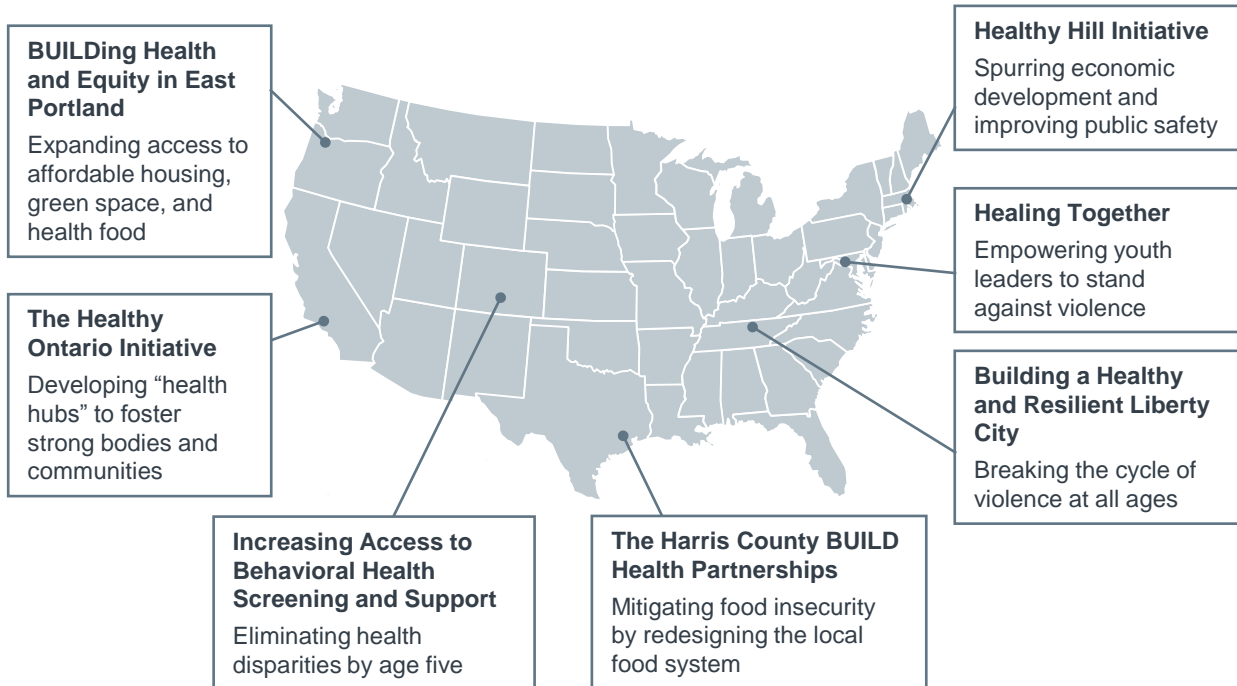
5 Years Program duration; participants must renew annually

\$4.5M Maximum funding per each of 20 track 3 bridge sites

Tremendous Innovation Driven by Partnerships

Focus on Determinants of Health Driving Short- and Long-Term Impact

Overview of the BUILD Health Challenge¹ Communities



1) The BUILD Health Challenge is an initiative designed to foster and expand meaningful partnerships among health systems, community-based organizations, local health departments, and other organizations that impact health in the community.

1

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Addressing Patients' Non-clinical Risk Factors

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Key Considerations for Promoting Long-Term Sustainability

Addressing Non-clinical Needs to Improve Outcomes

Identify Structural Barriers that Contribute to Health Disparities

Map Major Community Health Needs to Partner Organizations With Tools for Success



Meet Fundamental Needs Critical to Clinical Success

Opportunities to Partner

Address baseline needs (e.g., hunger, housing) that must be met before patients can begin to prioritize health care



Remove Barriers to Access Based on Severity of Need

Increase access to health services, from preventive to specialist care, for patients facing logistical barriers (e.g., work hours, lack of transportation)



Engage Disconnected Patients At-Risk of Clinical Escalation

Enhance engagement and reduce the trust gap by aligning with community-based organizations serving at-risk, disengaged patient populations



