Contact Information	Donna Oliver Spokane Regional Health District (509) 324-1520 doliver@srhd.org *Organizations involved in developing this project suggestion:* • Spokane Regional Health District, Better Health Together, Foundation for Healthy Generations, Catholic Charities of Spokane, WA Department of Health
Project Title	Community Health Workers as a Mechanism for Increasing Preventive Behaviors

Rationale for the Project

Problem Statement: It is common knowledge that prevention and early detection of disease can save not only lives, but also money. In this new era of implementation of the Affordable Care Act there is a large, new group of Medicaid insured adults that may not be familiar with how to use their insurance, access to primary care, or screening and prevention resources available to them. In addition, the large influx of new patients put increased stress on the existing medical system's ability to meet these needs. The majority of Medicaid costs are attributable to a very small portion of the Medicaid population: the highest-spending 5% of enrollees account for 54% of total expenditures.[1] Among the highest-spending 1%, 83% have at least three chronic conditions and more than 60% have five or more chronic conditions. [2] These patients often need services beyond medical care and support beyond the traditional office-based medical team.

Preventive behaviors happen where people live and are heavily influenced by the context of their lives. Community Health Workers (CHWs) have the potential to enhance the healthcare system because of their unique qualities. According to the American Public Health Association, a CHW is a "trusted member of and/or has an unusually close understanding of the community served."[3] Often sharing the same ethnic background, culture, language, and life experiences, CHWs have knowledge and the ability to communicate with some patient populations that doctors and nurses do not possess. By integrating CHWs into clinical care teams, CHWs can act as liaisons and patient advocates. CHWs can help patients connect to service providers to help them meet their health goals, navigate the health system, connect them to community resources, participate in preventive care and chronic disease self-management skills, and much more.[4]

- *Supporting research (evidence-based and promising practices) for the value of the proposed project.*[i]

Studies have shown that CHWs can be effective in improving outcomes for many health outcomes including cervical cancer screening,[5] mammography rates,[6] tobacco cessation,[7] and cardiovascular risk reduction.[8] In addition CHWs in clinical settings have tackled multiple factors which included preventive behaviors such as fruit and vegetable consumption.[9]

- *Relationship to federal objectives for Medicaid*[ii] *with particular attention to how this project benefits Medicaid beneficiaries. Conditions and more than 60% have five or more chronic conditions.*

The integration of CHWs into community based care coordination teams has the potential to further meet the Affordable Care Act's triple aim of improving the quality of care, improving patient health, and reducing costs. CHWs share similar cultures, language, and life experiences, and "this trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery." [10]

Project Description

Which Medicaid Transformation Goals[iii] *are supported by this project/intervention? Check box(es)*

- ☐ Reduce avoidable use of intensive services
- X Improve population health, focused on prevention
- ☐ Accelerate transition to value-based payment
- X Ensure Medicaid per-capita growth is below national trends

Which Transformation Project Domain(s) are involved? Check box(es)

- ☐ Health Systems Capacity Building
- X Care Delivery Redesign
- X Population Health Improvement – prevention activities

Describe Intervention: Activate communities through CHWs: Recruit and train CHWs as part of medical teams who will assist in promoting preventive clinical screenings and supporting prevention behaviors,[11] link to community resources and connect to a larger network that includes CHWs within the community. Coordination of this effort would strengthen existing regional CHW networks to build community solutions and help to develop new community-based responses and strategies that address the unique needs of this population. In addition, the community-clinical linkage application will connect CHWs to larger reform efforts through Accountable Communities of Health. CHWs will be not only with community organizations but also be changing the systems in which care is provided by those organization by utilizing CHW model.

Relationship to Washington's Medicaid Transformation goals.

Improving the use and access to needed community supports will get to four major population health and prevention goals: (1) improve the health and stability of vulnerable populations; (2) create targeted connections that dramatically reduce unnecessary ED visits, hospital admissions, and incarceration; (3) lower the cost of health care delivery; and (4) create an opportunity to explore innovative ways to leverage partnerships and reinvest funds into community-based prevention with the goal of maximizing population health by understanding the specific needs of target populations.

Project goals, interventions and outcomes expected during the waiver period, including relationship to improving health equity /reducing health disparities.

