**Category 1 Project Narrative**

**Williamson County & Cities Health District ‐ 126936702.1.3**

**Project Area, Option and Title:** 1.5.3 Implement project to enhance collection, interpretation, and/or use of REAL data

**Unique Project ID:** 126936702.1.3

**Performing Provider Name:** Williamson County Cities and Health District

**Performing Provider TPI #:** 126936702

**Project Summary:**

* **Provider Description:** Williamson County and Cities Health District (WCCHD) is the local public health department for Williamson County and is responsible for serving a 1,118 square mile area and a population of an estimated 442,782 (2011 Census data).
* **Intervention:** The project will enhance and improve the quality and consistency of public health client demographic (race, ethnicity, gender, and language) data collection and interpretation to ensure health disparities are addressed appropriately.
* **Project Status:** This is a new project.
* **Project Need:** CN.3.3 – Inconsistency in data collection which identifies health disparities and populations at risk. This project will address problems with data collection, particularly for race/ethnicity. For example, WCCHD analysis of reported sexually transmitted disease cases for Round Rock shows a growing proportion of cases in the “unknown” category for race/ethnicity from 2006 to 2011 (analysis by WCCHD of data from the Texas Department of State Health Services) and case data from the 2009 – 2010 pertussis epidemic mirror national trends indicating that Hispanic infants have a higher incidence of clinically significant pertussis, which place them at greater risk for hospital admission. Factors leading to an increased risk for Hispanic infants including language/communication and cultural issues that may serve as barrier to obtaining health care services. The insignificant of poor data could misinform key policy and program decisions, leading to interventions that are counterproductive and unintentionally increasing the impact of a disparity and coordinated care for those with multiple needs.
* **Target Population:** This project will leverage existing groups and organizations such as hospitals, community clinics and community health centers. The target populations identified are individuals with Medicaid, low income uninsured and indigent with disparate health outcomes to ensure appropriate level of care is addressed and met which makes up approximately 60% of our population served.
* **Category 1 or 2 Expected Project Benefit for Patients:** This project seeks to structure a framework for reliable Race, Ethnicity and Language fields to improve the collection of data in identifying health disparities and reducing empty REAL (race, ethnicity, and language) data fields. This project will increase completed REAL data fields from baseline of 57% to 67% in DY4 and 80% in DY5.
* **Category 3 Outcomes:** The following Category 3 measures were submitted in August 2014 to describe improvements to the patient population’s health: IT-15.6 (Chlamydia screening in women), IT-1.29 (Weight assessment and counseling for nutrition and physical activity for children/adolescents), and IT-12.11 (HPV vaccine for adolescents).
	+ IT-15.6 (Chlamydia screening in women): We will demonstrate improvement by increasing the percentage of women 16-24 years of age who were identified as sexually active and who had at least one test for chlamydia during the measurement year. This includes patients seen at any one of the WCCHD Public Health Centers (facility subset).
	+ IT-1.29 (Weight assessment and counseling for nutrition and physical activity for children/adolescents): We will demonstrate improvement by increasing the percentage of children 3-17 years of age who received a non-immunization WCCHD service and had evidence of BMI percentile documentation, nutrition counseling, and physical activity counseling.
	+ IT-12.11 (HPV vaccine for adolescents): We will demonstrate improvement by increasing the percentage of adolescents 13 years of age who were seen at any one of the WCCHD Public Health Centers in the past five years and who had received three doses of the HPV vaccine.
* Each of the three measures proposed above will be stratified by race, ethnicity, and language in an effort to identify any health disparities in our patient population.
* **Collaboration:** Texas A&M Health Science Center (TAMHSC) had a Pass 1 allocation it could not use, since TAMHSC did not have providers in RHP 8. TAMHSC allowed its allocation to be used by local health departments and local mental health authorities (public entities) which had much smaller provider allocations in Pass 1, so these entities could have broader, transformative, regional projects. TAMHSC has not played a role in these projects, other than the role of anchor. There are no impermissible provider‐ related donations involved. This usage of the TAMHSC allocation ensured these providers, who could self‐fund the required IGT, could participate in the waiver. WCCHD intends to develop and pilot a continuous quality improvement (CQI) based process for improving data quality, using analyses of the data to identify disparities and plans to address these gaps. WCCHD will share the results of the pilot with providers throughout the region and through existing forums (Health Data Users Group and WilCo Integrated Care Collaboration). Improved data are a vital need to help drive policy and planning decisions which have a measurable meaningful impact on residents throughout the region.