Resources to Achieve Health Equity Aims

- Safe, stable housing
- Healthy foods



- Transportation services
- Convenient health fairs
- Mobile health clinics



- Community health workers
- Barbershop screenings
- Congregational liaisons

Decreasing resource requirements and severity of need 

Prioritize Needs That Preclude Health Improvement

Review Evidence to Surface Community's Most Pressing Barriers

Lack of housing

- Leads to increased rates of physical trauma, chronic diseases, dental issues, behavioral health problems, and exposure
- Reduces access to primary care and ability to self-manage

26-36 years reduced life expectancy

\$44K average annual cost per highest-volume ED patient experiencing homelessness



Food insecurity

- Leads to increased rates of chronic diseases, dental issues, behavioral health problems, stress, and hospitalizations
- Influences purchasing decisions between food and: medicine (74%), transportation (67%), utilities (59%), and housing (57%)

\$179B annual direct and indirect health-related costs attributed to food insecurity



Language barriers

- Leads to increased rates medical errors, infectious disease, and infant mortality
- Reduces access to preventive care, ability to adhere to care plan, and engagement

2x increased likelihood of interpretation errors without use of a professional

60% increased risk of initial ED visit for patients requiring interpretation services



Social isolation

- Leads to increased rates of behavioral health problems, dementia, hospital readmissions, and mortality
- Reduces ability for the elderly to live independently

26% increased risk of mortality resulting from loneliness





10% increased annual visits to the doctor



Collaborate to Make Big Community Investments

Diversified Housing Offerings Meets Range of Needs with Tangible ROI

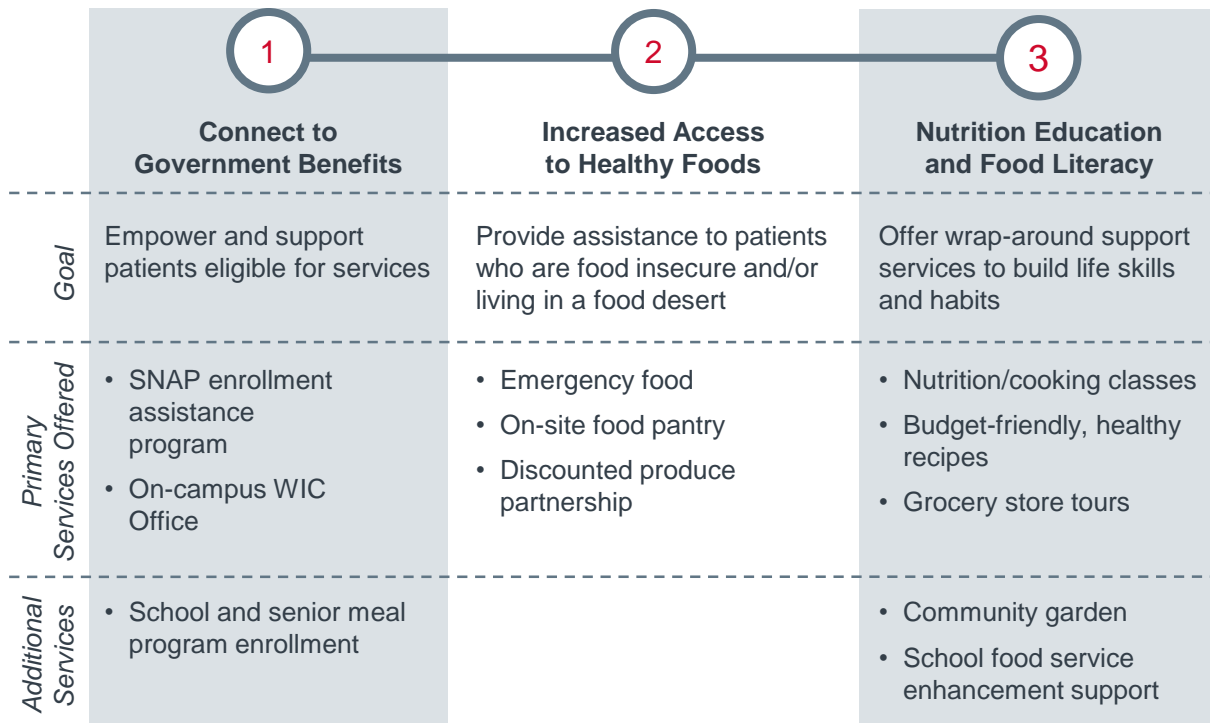
UVMMC¹ Develops Housing Portfolio Through Partnership

