**Project Option 2.1.1- Develop, implement, and evaluate action plans to enhance/eliminate gaps in the development of various aspects of PCMH standards: The Fifth Ward Model – Inter-professional Primary Care**

**Unique RHP Project ID:** 082006001.2.1

**Performing Provider Name/TPI:** Baylor College of Medicine/082006001

**Project Description:**

The Fifth Ward Model Inter-Professional Primary Care Practice Demonstration Project will bring together an interdisciplinary team of healthcare professionals including physicians, mid-level providers (nurse practitioners and physicians’ assistants), nurses (RNs, LVNs), nursing assistants, clinical pharmacists (PharmDs), social workers, health educators, and mental health professionals (psychologists, licensed professional counselors) to provide interdisciplinary primary healthcare to patients residing in a medically underserved community of Houston (the 5th ward).

The practice will be located at the Pleasant Hill Baptist Church Center for Spiritual Growth, Health and Wellness, a facility focused on holistic health being developed in partnership with the 5th Ward Re-development Corporation; the Rice University Kinder Institute and Urban Health Program; the Duke Divinity School; YES Prep, an urban educational specialist; Can Do Houston, an urban food specialist; and the Baylor College of Medicine Department of Family and Community Medicine.

The primary care practice will be developed as a high performing Patient Centered Medical Home (PCMH), providing broad spectrum primary health care services including health promotion and disease prevention, care of acute illnesses and injuries, care of common chronic diseases, care of common mental health problems, well woman, prenatal and gynecological services, care of infants and children, geriatric care, rehabilitative and palliative care through a multidisciplinary primary care team, with each team member practicing at the “top” of his or her training and professional license. The practice will be certified as a level 3 Patient Centered Medical Home, use a modern electronic medical record with a secure patient internet portal, and provide high quality care based on the most current evidence-based clinical practice guidelines, continuously measuring and striving to improve its processes and care outcomes.

The practice will serve as a demonstration project and laboratory for training healthcare professional students to work in inter-professional teams, involving faculty and students from Baylor College of Medicine, Prairie View A&M University School of Nursing, the University of Houston School of Pharmacy, Department of Psychology and School of Social Work, the University of Texas School of Public Health, etc.

**Goal(s) and Relationship to Regional Goal(s):**

The goal of this project is to provide comprehensive, patient-centered primary care to patients who live in a medically underserved area. It relates to the regional goals by providing patient-centered, coordinated care. It also uses existing infrastructure by partnering with Pleasant Hill Baptist Church to build a clinic within its existing space.

**Challenges and how to address:**

Clinic leadership will be challenged to develop relationships with other integrated healthcare systems for the provision of specialty and hospital care services and to ensure seamless integration with secondary and tertiary levels of care. The team will partner with other RHP DSRIP participants who are committed to ensuring access for this patient population. All professional staff must be open to developing and learning a new model of providing primary healthcare. One of the core components of the project is to engage all providers in process improvement so as to ensure their commitment to implementing successful care models.

**5-Year Expected Outcome for Provider and Patients:**

The goal is to increase access to primary care with achievement of NCQA recognition of the clinic as a PCMH. Expected outcomes also include improved immunization rates, cervical screening rates, HbA1c control and weight management, overall providing the best opportunity for the health and well-being of this community.

**Starting Point/Baseline:**

This is a new clinic; baseline data are not available and will be determined during the first year of the clinic opening.

**Rationale:**

This project will enhance healthcare value by increasing primary healthcare access to an underserved population of the community and decreasing their use of emergency rooms, as well as hospitalization for downstream complications that can be prevented with timely primary care (ambulatory sensitive conditions). Healthcare value will be enhanced by training learners from multiple healthcare professions in a high-performing, model Patient Centered Medical Home where high quality primary care is provided by an inter-professional team, resulting in more cost-efficient and higher quality care, i.e. higher value care. This contributes to the RHP goals by increasing access to patient-centered primary care.