The state-wide CHW Task Force, formed by HCA and DOH, is a broad based group validated the importance of integrating CHWs into the health workforce. This strongly recommends the use of CHWs to address health equity and health disparities. The peer to peer model eliminates bias of the practitioner and supports a common belief system. By integrating CHWs into medical teams to provide whole-person care, health and social service care teams can address not only the presenting medical conditions, but the challenges and barriers that may prevent successful self-management of chronic conditions. The Institute of Medicine supports the use of CHWs to provide better care to diverse and underserved populations and reduce health inequities.[12] Furthermore, CHWs are particularly valuable in connecting populations with limited English proficiency and those who are distrustful of the medical establishment to primary and preventive care and linking them to needed supports and services in the community.

Project goals include integrating CHWs into health care teams, connecting patients to appropriate health and social service providers, establishing coordinated, high-quality care, thereby reducing the spending on disease management/treatment.

Project outcomes:

- Increased preventive behaviors
- Improved patient health, both in preventive care and the management of chronic diseases
- Increased system effectiveness in reaching and engaging the Medicaid population
- Decreased non-urgent ED utilization, preventable hospitalizations, and other avoidable high-cost
- Regular ongoing primary care visits
- Reduced costs per patient
- Patient satisfaction with care quality

Links to complementary transformation initiatives - those funded through other local, state or federal authorities (such as the health home program and Early Adopter/Behavioral Health Organization regional purchasing) and/or Medicaid Transformation initiatives # 2 and 3.

- Accountable Communities of Health, 1422 Grantees/Partners, Low-income Housing Community Health Advocate Model, Community Health Worker Training System, Community Health Worker Regional Network, Fruit and Vegetable Prescription Programs

Potential partners, systems, and organizations (e.g., health and social service providers, ACH participants) needed to be engaged to achieve the results of the proposed project.

- Spokane Regional Health District, Better Health Together, Medical Clinics, Low-income Housing, Catholic Charities, Social Service Organizations, CHW Network, United Health Care, Inland Northwest Health Services, Safeway Stores

Core Investment Components

Describe:

Proposed activities and cost estimates ("order of magnitude") for the project.

- Develop protocol (e.g., referrals, documentation, etc.)
- Hire and train CHW – both CHW role, role on a care team, EMR
- Orient host agency/care coordination team. Train supervisor.
- Identify potential partners and referral sources.
- Identify patient/client
- Provide CHW services
    - Outreach, develop and implement a care plan with patient/client, coordinate with local health and human service providers for needed services, advocate for the patient/client to get needed services, provide appropriate health education/health coaching (e.g., chronic disease self-management), connect to potential sources of social support

***Best estimate (or ballpark if unknown) for**:* Costs would include coordination of efforts, and would be dependent on the number of clinics involved: Bronx-Lebanon Hospital Department of Family Medicine's CHWs each work with an average of 33 patients per year. In one study, researchers estimated a savings of $50,000 per year per CHW, with the assumption that each CHW has a caseload of 30 patients. In the Molina New Mexico program hired 6 CHWs to cover 691 high-utilizing patients. Costs were estimated to be $559 per patient per year. Denver Health Community Voices hired 12 CHWs to work with 590 underserved patients. The program cost $6,229 per month.

How long it will take to fully implement the project within a region where you expect it will have to be phased in. Implementation would take 6-12 months: Engagement of clinical partners, recruitment and training of CHWs, defining of system and measures, connection to CHW network.

The financial return on investment (ROI) opportunity, including estimated amounts and associated ROI timeline.

- Bronx-Lebanon Hospital Department of Family Medicine's CHW program began in 2007. It saw a net savings of $1,135 per patient and $170,213 per CHW per year, which equates to a $2.30 return on every $1 invested in the program.[13] Initially the CHW positions were grant-funded. By 2012, seeing the program's success, hospital administration decided to pay for the CHWs positions.
- Through a six-month CHW intervention, Molina Health Care of New Mexico experienced an average savings of $4,564 per patient when comparing costs pre- and post-intervention.[14]
- Denver Health Community Voices hired 12 CHWs to work with 590 underserved men. Researchers studied utilization data before and after an 18-month intervention period and determined a return on investment of $2.28 for every $1 spent and an annual savings of $95,941.[15]
- In West Baltimore, CHWs served patients with diabetes and were able to achieve an average savings of $2,245 per patient per year. If each CHW had a caseload of 30 patients, it is estimated that gross savings would be $80,000 to $90,000 per CHW per year. The program generated a total savings of $262,080 for 117 patients.[16]
- The financial return on investment (ROI) for a Fruit and Vegetable Prescription Program has never been calculated, but it is estimated that involving such a program would be 20%. On average, fruit and vegetable prescriptions are estimated to cost $900/year per Medicaid household ($75/month*12months=$900/year), but could save $1092/year in healthcare costs[17] by improving patient food security.