	Short-Term	Permanent
 <i>Infrastructure</i>	Harbor Place Rooms: 22 family units, 34 single units with an average stay of 8 days	Beacon Apartments: 18 single units across an indefinite stay
 <i>Services</i>	<p>Case management: UVMMC funds 1 onsite FTE Case Manager from CHC¹ who connects patients to CHC provider and fulfills additional needs (e.g., insurance)</p> <p>Mental health services: Howard Mental Services dedicates one case manager to each site (1 FTE), who is reimbursed separately</p> <p>Additional clinical services : Various providers (e.g., Visiting Nurse Association, physician house call) visit each site as needed</p>	
 <i>Funding</i>	<p>Pay per diem rate for patients</p> <p>Guarantees minimum number of nights</p>	<p>Helped fund purchase and renovation of motel and pays operations amount per patient</p>
 <i>Results</i>	<p>Decreased inpatient admissions: Reduced from 95 to 30 stays</p> <p>Decreased ED utilization: Reduced from 161 to 94 visits</p>	<p>Decreased annual cost of care: Dropped health care from \$750K to \$250K for permanently housed patients</p>

1) University of Vermont Medical Center.

Food, Nutrition Often at Heart of Initial Partnerships

Obesity, Food Insecurity, and Chronic Conditions Inextricably Linked



Use Existing Resources for Holistic Nutrition Support

Produce from On-Site Farm Supplements Cross-Continuum Education

Lankenau's Health Educators Combat Food Insecurity Across Care Continuum



Inpatient

Health educator role

Educate CHF patients and families about healthy eating to encourage long-lasting dietary changes

Added support

Fresh, free produce given to patients from onsite farm



Outpatient

Lead pop-up nutritional classes and provide free produce and recipes in waiting rooms

Patients referred to community-based services based on results of Social Needs Survey administered in waiting rooms



Community

Offer nutrition counseling at local farmers markets and corner stores; direct patients to fresh, low-cost produce sources

\$10 Philly Food Bucks vouchers distributed to be redeemed at local farmers markets; corner stores host wellness and preventive care sessions

EMR tracks pop-up class utilization, Philly Food Buck usage, harvest volume, and produce distribution



9,596

Pounds of food harvested

1,600

Patients receiving food during first 1.5 years open

1/2

Acre used for harvest

Design Program to Address Root Cause of Care Gap

Stabilize At-Risk With Consistent Touchpoints to Health System

Disconnected Patients Face Three Common Access Barriers That Threaten Outcomes

Miss preventive, primary care appointments due to a lack of adequate transport

Unable to access care due to logistical barriers (e.g., appointment timing, clinic location)

Lack key resources to manage health and access care (e.g., housing, economic stability, insurance)

Map Program to Community's Most Pressing Access Barriers and Level of Care Required

1

Arrange Transportation Support to Bring Patients to You

- Coordinate with rideshare companies
- Offer taxi vouchers

2

Create Convenient Care Hotspots

- Launch targeted health fairs
- Integrate staff in community based organizations

3

Bring Full Scale Services to Targeted Locations

- Invest in mobile health clinic for community hotspots
- Set up worksite clinics

