**Category 2 Project Narrative**

**Bluebonnet Trails Community Services – 126844305.2.2**

**Project Area, Option, and Title:** 2.13.1 Design, implement, and evaluate research‐supported and evidence‐based interventions tailored towards individuals in the target population.

**RHP Project Identification Number:** 126844305.2.2

**Performing Provider Name:** Bluebonnet Trails Community Mental Health and Mental

Retardation Center dba/ Bluebonnet Trails Community Services

**Performing Provider TPI #:** 126844305

**Project Summary:**

* **Provider Description:** Bluebonnet Trails Community Services (BTCS) is the Local Mental Health Authority (LMHA) for Burnet and Williamson Counties in RHP 8 and for six adjacent Counties in three other RHPs. Burnet and Williamson Counties comprise 25% of the land mass but 54% of the population. Williamson County has nearly 50% of the population at 422,679. BTCS is the public provider of behavioral health services for the poor, under or uninsured in Williamson County and coordinates and provides crisis services.
* **Intervention:** BTCS proposes to use healthcare teams to reduce utilization of emergency services by individuals identified as a high utilizers. Those identified will be offered proactive care in settings other than emergency departments (EDs), including their homes. Services will be provided immediately in the short‐term and ongoing wellness activities and behavioral health treatment will be initiated in the long‐term.
* **Project Status:** This is a new project to be established in partnership with the Williamson County Emergency Medical Services (EMS).
* **Project Need:** A study revealed of 144 High Utilizers of emergency services, 105 had a mental health diagnosis and accounted for 2,071 ED visits during 2010. This project addresses the RHP Community Needs Assessment needs: CN.2.1 ‐ Limited access to behavioral health services to rural, poor and under and uninsured populations (meds, case management, counseling, diagnoses) in Williamson County; and CN.2.2 – Limited access for serious mentally ill adults to crisis services in Williamson County.
* **Target Population:** This project will identify high utilizers of emergency services through the use of EMS records, Indigent Care Collaboration EMR statistics and ED reporting. BTCS served 6,429 persons with behavioral health disorders in FY 2012. An average of 43% of adults were Medicaid‐eligible; and 73% of BTCS clients were below the federal poverty level. We expect 70% of those benefitting from this project will be poor, under or uninsured.
* **Category 1 or 2 Expected Project Benefit for Patients:** The project seeks to provide care to at least 45 people in DY4 and 60 people in DY5. Access to a broader range of services, a medical home and wellness activities will improve functioning, improve quality of life for these patients and will reduce the multiple inappropriate trips to the ED. This is a substantial benefit to these patients who have improved access to ED services due to reductions of inappropriate utilizers and to healthcare costs in the RHP.
* **Category 3 Outcomes:** IT‐9.4.e: Our goal is to reduce Emergency Department visits for Behavioral Health/Substance Abuse.
* **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. This is a transformative project as indicated by the broad community support and participation by Williamson County Emergency Services and the healthcare community. This group of patients has presented a substantial challenge to the community and a drain on community resources. All healthcare providers are looking forward to reducing this inappropriate utilization.

**Project** **Description:**

*Emergency Services Diversion Project/Community Health Initiative*

BTCS is the LMHA for Burnet and Williamson Counties in RHP 8 and for six adjacent Counties in three other RHPs. BTCS proposes to use teams consisting of a project coordinator, licensed social workers (LSW), advanced Paramedic and nurse practitioner (NP) to reduce utilization of emergency services by individuals identified as high utilizers of such services. This project will identify high utilizers of emergency services through the use of Emergency Medical Services (EMS) records, Indigent Care Collaboration Electronic Medical Record (EMR) statistics, and emergency department (ED) reporting. When individuals are identified, they will be offered the opportunity to receive proactive assistance in settings other than hospital EDs, including their homes. To participate patients must be enrolled and sign a Consent for Care form, which will also allow sharing of information in order to improve continuity of care. Enrolled participants medical records will be reviewed by a Professional Peer Review Committee (PPRC) made up of medical and mental health professionals from five local public hospitals, the Williamson County & Cities Health District (WCCHD), Mobile Outreach Team (MOT), EMS and Bluebonnet Trails Community Services. The PPRC will create unique comprehensive care plans for patients identified that often have mental illness and co‐occurring disorders. The collaboration and sharing of information by professionals will allow improved coordination of community resources, continuity of care, avoidance of over prescribing, or contra‐indication of numerous medications prescribed by multiple sources. Once a comprehensive plan has been created local hospitals should follow the plan which will help avoid duplication of services and unnecessary lab and medical tests.

