TRANSFORMATION PROJECT SUGGESTION

Contact Information	***Identify point person, telephone number, e-mail address*** Dr. Kathleen Burgoyne, Foundation for Healthy Generations, 206-498-2993, Kathyb@healhtygen.org ***Which organizations were involved in developing this project suggestion?*** Foundation for Healthy Generations, Healthy Living Collaborative, Free Clinic of Southwest Washington, Sea Mar Community Health Centers, PeaceHealth, CHOICE Regional Health Network, Cascade Pacific Action Alliance Accountable Community of Health, Clark County Public Health, Washington State University Extension, Washington Dental Service Foundation, Uncommon Solutions, Cowlitz County Public Health and Community Services, UnitedHealthcare, Providence Medical Group, Providence CORE and Washington Dental Service Foundation.
Project Title	*Community Health Workers as Care Extenders for Diabetic and Pre-diabetic Patients*

Rationale for the Project

Problem statement – why this project is needed. Nine percent (640,000) of Washington's (WA) population have diabetes, and over one-third (1,871,900) of all adult residents have pre-diabetes. Diabetes prevalence and associated costs are growing: WA spent $3.75 billion in 2012 and is projected to spend $5.39 billion in 2024.[i] Lower-income Washingtonians face higher rates of diabetes, diabetes complications, and deaths compared to the general population. People with diabetes have double the odds of depression and an increased risk of other psychological conditions.[ii] People with diabetes are also at increased risk for both oral complications and adverse health outcomes if their oral health goes untreated.

Supporting research (evidence-based and promising practices) for the value of the proposed project. Research suggests that, for impact and cost-effectiveness, community health workers (CHW) teach self-management strategies. CHWs are members of the communities they serve and function as trusted advisors. With clinical supervision and diabetes education, these trusted health advisors can help people with diabetes and those at high risk to self-manage their weight, physical activity, medications, and other components of self-care.[iii] [iv] [v] CHW interventions have shown reduced hemoglobin A1c (A1c) and positive return on investment. [vi] [vii] The National Diabetes Prevention Program (DPP) is an evidence-based lifestyle change program for preventing type 2 diabetes.[viii] Both DPP and CHW interventions are recommended by the WA Department of Health (DOH), WA Department of Social and Health Services (DSHS), and WA Health Care Authority (HCA) in the 2014 Diabetes Epidemic & Action Report.[ix]

Relationship to federal objectives for Medicaid with particular attention to how this project benefits Medicaid beneficiaries. The integration of CHWs into clinical care teams has the potential to meet the Affordable Care Act's triple aim. CHWs are care extenders. CHWs and the patients they serve share similar cultures, languages, and life experiences. It is this connection that fosters trust, particularly with Medicaid populations with limited English proficiency and those who are distrustful of the medical establishment. This trust allows CHWs to address the range of conditions beneficiaries with diabetes face, including co-existing behavioral and oral health disorders.

Project Description

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

X Reduce avoidable use of intensive services

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)

X Health Systems Capacity Building

X Care Delivery Redesign

Population Health Improvement – prevention activities

Describe: Region(s) and sub-population(s) impacted by the project. Include a description of the target population (e.g., persons discharged from local jail facilities with serious mental illness and or substance use disorders). People with type 2 diabetes (A1c > 6.5) and pre-diabetes (A1c of 5.7-6.4) in Cascade Pacific Action Alliance (CPAA) and Southwest Washington Regions.

Relationship to Washington's Medicaid Transformation goals. Working within care teams, CHWs have been proven to reduce avoidable use of intensive services (e.g., ED visits, hospitalizations), which will lower Medicaid per capita cost growth. Evidence shows that CHWs have been successful in promoting better nutrition and improving outcomes for patients with hypertension, diabetes, and depression.[x] This CHW intervention will align with and further the Southwest region's work as an early adopter in integrating physical, behavioral, and oral health, and extend this work into the CPAA region.