Low

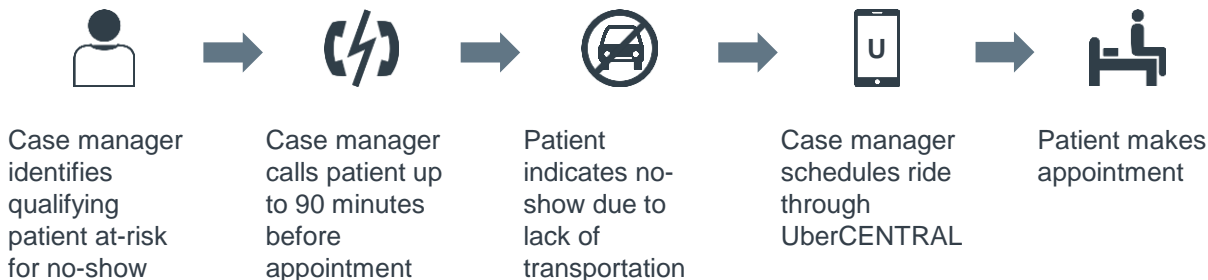
Provider integration into the community

High

Getting Patients To, Rather than Through, the Door

MedStar Teams Up with Uber to Bring Qualifying Patients to Appointments

Case Managers Use Uber to Help Patients Overcome Transportation Barrier



Source: Syed, Samina T., Ben S. Gerber, and Lisa K. Sharp. "Traveling Towards Disease: Transportation Barriers to Health Care Access." *Journal of community health* 38.5 (2013): 976-993. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4265215/>. Population Health Advisor interviews and analysis.

Create Convenient Care Hotspots in the Community

Bring Screening Events to Unconnected Groups

Annual Health Fair for Upper Manhattan's Taxi Drivers



Engage Target Population

Livery Cab drivers, adult males of all ages



Pinpoint Specific Health Needs

Sedentary 12-16 hours a day, do not receive regular preventive care



Remove Barriers to Attendance

Lack of parking for cabs, lack of awareness and time

Targeted Outreach Strategy

- 1** Taxi cab dispatchers direct drivers to the annual health fairs; NYP posts marketing flyers at cab bases
- 2** Taxi drivers are provided with free parking for their cabs
- 3** Medical home staff provide HIV, blood pressure, diabetes, cholesterol, prostate, and vision screening
- 4** Patients receive on-site counseling based on screening results

Supporting Team Efforts with Minimal Resources

System Staff Volunteer at Health Fair

Before Health Fair



Outreach Nurse and Coordinator

- Plans and coordinates health fair
- Enlists volunteer providers
- Liaises with taxi dispatchers

During Health Fair¹



Provider Volunteers

- Conduct all patient screening during health fair
- Provide in-the-moment counseling

After Health Fair



Outreach Nurse

- Follows up on patients with high clinical indicators or positive tests



NewYork-Presbyterian's Regional Health Collaborative Driving Results

20%

Portion of a single full-time employee's time dedicated to this initiative

500

Number of patients seen annually at taxi driver health fairs

¹) All education and screening efforts made possible by inter-departmental collaboration and community partnerships.

Clinic Brings Care to CBOs¹ Serving the Homeless

Eliminate Transit Barriers that Impede Access to Care and Medications

HOMES² Program Addresses Needs of Patients Experiencing Homelessness During and After Visit



Clinical Care

Mobile clinic staff provide acute and chronic disease care, education, check-ups, immunizations, mental health counseling, and dental care for children and adults



Psychosocial Services

Supplemental services vary by site and population need (e.g., staff health educator, interpreter, psychologist when visit domestic violence shelter)



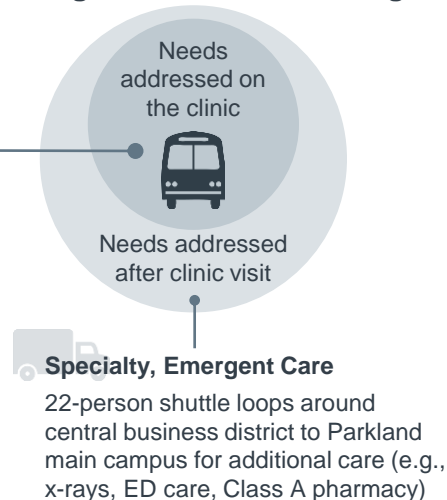
Medication Access

Pharmacy supplies 35 medications for patients free of charge to enable patients to start regimen immediately



Referrals to Other Programs

Staff connect patients to other programs (e.g., specialty clinics, housing support)



9,377

Patients served in 2015

78%

Patients uninsured

\$5M

Annual program budget

1) Community Based Organizations.