Another important component of the project is the use of non‐physician health professionals to help coordinate care and connect patients with multiple and complex needs to appropriate resources. Teams of professionals including an advanced paramedic, Advanced Nurse Practitioner and Licensed Social Workers will make home visits to check vital signs, help with medication compliance, assess home safety and ensure basic needs are met with appropriate resources. By providing proactive care with multidisciplinary teams, patients can learn to manage their chronic conditions, avoiding costly emergency room and hospital admissions can be avoided, while reducing costs and improving quality of care.

To initiate appropriate disposition of calls into the field, the 11 Williamson County EMS dispatchers will be trained to recognize critical primary and behavioral health issues. A centralized health information management system will be used to collect patient access information from the participating emergency and crisis services providers including the local EDs, EMS, MOT and BTCS. A data analyst will be hired to review the patient access information from each participating emergency and crisis services provider. On a monthly basis high utilizers of the emergency and crisis services will be identified by the data analyst and presented to the PPRC. The PPRC is comprised of key staff from the participating emergency and crisis services. A collaborative treatment plan will be developed for the individual identified as a high utilizer of emergency and crisis services.

The treatment plan will be shared with each participating emergency and crisis services provider‐‐and will drive the treatment provided in the field by the team of professionals including the advanced Paramedic, Advanced Nurse Practitioner and Licensed Social Workers. Each participating provider will be able to follow the treatment to ensure the individual receives a comprehensive approach to care‐‐ reducing the use of unnecessary ED visits; reducing readmissions into critical care; assisting the persons without a medical home to engage with a medical home; and positively impacting the overall health of each individual served.

This team has the capability to serve 30 identified patients at any given time. The PPRC may establish other comprehensive care plans that do not involve the use of the team for coordination of care purposes.

**Goals and Relationship to Regional Goals:**

This project proposes to use multi‐disciplinary teams to reduce utilization of emergency services by individuals identified as a high utilizer of such services. Patients who have been identified as high utilizers of EMS and ED services will receive a care plan that reduces high utilization of EMS and ED services.

**Project Goals:**

* Establish a Professional Peer Review Committee for the purpose of establishing care plans for patients with a history of high utilization. The PPRC allows for discussion of treatment related issues in a protected environment, for the purpose of improving care at any location
* Establish a team of a LSW and NP to provide coordination of care, patient education, and linkage to needed services to prevent unnecessary use of EMS and ED services.
* Reduce inappropriate emergency transports, ED use
* Improve quality of care and access to healthcare for patients with complex medical needs
* Reduction of inpatient hospitalizations and costs associated with providing emergency services.

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

* Improving access to timely, high quality care for residents, including those with multiple needs;
* 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.

We are proposing this project in Williamson County because an August, 2011 study by the WCCHD and the Integrated Care Collaboration of ED use in Williamson County zip codes found that a small cohort of individuals account for a disproportionate share of acute medical cases, and while consuming significant resources they were achieving poor health outcomes. There were 144 High Utilizers (HU) of emergency services, as defined as having 6 or more ED visits during a 3 month period. Of these HUs, 105 had a mental health diagnosis and accounted for 2,071 ED visits during 2010. Overall MH utilization had 44% growth from 2008 to 2010 while HUs of MH had a 74% increase. 50% of HUs have Medicaid as a payment source with the majority of the remainder having no payment source. Baseline data from the above referenced study shows that the 144 HUs accounted for approximately 2,100 ED visits. With an average ED visit being $3,700 this equals approximately $7.8 million dollars of medical care, which does not account for the cost of EMS transport. Assuming half of the visits were transported by EMS at a cost of $1,361/transport that would equal approximately another $1.43 million.

**Challenges:**

It will be a challenge to coordinate a monthly meeting of appropriate healthcare professionals in order to provide services to high users (HU) of emergency services. It will be a challenge to create an authentication system to ensure users view appropriate sensitive medical information based on assigned roles and responsibilities. It will be a challenge to develop patient consents and methods for sharing data that meets the needs of all of the partners. Finally, it will be a challenge to identify the appropriate patients to serve, as there is anticipated to be more need than there are resources to provide care.

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

Over the next 5 years, we expect the outcomes to include: patients with high utilization of emergency services will be continuously identified and served in the most appropriate and efficient setting; and that will result in a reduction of ED utilization by the targeted population.