**Project Components:**

The Inter-Professional Primary Care Clinic is proposed under option 2.1.1. The following project requirements will be completed over DY 2-5:

1. Utilize a gap analysis to assess the clinic’s NCQA PCMH readiness
2. Conduct feasibility studies to determine necessary steps to achieve PCMH status
3. Conduct educational sessions for practitioners, clinic staff and leadership about the PCMH model
4. Conduct quality improvement activities

The core project components will be met as the clinic works toward NCQA PCMH status and trains the various professionals in the PCMH model. Components (a) and (b) will be required to achieve Level 3 PCMH status and will be conducted throughout DY 2-4. Once PCMH status is achieved in DY5, the components will be considered fulfilled. Component (c) is addressed as new staff are hired and trained, and through the workforce development metrics described below. Component (d) is addressed in DY3-5 as the evidence-based clinical practice guidelines are developed and implemented for this patient population.

**Milestones & (Metrics):**

* + Process Milestones and Metrics: P-4 (P-4.1); P-5 (P-5.1); P-X (P-X.1)
  + Improvement Milestones and Metrics: I-17 (I-17.2); I-19 (I-19.2); I-X (I-X.1, I-X.2, I-X.3)

Workforce development is one of the project cornerstones. Designing a curriculum for the inter-professional team is proposed as a DY2 milestone under option P-X. One proposed metric is to enter into agreements with local health professional schools to ensure trainees of all types have an opportunity to learn and participate in a PCMH environment. Subsequent metrics include expanding the number of health professions involved in the inter-professional training. The goal is to ensure many types of healthcare providers are trained in the PCMH model and have an opportunity to participate in care delivery improvement. The inter-professional team will develop evidence-based clinical practice guidelines and monitor patient outcomes monthly to drive process improvement and ensure high quality care. The specific guideline will be determined once the clinic has enrolled patients in order to ensure the guidelines represent the salient health issues of the patient population. Decision support tools (e.g. smart forms) will be embedded within the electronic health record (EHR). The monthly reports will measure adherence to the (process of care) guidelines as well as disease-specific outcomes of care. Success of these implemented guidelines will be measured further in the Category 3 outcomes, such as HbA1c control.

**Unique community need identification number the project addresses:**

* CN1 – Access to primary care
* CN4 – Coordinated care for chronic conditions
* CN6 – Improved immunization compliance

**How the project represents a new initiative for the Performing Provider or significantly enhances an existing delivery system reform initiative:**

This clinic will transform delivery by training many types of healthcare providers in the PCMH model. All providers will be engaged in process improvement initiatives to ensure the delivery of continuous integrated care. The beneficiaries are patients who live in a medically underserved area, where access to care is limited at best, so this clinic will help fill that gap.

**Related Category 3 Outcome Measures:**

OD-1 Primary Care and Chronic Disease Management

* IT‐1.10 – Diabetes care: HbA1c poor control (>9.0%)
* IT-1.20 – Weight management
* IT-12.2 – Cervical cancer screening (HEDIS 2012)

**Reasons/rationale for selecting the outcome measure(s):**

The Fifth Ward has been identified as a medically underserved area[[1]](#footnote-1) and is predominantly comprised of residents who identify themselves as Black, Hispanic or Latino[[2]](#footnote-2). The Category 3 outcome measures selected below each address health care issues that affect minority and poor populations disproportionately. These specific measures will reflect the Fifth Ward Clinic’s success in providing access to and improving utilization of preventive services.

Improvements in HbA1c control can improve patient quality of life and cost of care by reducing the lifetime incidence of blindness, end-stage renal disease (ESRD) and coronary artery disease in patients with type 2 diabetes[[3]](#footnote-3). Black and Hispanic patients have higher rates of diabetes and higher mortality rates due to diabetes[[4]](#footnote-4) than white patients. African Americans are more likely to develop ESRD. The Health of Houston Survey 2010 indicated that the Near Northside-Fifth Ward area of the city has the highest rate of diabetes in the city – 20 percent.

Weight management is a proposed outcome measure under option IT-1.20. According to the Health of Houston Survey in 2010, 32% of Houston area adults were obese, compared to 29% across the State of Texas[[5]](#footnote-5) with a high prevalence among non-Hispanic blacks (51% higher) and Hispanics (21% higher)[[6]](#footnote-6). In the Near Northside-Fifth Ward area, 37 percent of residents are obese – again the highest rate in the city. Obese patients face a higher risk of developing diabetes[[7]](#footnote-7), but weight loss can significantly reduce that risk[[8]](#footnote-8). Helping patients achieve healthier weights can reduce mortality and morbidity and their attendant costs associated with diabetes.