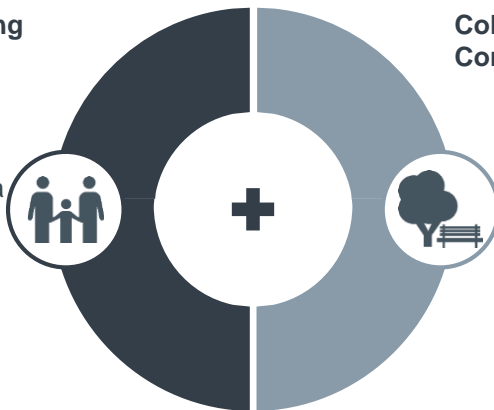
2) Homeless Outreach Medical Services.

Select Trusted Partners with Deep Community Ties

Supplement Programs with Partner Expertise to Jump Start Engagement

Devote Staff to Strengthening Community Relationships

- Build a longstanding relationship by catering to the specific needs of a particular population
- Promote top-of-site utilization by connecting patients with appropriate services
- Embed a health system staff member in the community to build patient loyalty



Collaborate with Trusted Community Partners

- Choose partners based on existing positive relationships with target population
- Augment partner expertise with health system resources
- Build rigorous partnership agreements based on joint principles of collaboration

Time, resource commitment

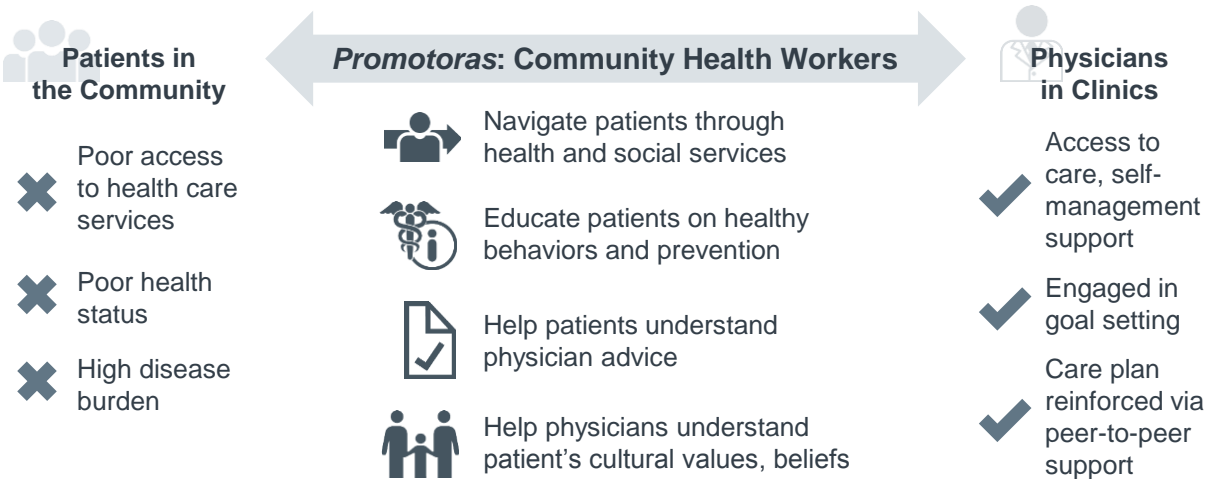
High

Health system control

Low

Use CHWs¹ to Capture Disconnected Patients

Bridging the Physician-Patient Communication Gap



Academic Research Supports the Case for Leveraging CHWs

2.28:1

ROI of running a CHW program

25%

Decrease in inpatient visits after contact with a CHW

79%

Frequency of positive outcomes associated with CHWs

Source: Bodenheimer, T., "Building Primary Care Teams: 15 Case Studies," *California HealthCare Foundation*, 2007; Dower C, et al., "Advancing Community Health Worker Practice and Utilization: The Focus on Financing," National Fund for Medical Education, https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/6_%202006-12_Advancing_Community_Health_Worker_Practice_and_Utilization_The_Focus_on_Financing.pdf; Population Health Advisor interviews and analysis.