**Starting Point/Baseline:**

Currently no Emergency Services Diversion project exists in Williamson County; therefore, the baseline is 0 in DY2. As presented above, we do have data reflecting the number of people identified as high utilizers, with 6 or more visits to the ED during a 3 month period, but we do not know the number who will accept the services and be enrolled in the project. A major effort is needed during DY2 to identify the extent of the resources needed and ensure that the intervention is appropriate and adequate.

**Rationale:**

**Community Need Addressed:**

* Community Need Area: CN.2 ‐ Limited access to mental health/behavioral health services
* Specific Community Needs include:
  + CN.2.1 – Limited access to behavioral health services to rural, poor and under & un‐ uninsured populations (meds, case management, counseling, diagnoses) in Williamson County.
  + CN.2.2 – Limited access for serious mentally ill adults to crisis services in Williamson County

A project to establish a PPRC among local hospitals, the health department, the mobile outreach team, EMS, and BTCS provides an opportunity to create comprehensive treatment plans for patients identified as high utilizers of emergency services. The plan may involve the use of teams consisting of an advanced paramedic, nurse practitioner and licensed social workers to coordinate services, improve patient compliance, monitor chronic conditions, and reduce duplicative services and link to needed services within the community. The skill set of the team will allow for assessment of medical conditions, psychiatric conditions, and substance use problems. Patients with chronic conditions will receive proactive, ongoing care keeping patients healthy and empowering patients to self‐manage their conditions in order to avoid a decline in health or needing ED or inpatient care. This project provides the opportunity to improve the quality of care while reducing reliance on unneeded emergency services.

**Core Project Components:**

This project to provide Emergency Services Diversion will address all of the required core project components:

a*) Assess size, characteristics and needs of target population(s) (e.g., people with severe mental illness and other factors leading to extended or repeated psychiatric inpatient stays. Factors could include chronic physical health conditions; chronic or intermittent homelessness, cognitive issues resulting from severe mental illness and/or forensic* *involvement.* Although the initial study, cited above, revealed the number of high utilizers and some characteristics of the population, the contributing factors are not completely described. We will gather information from electronic health records and case management reports to further refine the characteristics and needs.

*b) Review literature / experience with populations similar to target population to determine*

*community‐based interventions that are effective in averting negative outcomes such as repeated or extended inpatient psychiatric hospitalization, decreased mental and physical functional status, nursing facility admission, forensic encounters and in promoting correspondingly positive health and social outcomes / quality of life.* The community team has done some literature review. The basic design of this project as well as the information sharing protocol and implementation steps originated from those reviews.

We will use the PPRC to continue those reviews to expand the community based interventions to be developed in subsequent years.

*c) Develop project evaluation plan using qualitative and quantitative metrics to determine outcomes.* We will use BTCS and hospital business intelligence and quality management staff to facilitate the development and documentation of our evaluation plan. Oversight will be provided by the PPRC who will ensure qualitative and quantitative metrics will be used to measure outcomes.

*d) Design models which include an appropriate range of community‐based services and residential supports.* Using the information from stakeholders, PPRC, evaluation metrics, patient assessments and reports; we will evaluate available interventions to determine if they are sufficient in capacity and scope. We will adjust our model accordingly.

*e) Assess the impact of interventions based on standardized quantitative measures and qualitative analysis relevant to the target population. Examples of data sources include: standardized assessments of functional, mental and health status (such as the ANSA and SF 36); medical, prescription drug and claims/encounter records; participant surveys; provider surveys. Identify “lessons learned,” opportunities to scale all or part of the intervention(s) to a broader patient populations, and identify key challenges associated with expansion of the intervention(s), including special considerations for safety‐net populations.* The impact of interventions will be assessed on an individual patient level by using the ANSA and SF 36. Aggregated data from those assessments along with number of ED visits, cost of medical care pre and post intervention, will be used to assess community impact and identify and respond to lessons learned.