Project goals, interventions and outcomes expected during the waiver period, including relationship to improving health equity /reducing health disparities. The Institute of Medicine supports the use of CHWs to provide better care to diverse and underserved populations and reduce health inequities.[xi] In order for patients to effectively manage their diabetes, they need whole person care (physical, oral, mental health) and connections to human services to address the social conditions that inhibit their ability to manage their diabetes, and support to change their behaviors, increase self-efficacy, and reduce social isolation. *INTERVENTION*: Integrate CHWs into clinical care teams to provide whole-person care for people with type 2 diabetes and pre-diabetes. ***If diabetic****:* (1) tailored diabetes education & self-management classes in community or clinical settings, (2) CHW home visits for people with uncontrolled glucose levels, (3) mobile phone based support. ***If pre-diabetic:*** Provide Diabetes Prevention Program. *PROJECT GOALS:* Reduce and stabilize HbA1c levels; increase healthy eating and active living; transform work flow and staff responsibilities and relationships within clinics to include CHWs as full members of the care team; at least 50% of patients referred will participate in DPP. *PROJECT OUTCOMES:* Improved health in preventive care and diabetes management (e.g., improved A1c, reduced gum disease); decreased non-urgent ED utilization, preventable hospitalizations, other avoidable high-cost services; regular ongoing primary care visits; reduced costs per patient; patient satisfaction with care quality; behavior change (e.g., goal setting, healthier eating, increased physical activity, medication use, monitoring of blood glucose levels).

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. This project builds on & furthers the following: (1) Food Insecurity Nutrition Incentive Grant, which incentivizes healthy eating among food insecure populations; (2) Chronic Disease Prevention and Health Promotion initiative, which focuses on diabetes and hypertension and uses the DPP curriculum; (3) two Healthy Living Collaborative initiatives: (a) CHW-led health promotion initiatives in two Medicaid dense neighborhoods and (b) a regional network of CHWs and peers; (4) The Healthier Washington CHW Task Force's recommendation of integrating a CHW workforce within health systems in order to reduce health disparities and achieve the triple aim among low-income and culturally and linguistically diverse populations.

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. Foundation for Healthy Generations, Healthy Living Collaborative, Free Clinic of Southwest Washington, Sea Mar, PeaceHealth, CHOICE, Washington State University Extension, Cascade Pacific Action Alliance, Regional Heath Authority, behavioral health and social service providers, and local health jurisdictions.

Core Investment Components

Describe: **Proposed activities and cost estimates ("order of magnitude") for the project.** Activities include: tailoring evidence based CHW protocol to reflect whole person care; hiring CHWs, training CHWs and supervisors, orienting host agency/clinic; identifying potential partners and referral sources; identifying adults with type 2 diabetes and pre-diabetes; providing CHW services (home visits for education/coaching to improve self-management, mobile text support, links to health and human service providers for needed services, patient advocacy, DPP implementation, connection to social supports); monitoring and evaluation project. Cost estimate $35,000 per site x 15 sites = $525,000

Best estimate (or ballpark if unknown) for: How many people you expect to serve, on a monthly or annual basis, when fully implemented. How much you expect the program to cost per person served, on a monthly or annual basis. Based on historical tracking Sea Mar, PeaceHealth, Providence and the Free Clinic see approximately 4,597 patients with type 2 diabetes a year and 3,126 with pre-diabetes. In addition, there are approximately 65,082 people within the region that have undiagnosed pre-diabetes. We estimates that there are approximately 4,865 client referrals where CHW partnerships would be beneficial in engagement in care services across the SW and Cascade regions. We estimate that CHWs could serve 10 individuals a month who have uncontrolled glucose levels and need a full complement of services, 25 individuals a month with mobile applications, and 20 individuals per month with the DPP program. 8 CHWs will serve approximately 440 individuals 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.

We anticipate that the project will be fully implemented in 6-12 months.

The financial return on investment (ROI) opportunity, including estimated amounts and associated ROI timeline. People with diagnosed diabetes incur average medical expenditures of about $13,700 per year and on average have medical expenditures approximately 2.3 times higher than what expenditures would be in the absence of diabetes.[xii] A 2003 study in Baltimore showed that care integrated CHWs for diabetic men resulted in a savings of $1,200-$9,300 per participant. A 10 year study of the cost effectiveness of DPP suggests a savings of $1,623 per patient[xiii].