Embed Targeted Health Literacy Approach with Rigor

Initiating Effort with Rx Adherence Goals to Achieve Trackable Success

Improving Health Literacy Necessitates Standardized, Community-Inclusive Process



Develop culturally-relevant and evidence-based **health literacy curriculum**

- Incorporate community input on unit topics
- Use data from needs assessments or studies



Perform individual **patient interventions** across all partner organizations

- Perform teach-back
- Provide visual and written educational materials



Train **health and community leaders** to use effective health literacy techniques

- Medical center staff (e.g., pediatricians, residents, and family support/ community health workers)
- Staff from seven participating CBOs¹ (medical students, volunteers)



Repeat research process as necessary to **adapt curriculum** with changing community needs

1) Community Based Organizations.

Leverage Community as Program Design Lab

Columbia University's Three Step HEAL¹ Curriculum Based on Research Shape Curriculum According to Community-Sourced Needs and Provider-Led Analysis



Provider role

- Community pediatrics unit initiated health literacy program targeted towards parents
- Staff researcher performed an observational study on communication quality between patients and providers
- Included patient exit interviews



Community role

- Key nonprofit partner gathered 22 community members to form three focus groups in Spanish and English
- Groups offered input on patient communication with providers, medication use, and home remedies



Health literacy curriculum

- Seven-unit course developed on a 5th grade reading level and a train-the-trainer manual
- Spanish versions created by speakers native to countries represented by patients
- Unit topics include:
 - Doctor's appointment preparation
 - Over-the-counter medications
 - Prescription medications
 - Home remedies
 - Medication management
 - Upper respiratory infections
 - Antibiotic use

Results Indicate Improved Health Literacy is Viable

Incorporate Applicable Lessons Into Nascent Efforts



83%

Patients approached in waiting rooms indicating interest in program

61%

Increased knowledge/attitude score for parents receiving upper respiratory infection education

145

Pediatric faculty, residents, and family support workers trained at CUMC¹ clinics

Key Lessons To Guide Health Literacy Programs



Base Program on Explicit, Quantifiable Goals

Strong vision for health literacy intervention (e.g., improved medication adherence) spurs metric tracking to prove efficacy and sustain funding



Leverage Networks of CBOs² to Build Course

Local social services and nonprofits can connect providers with community representatives who help guide topic development



Inform Clinical Staff of Proven Best Practices

All patient-facing staff should be aware of and trained on health literacy best practices to improve communication protocols



Use Partners to Expand Program Reach

Extend health literacy programming outside the health system into community health clinics and social service organizations

1) Columbia University Medical Center.

2) Community Based Organizations.

Pillars of Community Can Help Breach the Trust Gap

MedStar Brings Care to Barbershops to Reach the Disconnected

Staff Perform Screenings Through the “Hair, Heart and Health” Program to Identify African-American Men At-Risk for Hypertension, Diabetes



Barbers trained to promote diabetes and hypertension screening, provide health education

- Receive 8-hour training on informed consent, measuring height and weight, and collecting data



Health navigators conduct blood pressure and blood glucose screenings on-site

- Present in rotating, high-traffic barbershops from 2-7pm five days/week



RN, Dietician, Diabetes Educator perform follow up appointments on-site

- Do not travel for regular screenings



Surfacing Undiagnosed Health Issues

54%

Previously undiagnosed participants with hypertensive or pre-hypertensive BP readings