**Project** **Description:**

*Addressing and Developing Strategies for Reducing Health Disparities through Improved Data Collection Systems and Analytics ‐ The Williamson County and Cities Health District (WCCHD) proposes to improve the quality and consistency of public health client demographic (race, ethnicity, gender, and language) thereby improving the quality of information supplied to decision makers addressing health disparities.*

This project will involve significant changes in administrative and training policies and procedures throughout WCCHD at all four public health centers (Georgetown, Cedar Park, Round Rock, and Taylor). Staff at all levels, including program navigators, case managers, social workers, customer service representatives, nutritionists, public health and prevention specialists, administrative support staff, and management would receive training as part of a Data 101 course (currently being developed) on the importance of collecting accurate demographic information on all clients served. There are clearly problems with data collection, particularly for race/ethnicity. WCCHD analysis of reported sexually transmitted disease cases for Round Rock shows a growing proportion of cases in the “unknown” category for race/ethnicity from 2006 to 2011 (analysis by WCCHD of data from the Texas Department of State Health Services). The reasons for this negative trend are unclear but needs to be addressed.

The intent of the Data 101 course is not only to improve data quality and consistency but also to raise awareness and understanding of the relationship between social disparities and community health outcomes. After being piloted at WCCHD, the Data 101 curriculum will be shared with other organizations with the ultimate goal of improving the quality of data feeding into the regional ICare system managed by the Integrated Care Collaboration (ICC). The ICC is a nonprofit alliance of health care providers in Central Texas dedicated to the collection, analysis and sharing of health information with the goal of improving health care quality and cost efficiency across the continuum of care. One of the ICC primary functions is the operation and management of a regional Health Information Exchange called ICare. Through the analysis of clinical data in ICare, the ICC is able to identify needs in the Central Texas health care system and create programs to improve health outcomes for vulnerable populations.

The concepts of continuous quality improvement and the community health assessment (WCCHD follows the Mobilizing for Action through Planning and Partnership (MAPP) process) will also be reviewed during Data 101, introducing the concept of a community dashboard as a means to continuously monitor and share updates on community health related statistics. Examples of how data are used will be featured during the training including WCCHD Community Health Profiles, Condition/Disease Briefs, and Epidemiology Annual Reports. These documents, combined with dashboard demonstrations ([http://www.healthysonoma.org/,](http://www.healthysonoma.org/) [http://www.healthyntexas.org/](http://www.healthyntexas.org/%29)) will provide Data 101 participants with a clear understanding of the importance of collecting data in a systematic fashion, and that the process for appropriately targeting public health interventions starts with data collection at the client interview and data entry level.



**Goals and Relationship to Regional Goals:**

This project will leverage existing groups and organizations wherever possible to provide venues or forums for discussions on improving the quality of data used to make key programmatic and policy decisions related to community health assessment. The emphasis on partnership will improve the credibility of the public health system and help WCCHD to expand upon existing coalition building activities under the Wilco Care Alliance.

**Goals:**

* Increase the % of WCCHD clients with accurate race/ethnicity information recorded in their electronic health record;
* Improve the quality of data analysis based on demographic data used to inform policy decisions focused on reducing health disparities; and
* Enhance the information technology infrastructure for the public health system to improve ability to exchange data with the ICare system electronically.

Actions aimed at addressing disparities which are based on poor data will have limited impact on the problem. At worst, poor data could misinform key policy and program decisions, leading to interventions that are counterproductive, unintentionally increasing the impact of a disparity and using up critical resources. Achieving the primary goals should ultimately result in improved customer satisfaction and health outcomes for populations experiencing disparities.

**This Project meets the following Regional Goals:**

* increasing the proportion of residents with a regular source of care; and
* increasing coordination of prevention and care for residents, including those with behavioral or mental health needs

**Challenges:**

One of the greatest challenges may be in sharing the results. For some measures, improving the quality of REAL data collection may actually produce results that do not support the notion of a disparity or may point to inequities in different groups or populations. Reaching consensus on how race/ethnicity is handled may be difficult. For example, decisions about whether or not to record multiple races may impact database design and mapping fields for import/export between systems. To address differences between systems and possible problems with mapping, we anticipate (1) comparing different organizations’ data collection requirements and determining whether or not there is any flexibility in these requirements, and (2) using the results of this assessment to guide negotiations on establishing standards for collecting REAL data. These negotiations would occur in existing venues such as HDUG or the Williamson County ICC.