Project Metrics

Describe: Key process and outcome measures (and specific benchmark performance data if known) against which the performance of the project would be measured. Include priority measures sets described in the Waiver application http://www.hca.wa.gov/hw/Documents/waiverappl.pdf ***pages 46-47. If no specific benchmark performance data are currently available, what efforts will be undertaken to establish benchmark performance ahead of any proposed project implementation*****?** Process measures include developing a protocol, hiring CHWs, training CHWs and non-CHW staff, and identifying partners and referral sources. Outcome measures for this project from the **Healthier WA Statewide Common Core Set** of measures for 2016 include: comprehensive diabetes care, mental health treatment penetration, and plan all-cause readmission rate. **Health Care Utilization and Cost** measures: non-urgent ED visits, preventable hospitalizations, primary care visits, preventive care visits (chronic disease management), total cost of care (per member per month). Health care cost and utilization baseline data can be obtained by leveraging the state ProviderOne data system solution being developed by Providence CORE under the direction of HCA; the data solution can be leveraged for outcomes measurement purposes within the region and additional development and funding to accomplish baseline estimates would managed and funded regionally. **Health and Well-Being** measures: self-reported health (physical and mental), self-reported social well-being (isolation/connectedness), self-reported self-efficacy/management of conditions. These measures can be collected via survey data or CHW baseline assessment - a region can survey the target population to gain baseline measures for self-reported health and quality of care. Because "high-utilizer" populations are hard to reach, outreach could be enhanced by CHWs. **Quality and Access** measures: self-reported patient satisfaction with care quality (can be obtained as described above in "health and well-being" data sources), adult access to primary care (via Medicaid claims data, this measure is being constructed as a part of the ACH reporting solution being developed by Providence CORE and HCA; baseline can be produced for this measure), access to social determinants of health resources like food, transportation, housing (CHWs can collect and track data).

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[i] Washington Department of Health, Department of Social and Health Services, Health Care Authority. Diabetes Epidemic & Action Report. December 2014. Available here: http://www.doh.wa.gov/Portals/1/Documents/Pubs/345-342-DiabetesEpidemicActionReport.pdf

[ii] Brown AF, Ettner SL, Piette J, Weinberger M, Gregg E, Shapiro MF, et al. Socioeconomic position and health among persons with diabetes mellitus. Epidemiol Rev. 2004;26:63-77.

[iii] Glazier RH, Bajcar J, Kennie NR, Willson K. A systematic review of interventions to improve diabetes care in socially disadvantaged populations. Diabetes Care. 2006;29:1675-88.

[iv] Katula JA, Vitolins MZ, Morgan TM, Lawlor MS, Blackwell CS, Isom SP, et al. The Healthy Living Partnerships to Prevent Diabetes study: 2-year outcomes of a randomized controlled trial. Am J Prev Med. 2013 Apr;44(4 Suppl 4): S324-32.

[v] Lawlor MS, Blackwell CS, Isom SP, Katula JA, Vitolins MZ, Morgan TM, et al. Cost of a group translation of the Diabetes Prevention Program: Healthy Living Partnerships to Prevent Diabetes. Am J Prev Med. 2013 Apr;44(4 Suppl 4):S381-9

[vi] Gutierrez-Sanin, J.F. Global to Local mobile health program analysis of change in care cost and ROI. National Institute for Coordinated Healthcare. 2016.

[vii] Palmas W, March D, Darakjy S, Findley SE, Teresi J, Carrasquillo O, et al. Community Health Worker Interventions to Improve Glycemic Control in People with Diabetes: A Systematic Review and Meta-Analysis. J Gen Intern Med. 2015 Jul;30(7):1004-12.

[viii] Centers for Disease Control and Prevention. About the Program. Available here: http://www.cdc.gov/diabetes/prevention/

[ix] Washington Department of Health, Department of Social and Health Services, Health Care Authority. Diabetes Epidemic & Action Report. December 2014. Available here: http://www.doh.wa.gov/Portals/1/Documents/Pubs/345-342-DiabetesEpidemicActionReport.pdf

[x] The Commonwealth Fund. *Transforming Care: Reporting on Health System Improvement.* December 2015.

[xi] Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Brian D. Smedley, Adrienne Y. Stith, Alan R. Nelson, editors; Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, Board on Health Sciences Policy, Institute of Medicine.

[xii] http://www.diabetes.org/advocacy/news-events/cost-of-iabetes.html?referrer=https://www.google.com/#sthash.sSy9VZeq.dpuf

[xiii] http://care.diabetesjournals.org/content/35/4/723.full.pdf+html%20