19%

Participants with uncontrolled BP referred to and tracked for follow-up care

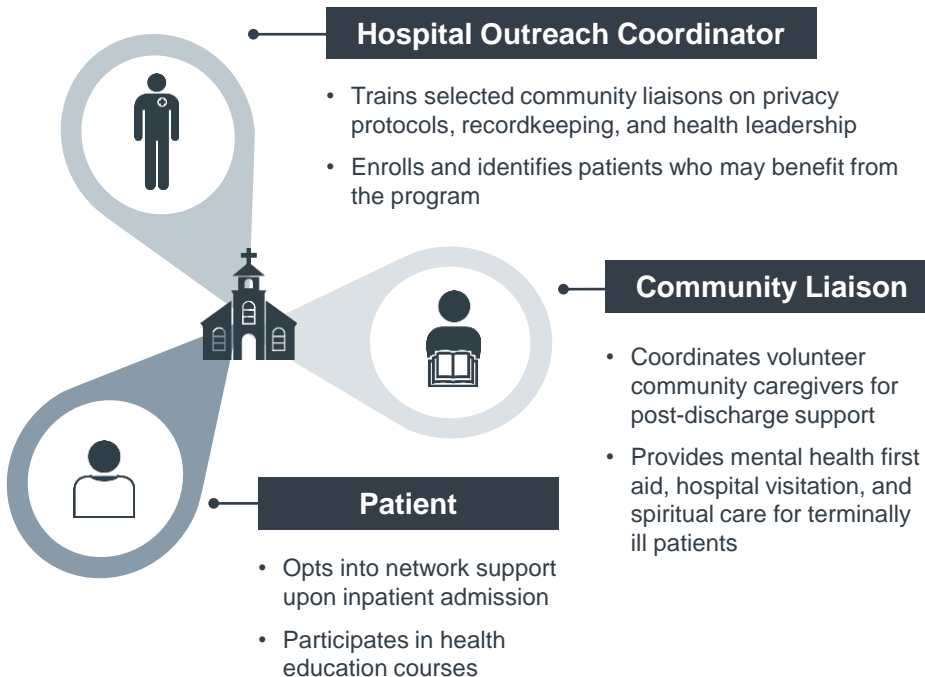
9%

Previously undiagnosed participants with elevated blood sugar

Embed Staff in Community to Optimize Transitions

Empower Community Liaisons to Support High-Risk Patients

Outreach Coordinator, Liaison Provide Face-to-Face Patient Support in Community



20%

Reduction in readmissions among program participants

\$4.1 M

Aggregate cost savings from decreased utilization

1

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Key Considerations for Promoting Long-Term Sustainability

Providers Can't Afford to Ignore Non-Clinical Needs

Documented Impact of Addressing Specified Patient Need

Need	Reduces Cost	Rightizes Utilization	Improves Quality	Improves Access	Improves Satisfaction ¹
 Language barriers	✓	✓	✓	✓	✓
 Behavioral health	✓	✓	✓		✓
 Housing instability	✓	✓	✓		✓
 Socioeconomic status ²	✓	✓	✓	✓	
 Food insecurity	✓	✓	✓		
 Lack of transportation	✓		✓	✓	
 Social isolation		✓	✓		✓

1) Includes staff and patient satisfaction.

2) Includes insurance status and financial status.

Best Partnerships Require Rigorous Standards

Success an Iterative Process Requiring Buy-In, Focus, and Care Integration



Prioritize Initial Focus: *Determine what services to start with*

1. Who are the most vulnerable members of my community?
2. What are their greatest non-clinical needs?
3. Who is identifying these needs at the level of the individual?
4. Are assessment results being shared across partners?
5. Are we adequately serving those who may be disconnected from the health system? If not, how will we reach them?



Engage Leadership: *Communicate the business case, resource needs*

1. What is our business case for expanding community engagement/collaboration efforts?
2. How will we measure and track partnership success?
3. What kind of resource commitment can we offer? What resource commitments do we need from others?



Design Standards: *Outline screening, referral protocols and contributions*

1. Which partners can support us in providing these services?
2. How many patients do we aim to treat through this initiative?
3. What will each party contribute?
4. How will we share data and communicate regarding progress?