**Continuous Quality Improvement:**

The BTCS 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**:

As presented above, the August, 2011 study by the WCCHD and the Integrated Care Collaboration of ED use in Williamson County zip codes found that a small cohort of individuals account for a disproportionate share of acute medical cases, consuming significant resources they were achieving poor health outcomes. There were 144 high utilizers (HU) of emergency services, as defined as having 6 or more emergency department visits during a 3 month period. Of these, HU MH had a 74% increase. The high utilizer case management program implemented by the University of Washington Medicine, (The University of Washington Medicine, Harborview Medical Center in 2009 which *A High Utilizer Case Management Program* [(http://www.wsha.org/files/2012](http://www.wsha.org/files/2012) June 15 Behavioral Health Web Conf.pptx;) indicates that one common cause of frequent ED use is lack of access to primary care and another is the presence of behavioral health diagnoses. BTCS is a recipient of a grant through the Health Resources and Services Administration Division of the U.S. Department of Health and Human Services (DHHS) to develop a primary care/behavioral health care another RHP in partnership with the Federally Qualified Health Center for Guadalupe County. BTCS also receives funds from DHHS to operate substance abuse Outreach Screening and Referral services in Williamson and several other counties, and Mental Health block grant funds for outpatient mental health services. Those DHHS funds will not be used for direct services in this project; however, this project enhances and extends those by identifying and directing those in need to re care currently provided with federal funds.

**Related Category 3 Outcome Measure:**

* OD‐ 9 Right Care, Right Setting
  + IT‐9.4.e Reduce Emergency Department visits for Behavioral Health/Substance Abuse

Reasons/rationale for selecting the outcome measure:

Rationale: Our goal is to decrease the emergency department visits for those with behavioral health and substance abuse issues. We aim to demonstrate a 5% improvement over baseline in DY4 and a 10% improvement over baseline in DY5. We selected this particular outcome because we believed it would measure the impact of the diversions. However, the number of persons in the intervention population is very small compared to the total number of ED visits. This measure might not be an accurate measure of the impact.

Baseline Information: The baseline rate established in DY3 was 9.59%. Our baseline measurement period established in DY3 was 10/01/2013-09/30/2014.

**Relationship to Other Projects:**

This enhances additional projects that BTCS is pursuing related to Emergency Services Diversion in that it provides access to care following emergency interventions. As a part of graduation from Emergency Services Diversion, we will be able to offer:

* The Transitional Housing initiative [#126844305.2.1] will solidify success in remaining in the community and offer expertise, support and experience through a Peer Support Specialist;
* The Expansion of Services in Eastern Williamson County [#126844305.1.1] will allow for ongoing outpatient services for persons who currently do not meet the eligibility criteria through existing funding from the Community Mental Health services block grant provided through the Department of State Health Services from DHHS;
* The Crisis Stabilization plan [#126844305.1.2] for persons in behavioral health crisis will provide a safety net for those individuals who may be in need for more intensive care without requiring the restrictive level of care provided by a psychiatric hospital.
* Like the Crisis Stabilization plan, the Substance Addiction Treatment option [#126844305.1.5] will offer substance abuse treatment as a back‐up for relapse and crisis events.

We expect these interrelated projects will demonstrate improved outcomes due to availability of outpatient and aftercare services in the communities in which people live. This Emergency Services Diversion plan supports and relies upon the projects noted above in developing a strong community network of resources for people to continue their recovery.

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

This project works in relation with Williamson County and Cities Health District project (126936702.1.2) for Community Paramedicine. BTCS will participate in all learning collaboratives organized or sponsored by Texas A&M Health Science Center that are relevant to our projects. We believe it is important to improving and adjusting the care provided. We will also participate with other community centers and behavioral health care providers as we continue to do through the Texas Council of Community Centers. This exchange of ideas is important and helps us adjust and refine our programs and approaches to behavioral health care.

**Project Valuation:**

We expect to serve 45 patients in DY4 and 60 in DY5. As described above, this represents over 700 ED visits and millions of dollars in trips by EMS, ED cost and hospital cost. The valuation calculated for this project used cost‐utility analysis which measures program cost in dollars and the health consequences in utility‐weighted units that were applied to the factors existing in this underserved area, including: limited access to primary care and to behavioral health care, poverty and the link between chronic health conditions and chronic behavioral health conditions. The valuation study was prepared by professors H. Shelton Brown, Ph.D. and A. asanat Alamgir, Ph.D. both of the UT Houston School of Public Health and Thomas Bohman, Ph.D. of the UT Austin Center for Social Work Research based on a model that included quality‐ adjusted life‐years (QALYs) and an extensive literature of similar interventions and cost savings and health outcomes related to those interventions. The QALY index incorporates costs averted when known (e.g., emergency room visits that are avoided).

A description of the method used, titled *Valuing Transformation Projects*, has been posted on the performing provider website which will be linked to [www.bbtrrails.org](http://www.bbtrrails.org/) under the Medicaid 1115 Transformation Waiver tab. A complete write‐up of the project will be available at performing provider site.