**5‐year Expected Outcome for Provider and Patients:**

* Improved understanding by front line employees of the importance of REAL data entry as measured by pre‐ and post‐training and client satisfaction surveys;
* 90% of all clients with WCCHD electronic health records with race/ethnicity fields populated or “unknown” entered;
* 75% of all clients with WCCHD electronic health records with the race/ethnicity fields populated; and

**Starting Point/Baseline:**

In 2012, records from CHASSIS showed 57% of all patients registered have all three REAL data fields completed. Completed does not include blank fields or fields marked “unknown”. Our goal is to increase the percent of registered patients with all three REAL data fields completed to 67% in DY4 and 80% in DY5.

**Rationale:**

**Community Need Addressed:**

* Community Need Area: CN.3 – Lack of coordinated care for those with multiple needs.
* Specific Community Need: CN.3.3 – Inconsistency in data collection which identifies health disparities and populations at risk.

Process milestones were selected to reflect a Continuous Quality Improvement (CQI) process, serving as an indicator of whether or not an established plan is followed and incorporating stakeholder feedback throughout the process. Milestones signal a significant and sustainable change in how data is collected, processed, and analyzed. Collecting valid and reliable data fields using a uniform framework provides a process improvement tool for health care organizations to systematically collect demographic and communications data from patients or their caregivers to address the identification of disparities and address appropriately.

Although Williamson County ranks as one of the healthiest counties in Texas according to the County Health rankings, it is clear there is still room for improvement when the health of Texas is compared to other states. There are some populations in Williamson County that experience disparities in health, quality of care, health outcomes, and incidence as related to conditions such as cardiovascular disease, pertussis, Chlamydia, cancer, obesity, and diabetes. Disparities can been seen among groups based on race and ethnicity, language, economic factors, education, insurance status, geographic location (rural vs. urban, zip code), gender, sexual orientation and many other social determinants of health.

Based on analysis of vital statistics data by WCCHD in 2012 (unpublished results) both the capacity for delivering prenatal care and the prenatal care rate have increased in recent years. However, the analysis suggests that prenatal care continues to be underutilized by minority women. Case data from the 2009 – 2010 pertussis epidemic mirror national trends indicating that Hispanic infants have a higher incidence of clinically significant pertussis, putting them at greater risk for being admitted to a hospital. There are many factors leading to an increased risk for Hispanic infants including language/communication and cultural issues that may serve as barrier to obtaining health care services. The 2011 WCCHD Epidemiology Report [(http://www.wcchd.org/statistics\_and\_reports](http://www.wcchd.org/statistics_and_reports/docs/2011_Epidemiology_Report.pdf%29)/docs/2011\_Epidemiology\_Report.pdf) contains an article describing the impact of the 2009 – 2010 epidemic on communities throughout Williamson County.

**Core Project Components:**

1. *Redesign care pathways to collect valid and reliable data on race, ethnicity, and language at the point of care.* Key stakeholders from throughout the region will be invited to participate in discussions around the collection standardization and processing procedures for REAL data. WCCHD will facilitate meetings to discuss basic definitions for REAL data and identify any existing procedures which may need to be modified as well as any training needs for front line staff.
2. *Implement system to stratify patient outcomes and quality measures by patient REAL demographic information in order to identify, analyze, and report on potential health disparities and develop strategies to address goals for equitable health outcomes.* WCCHD will assess its current and future data needs by examining how existing systems are being used (e.g. TWICES for immunizations and TB, CHASSIS for case management). Based on the results of this internal assessment, combined with the requirements and standards established with stakeholders (see project component 1), WCCHD will solicit proposals from vendors for a health record management system.
3. *Develop improvement plans, which include a continuous quality improvement plan, to address key root causes of disparities with the selected population.* An improvement plan, which includes a continuous quality improvement plan, will be developed by WCCHD research group in conjunction with the external stakeholders who serve on the Health Data Users Group. The plan will include a process for identifying and addressing key root causes of disparities. This includes developing a curriculum which will include guidelines and techniques for capturing quality REAL data and further developing of policy and procedures.
4. *Use data to undertake interventions aimed at reducing health and health care disparities (tackling “gap”) for target patient populations through improvements in areas such as preventive care, patient experience, and/or health outcomes.* With improved data collection identifying and addressing a more defined health care disparities within the targeted population, appropriate levels of interventions will be implemented. Data is a key to ensuring suitable interventions which aim at reducing health and health care disparities specifically where there’s a gap in services. Improved data will allow for assessing current interventions available for targeted population and improve or expand where necessary. Continuous quality assurance and improvement of data collection will result in higher quality health data driving the creation of activities and projects that impact patient outcomes.