Improvements in cervical cancer screening can reduce the incidence of cervical cancer by as much as 93%, while also decreasing associated mortality and lowering treatment costs[[9]](#footnote-9). Black and Hispanic women have much higher rates of incidence and mortality when compared to the general population[[10]](#footnote-10). Additionally, this will reflect the success of providing access to preventive services at the clinic.

**Relationship to Other Projects:**

Like the Baylor Teen Health Clinic (project 082006001.1.1), the Fifth Ward Clinic will provide primary care services in a medically underserved area. However, the clinic is situated in a different geographic area and targets the entire family rather than a specific age cohort.

**Relationship to Other Performing Providers in the RHP:**

Primary Care/Ambulatory Care clinics are a top priority to Region 3 due to the acuity of the regional patient mix, population concentration, and lack of primary care access points for our patient base. The regional approach of collaboration as well as existing patient referral pattern relationships allowed our team to properly identify the community needs based on the necessity of population, uninsured, and medically underserved patient bases. This program is consistent with our region and similar to numerous initiatives in our RHP plan sharing both concepts as well as outcome measures focused to percent improvement over baseline of patient satisfaction scores, reduction of inappropriate ED utilization, and third next available appointment status. The Region 3 Initiative Grid attached as a RHP Plan addendum reflects a grid of relationship for all initiatives.

**Plan for Learning Collaborative:**

We plan to participate in a region-wide learning collaborative(s) as offered by the Anchor entity for Region 3, Harris Health System. Our participation in this collaborative with other Performing Providers within the region that have similar projects will facilitate sharing of challenges and testing of new ideas and solutions to promote continuous improvement in our Region’s healthcare system.

**Project Valuation:**

The value of this project was determined by an econometrics assessment of access to primary care, immunizations and cervical screening, as well as the care and risks associated with obesity and diabetes. The value assigned to primary care is based on cost avoidance of emergency room visits. The difference between the cost of an emergency room visit and the cost of a primary care visit for primary-care-treatable conditions per visit was calculated for the age groups in question[[11]](#footnote-11).

Historical data were reviewed to determine the percentage of preventive and acute care visits. Rather than assume that all acute care visits could result in an emergency room visit, the project value conservatively estimates that a fraction of acute care visits results in an avoided emergency room visit. Improvements in HbA1c control were valued based on the current rate of adult diabetes in Houston18 and the annual differential medical cost savings of controlled and uncontrolled diabetes[[12]](#footnote-12). The total value was calculated based on the expected improvement in the clinic patient population. The value of weight reduction was calculated based on the percentage of the population that is obese18 and not currently diagnosed with diabetes20. Of those patients, it is expected that a 5-7% reduction in weight will reduce the risk of diabetes by 58%21. The annual savings21 was applied to the number of diabetes cases avoided due to weight management for the duration of the Waiver. Immunization rate value was based on the recommended doses administered to children by age 2[[13]](#footnote-13), the cost of each dose[[14]](#footnote-14), and the cost savings per dollar spent on immunizations[[15]](#footnote-15). This value was multiplied by the number of patients expected to be affected (the number of children as a percentage of the total patient population). For vaccines that require additional doses beyond age 2, the total savings were prorated for the remaining duration of the Wavier. The value of cervical screening was based on the differential costs of treating localized lesions and cancers and treating regional and distant cancers[[16]](#footnote-16). The initial, interim and pro rata final stage costs are calculated based on the current incidence of cancer rates in Texas[[17]](#footnote-17) and the reduction of invasive rates when screening occurs every two years23. The total value for the project was combined and distributed across measures to ensure category 3 outcome measurements comprised 5%, 10%, 15% and 20% of the project value in DY2-5. Distribution among the components was based on the weighted value of the measure.