Project Metrics

The state will monitor implementation of transformation projects at regional and statewide levels through process and outcome measures. Each project will require clearly defined outcomes that relate to the goals and specific process steps.

Key process and outcome measures: Key process measures include developing a protocol, hiring CHWs, training CHWs, training non-CHW staff, and identifying partners and referral sources. Key outcome measures for this project from the Healthier Washington Statewide Common Core Set of measures for 2016 include: cancer screening (breast, cervical, colon), blood pressure management, tobacco cessation, nutrition and physical activity behaviors, pre-diabetes screening.

***If no specific benchmark performance data are currently available, what efforts will be undertaken to establish benchmark performance ahead of any proposed project implementation*?** Every effort will be made to gather baseline data before project is fully implemented.

Foot notes/references/citations:

[1] http://kff.org/health-reform/issue-brief/medicaid-moving-forward/
[2] http://www.chcs.org/resource/the-faces-of-medicaid-ii-recognizing-the-care-needs-of-people-with-multiple-chronic-conditions/
[3] https://www.apha.org/apha-communities/member-sections/community-health-workers
[4] http://nyshealthfoundation.org/uploads/resources/making-the-connection-community-health-workers-sept-2012.pdf
[5] http://www.ncbi.nlm.nih.gov/pubmed/24185143
[6] http://www.sciencedaily.com/releases/2011/06/110623130940.htm

[7] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470484/
[8] http://www.ncbi.nlm.nih.gov/pubmed/23153152
[9] http://online.liebertpub.com/doi/abs/10.1089/1540999041281133
[10] https://www.apha.org/apha-communities/member-sections/community-health-workers
[11] http://www.ncbi.nlm.nih.gov/pubmed/20595453
[12] http://coe.stanford.edu/courses/ethmedreadings06/em0601garcia2.pdf
[13] http://www.chwnetwork.org/_templates/80/a_bronx_tale.pdf
[14] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3343233/
[15] http://communityvoices.org/assets/wp-content/uploads/2014/02/ROI-of-Community-Health-Workers.pdf
[16] http://www.ncbi.nlm.nih.gov/pubmed/12723008
[17] http://www.ncbi.nlm.nih.gov/pubmed/25960393

[i] The Washington State Institute for Public Policy, http://www.wsipp.gov, has identified "evidence-based" policies that can lead to better outcomes; Behavioral health research reports developed by the Research and Data Administration are available at: https://www.dshs.wa.gov/bhsia/division-behavioral-health-and-recovery/decision-support-and-evaluation

[ii] Medicaid objectives as stated in GAO report 15-239, April 2015, http://www.gao.gov/products/GAO-15-239:

- Increase and strengthen coverage of low income individuals.
- Increase access to, stabilize, and strengthen provider networks available to serve Medicaid and low-income populations.
- Improve health outcomes for Medicaid and low-income populations.
- Increase the efficiency and quality of care for Medicaid and other low-income populations through initiatives to transform service delivery networks.
- Criteria established for specific demonstrations described through an informational bulletin or State Medicaid Director's Letter – available at: http://www.medicaid.gov/federal-policy-guidance/federal-policy-guidance.html.

[iii] Transformation goals as stated in Washington's Medicaid Transformation waiver, http://www.hca.wa.gov/hw/Documents/waiverappl.pdf:

- Reduce avoidable use of intensive services and settings such as acute care hospitals, nursing facilities, psychiatric hospitals, traditional LTSS and jails.
- Improve population health, with a focus on prevention and management of diabetes, cardiovascular disease, pediatric obesity, smoking, mental illness, substance use disorders and oral health; that is coordinated and whole-person centered.
- Accelerate the transition to value-based payment, while ensuring that access to specialty and community services outside the Indian Health system are maintained for Washington's tribal members.
- Ensure that Medicaid per-capita cost growth is two percentage points below national trends.