**Continuous Quality Improvement:**

WCCHD is committed to continuous quality improvement and learning related to this project. We will establish quality improvement activities such as rapid cycle improvement and will perform other activities such as “lessons learned” and identifying project impacts. In addition, we are participating in a regional learning collaborative which share information such as challenges, lessons learned and considerations for safety net populations.

**How the project represents a new initiative or significantly enhances an existing delivery system reform initiative:** WCCHD does not receive U.S. Department of Health and Humans Services program initiative funds that will be used for this project.

**Related Category 3 Outcome Measure(s):**

The following Category 3 measures were submitted in August 2014 to describe improvements to the patient population’s health: IT-15.6 (Chlamydia screening in women), IT-1.29 (Weight assessment and counseling for nutrition and physical activity for children/adolescents), and IT-12.11 (HPV vaccine for adolescents).

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Each of the three measures proposed above will be stratified by race, ethnicity, and language in an effort to identify any health disparities in our patient population.

Reasons/rationale for selecting outcome measures: Improved data is necessary for building a foundation for effective policy and program development, and building the credibility necessary to advocate for addressing disparities, justifying local spending, and obtaining grant funding. Quality data is vital for the evaluation process and an integral part of the community health assessment process. Achievement levels would be reported for all three Category 3 measures. These measures provide solid and measurable outcome data for health issues that frequently have the greatest racial, ethnic, and linguistic disparities – STI screening, Body Mass Index (BMI) assessment and nutritional counseling, and vaccination in adolescents against human papillomavirus. With REAL data, WCCHD will be able to examine differences in these subpopulations for the very first time. In addition, the systematic and reliable collection of quality REAL data will help providers to delineate potential categories of differences in observed health status.

**Relationship to Other Projects:**

This project improves the quality of data supporting the need for the other WCCHD projects, ensuring disparities are being appropriately measured and monitored:

This project relates to all other WCCHD projects, including:

* 126936702.1.1 Expanded Capacity for Access to Care
* 126936702.1.2 Establish/expand access to medical advice and direction to the appropriate level of care to reduce Emergency Department use for non‐emergent conditions and increase patient access to health care;
* 126936702.2.1 Provide navigation services to targeted patients who are at high risk of disconnect from institutionalized health care; and
* 126936702.2.2 Engage in population‐based campaigns or programs to promote healthy lifestyles using evidence‐based methodologies including social media and text messaging in an identified population

A robust public health information technology infrastructure, supported by trained staff, is a vital component of any system intended to identify and serve high risk populations in the county. Furthermore, the ongoing monitoring of REAL data and the analysis of these data are needed to determine if performance measures are met. This project provides a basic foundation for improving communication between public health and providers across the county by improving the integrity of information as it passes from the provider to the Health Information Exchange level. The fact that individual providers will have real‐time access to a unified patient record of the highest quality will provide the platform providers need to make informed decisions toward positive outcomes for their patients. Finally, improved aggregate REAL data allows public health officials to more effectively track the progress of projects short and long term, allowing for more informed policy and decision making by leadership.

**Relationship to Other Performing Providers’ Projects and Plan for Learning Collaborative:**

For the WCCHD expansion of safety‐net services to succeed in reducing health disparities, robust data collection systems and training are needed to ensure WCCHD and the public health system meet information technology standards and practices followed by hospitals and other providers throughout the region. By necessity, the project will require intense collaboration with providers throughout the region. Much of the learning opportunities will occur early on as WCCHD implements the Data 101 curriculum. As the project matures, there will be many opportunities to share best practices and collaborate on special projects.

**Project Valuation:**

This project increase the percentage of registered patients with all three REAL data fields completed to 67% in DY4 and 80% in DY5 (see Improvement Milestone I‐9.1). The valuation of this project takes into account the degree to which the value of improved data linked in health care systems requires the development of tools, protocols and training curriculum for collecting and utilization of REAL data elements. The consolidation of many different data collection systems for reporting and syndromic surveillance, as well delivery of high quality care, is essential in keeping the overall costs of health care from escalating, specifically for the targeted population. Improving the information technology infrastructure will result in fewer clinical errors, improve diagnostic ability through improved access to critical historical information maintained in a Health Information Exchange, and allow for more sophisticated analytics to focus interventions for targeted population where they are most needed. In conclusion, the valuation and impact of this project to targeted population will result in patients receiving more culturally sensitive and appropriate care, improve the quality of care delivered, and focus on efforts to reduce health disparities and improve the accuracy in reported cases to Department of State Health Services for disease surveillance purposes.