| ***082006001.2.1*** | ***2.1.1*** | | ***2.1.1.a-d*** | ***The Fifth Ward Model – Inter-professional Primary Care*** | |
| --- | --- | --- | --- | --- | --- |
| Baylor College of Medicine | | | | | 082006001 |
| ***Related Category 3 Outcome Measure(s):*** | *IT-1.10*  *IT-1.20*  *IT-12.2* | | *082006001.3.3*  *082006001.3.4*  *082006001.3.5* | *Improved HbA1c Control*  *Improved Weight Control*  *Improved Cervical Cancer Screening* | |
| **Year 2**  **(10/1/2012 – 9/30/2013)** | | **Year 3**  **(10/1/2013 – 9/30/2014)** | | **Year 4**  **(10/1/2014 – 9/30/2015)** | **Year 5**  **(10/1/2015 – 9/30/2016)** |
| **Milestone 1** [P-4]: Develop primary care staffing plan  Metric 1 [P-4.1]: Expand primary care team member roles  Goal: Expand primary care team member roles  Data Source: Job descriptions  Milestone 1 Estimated Incentive Payment: $ 411,000  **Milestone 2** [P-5]: Determine appropriate panel size for provider teams.  Metric 1 [P-5.1]: Determine panel size  Goal: Document panel size by provider type and team  Data Source: Documentation from needs assessment  Milestone 2 Estimated Incentive Payment: $ 411,000  **Milestone 3** [P-X]: Design curriculum and teaching methodology for inter-professional primary healthcare team training  Metric 1 [P-X.1]: Enter into collaborative agreements with health professional schools  Goal: Collaborative agreements with health professional schools executed  Data Source: Documentation of collaborative agreements  Milestone 3 Estimated Incentive Payment: $ 411,000 | | **Milestone 4** [I-19]: Expand medical home principles.  Metric 1 [I-19.2]: Increase number of patient-centered visits.  Goal: 75% capacity utilization per provider based on panel size.  Data Source: EHR  Milestone 4 Estimated Incentive Payment: $ 500,000  **Milestone 5** [I-17]: Population health management  Metric 1 [P-17.2]: Establish baseline percentage of patients receiving recommended immunizations by age 2.  Data Source: EHR  Milestone 5 Estimated Incentive Payment: $ 140,000  **Milestone 6** [I-X]: Implement evidence-based guidelines and process improvement initiatives.  Metric 1 [I-X.1]: Implement evidence-based clinical guidelines.  Goal: Implement 3 evidence-based guidelines.  Data Source: HER  Metric 2 [I-X.2]: Report process and outcomes measures monthly.  Goal: Implement reports.  Data Source: EHR  Milestone 6 Estimated Incentive Payment: $ 634,300 | | **Milestone 7** [I-19]: Expand medical home principles.  Metric 1 [I-19.2]: Number of patient-centered visits compared to DY 3.  Goal: 30% increase in total number of patients seen compared to DY3.  Data Source: EHR / practice management system  Milestone 7 Estimated Incentive Payment: $ 500,000  **Milestone 8** [I-17]: Population health management  Metric 1 [I-17.2]: Increase percentage of pediatric patients receiving recommended immunizations by age 2.  Goal: increase by 5% compared to baseline (DY 3).  Data Source: EHR  Milestone 8 Estimated Incentive Payment: $ 150,000  **Milestone 9** [I-X]: Implement evidence-based guidelines and process improvement initiatives.  Metric 1 [I-X.1]: Implement evidence-based clinical guidelines.  Goal: Implement 2 additional evidence-based guidelines.  Data Source: HER  Metric 2 [I-X.2]: Document process improvements.  Goal: Document improvements for 3 existing guidelines.  Data Source: Process improvement documentation.  Milestone 9 Estimated Incentive Payment: $ 653,000 | **Milestone 10** [I-19]: Expand medical home principles.  Metric 1 [I-19.2]: Number of patient-centered visits compared to DY 4.  Goal: 25% increase in total number of patients seen compared to DY4.  Data Source: EHR / practice management system  Milestone 10 Estimated Incentive Payment: $ 400,000  **Milestone 11** [I-18] Obtain NCQA medical home recognition  Metric1 [I-18.1]: Medical home recognition.  Goal: Medical home recognition for Fifth Ward Clinic.  Data Source: Documentation of NCQA accreditation  Milestone 11 Estimated Incentive Payment: $ 400,000  **Milestone 12** [I-17]: Population health management  Metric 1 [I-17.2]: Increase percentage of pediatric patients receiving recommended immunizations by age 2.  Goal: increase by 10% compared to baseline (DY 3).  Data Source: EHR  Milestone 12 Estimated Incentive Payment: $ 160,000  **Milestone 13** [I-X]: Implement evidence-based guidelines and process improvement initiatives.  Metric 1 [I-X.2]: Document process improvements  Goal: Document improvements for all 5 guidelines.  Data Source: Process improvement documentation.  Milestone 13 Estimated Incentive Payment: $ 361,000 |
| Year 2 Estimated Milestone Bundle Amount: $ 1,233,000 | | Year 3 Estimated Milestone Bundle Amount: $ 1,274,300 | | Year 4 Estimated Milestone Bundle Amount: $1,303,000 | Year 5 Estimated Milestone Bundle Amount: $1,321,000 |
| **TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD** *(add milestone bundle amounts over DYs 2-5)****:***$ 5,131,300 | | | | | |