Value to Patients, System Must Be Critically Assessed

Partner Relationships a Two-Way Street, Success Not Guaranteed

Hallmarks of Effective Relationships



Enthusiastic buy-in from leadership and frontline staff



Sustainable infrastructure for stakeholder engagement, feedback



Clear metrics for measuring ROI, transparency, accountability



Aligned back office capabilities for data transparency, continuity



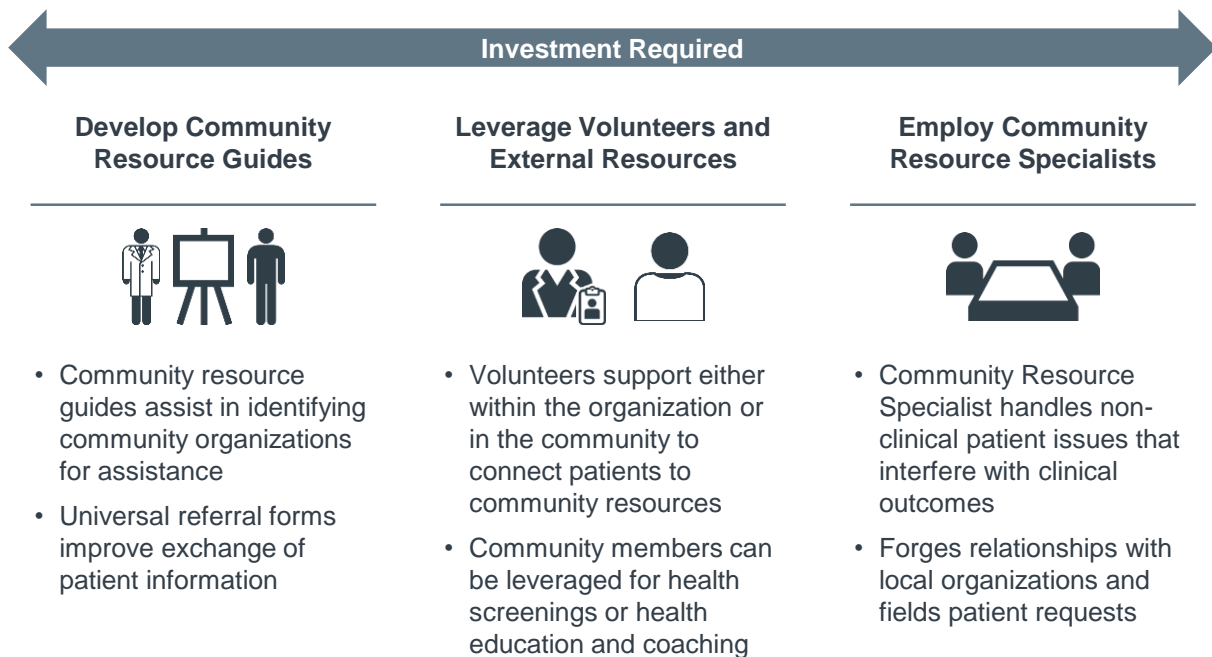
Shared mission and culture

Community Partner Checklist:

- Provides high quality services valuable to Medicaid population
- Conveniently located near crowded, high-Medicaid system EDs
- Articulates clear value to system, with demonstrable ROI
- Maintains open, transparent communication channels
- Willing to meet clinical standardization expectations
- Willing to progress toward risk-based arrangements

Many Opportunities for Engaging Staff with Partners

Communication Strategy Depends on Resource Availability



A Few Lessons from Experienced Peers

Advice from BUILD Leaders Helps Efforts Start Strong



Define key terms upfront. For example, there may be multiple concepts of “community” even within a single institution (e.g., metro region, adjacent neighborhoods, specific zip codes)



Balance accessibility with meaningfulness of data. Useful measure sets should capture both community conditions (e.g., whether housing is affordable and people are healthy) and institutional effort (e.g., dollars spent, staff hired)



Partner with community groups to collect data. While hospitals have robust clinical data, other partners have ready access to other helpful data points such as home environment



Include a mix of process and outcome metrics. Demonstrating outcomes can be slow given the pace of work and long-tail of certain interventions, so ensure metrics provide helpful guideposts for progress in the interim



Aim for “good enough.” There are no perfect metrics or perfect methods for isolating impact in interventions with multiple partners and confounding factors



Building the Business Case for Community Partnership

Four steps for building effective community partnerships to extend care team reach and improve cost and quality. Access it [here](#)

First Steps Can Be the Most Challenging

Tactics for Identifying Community Health Disparities

Next Webconference

Advancing Health Equity: Surfacing Disparities in Outcomes and Care Delivery



Thursday, **February 1st**, 2018 • 3:00p.m.

Join us again in February to discuss how to identify your community's most pressing social determinants of health. This collaboration from Population Health Advisor and Health Disparities Initiative will outline best practices for surfacing health disparities on a community- and patient-level.

Register for the webconference [here](#).

Webconference Survey



Please take a minute to provide your thoughts on today's presentation.

Thank you!

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Appendix

Sources Cited, Page 16

Lack of Housing

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2445 M Street NW, Washington DC 20037
P 202.266.5600 | F 202.266.5700 | [advisory.com](https://www.advisory.com)