1. U.S. Department of Health and Human Services, Health Resources and Services Administration. Find Shortage Areas: MUA/P by State and County. <http://muafind.hrsa.gov/index.aspx>. Accessed October 1, 2012 [↑](#footnote-ref-1)
2. United States Census 2010. 2010 Census Interactive Population Search. <http://2010.census.gov/2010census/popmap/>. Accessed October 1, 2012. Census Tracts 2111, 2113. [↑](#footnote-ref-2)
3. Huang ES, Zhang Q, Brown SES, Drum ML, Meltzer DO, Chin MH. The Cost-Effectiveness of Improving Diabetes Care in the U.S. Federally Qualified Community Health Centers. *Health Services Research*, 2007; 42(6 Pt 1): 2174-2193. [↑](#footnote-ref-3)
4. Agency for Healthcare Research and Quality, Diabetes Disparities Among Racial and Ethnic Minorities. [↑](#footnote-ref-4)
5. Institute for Health Policy, *Health of Houston Survey 2010: A First Look*, University of Texas School of Public Health. <https://sph.uth.edu/research/centers/ihp/health-of-houston-survey-2010/>. Accessed October 3, 2012. [↑](#footnote-ref-5)
6. Centers for Disease Control and Prevention, Differences in Prevalence of Obesity among Black, White and Hispanic Adults – United States, 2006-2008. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5827a2.htm>. Accessed October 3, 2012. [↑](#footnote-ref-6)
7. Mokdad AH, Ford ES, Bowman BA, Dietz WH, Vinicor F, Bales VS, Marks JS. Prevalence of Obesity, Diabetes and Obesit-Related Health Risk Factors, 2001. *Journal of the American Medical Association,* 2003; 289(1): 76-79. [↑](#footnote-ref-7)
8. National Prevention Council, *National prevention Strategy,* Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011. [↑](#footnote-ref-8)
9. U.S. Preventive Services Task Force. Screening for Cervical Cancer: Recommendations and Rationale. *Agency for Healthcare Research and Quality,* 2003, Pub No 03-515A. [↑](#footnote-ref-9)
10. Centers for Disease Control and Prevention, Cervical Cancer Rates by Race and Ethnicity, 1999-2008. <http://www.cdc.gov/cancer/cervical/statistics/race.htm>. Accessed October 2, 2012. [↑](#footnote-ref-10)
11. School of Public Health, *Houston Hospitals Emergency Department Use Study: January 1, 2010 through December 31, 2010,* Houston, Texas: University of Texas Health Science Center at Houston, 2012. [↑](#footnote-ref-11)
12. Dall TM, Roary M, Yang W, Zhang S, Zhang Y, Arday DR, Gantt CJ, Chen YJ. Health Care Use and Costs for Participants in a Diabetes Disease Management Program, United States, 2007-2008. *Preventing Chronic Disease*, 2011; 8(3): A53. [↑](#footnote-ref-12)
13. CDC, Recommended Immunization Schedules for Persons Aged 0 through 19 Years, United States, 2012. [↑](#footnote-ref-13)
14. CDC Vaccine Price List, <http://www.cdc.gov/vaccines/programs/vfc/awardees/vaccine-management/price-list/index.html>. Accessed October 3, 2012. [↑](#footnote-ref-14)
15. Every Child by Two, Economic Value of Vaccines, 2003. <http://www.ecbt.org/advocates/economicvaluevaccines.cfm>. Accessed October 3, 2012. [↑](#footnote-ref-15)
16. Texas Cancer Registry, The Cost of Cancer in Texas 2007, Texas Department of State Health Services, 2009. Publication No 10-13121. [↑](#footnote-ref-16)
17. CDC, National Breast and Cervical Cancer Early Detection Program. <http://www.cdc.gov/cancer/nbccedp/data/summaries/texas.htm>. Accessed October 4, 2012. [↑](#footnote-ref-17)