**Category 2 Project Narrative – Pass 2**

**Scott & White Hospital--Llano – 020840701.2.2**

**(Formerly Llano Memorial Hospital)**

**Project Area, Option and Title:** 2.8.1. Design, develop, and implement a program of continuous, rapid process improvement that will address issues of safety, quality, and efficiency

**RHP Project Identification Number:** 020840701.2.2

**Performing Provider Name:** Scott & White Hospital--Llano

**Performing Provider TPI #:** 020840701 (New TPI: 220798701)

**Project Summary:**

* **Provider Description:** Scott & White Hospital--Llano is a 30-bed hospital in Llano, TX, serving a 934 square mile area and a population of approximately 19,301. The hospital is part of Baylor Scott & White Healthcare, a large integrated system in Texas.
* **Intervention:** This project will apply continuous process improvement strategies, guided by the Institute for Healthcare Improvement (IHI) Model for Improvement, to identify causes of avoidable Sheriff Department Transport of behavioral health patients in crisis, prioritize potential solutions, and launch Plan, Do, Study, Act (PDSA) cycles on chosen improvements.
* **Project Status:** The project represents a new activity in the County and does not overlap with other U.S. Department of Health and Human Services initiatives.
* **Project Need:** The County identified the need for this project because the Sheriff’s Department is conducting multiple transfers each month to an out-of-county facility for persons who are a danger to themselves or others due to behavioral health challenges. These transfers represent potentially avoidable costs for the county, emergency department (ED) visits to determine safety for transport, and disruption of families and individuals. This project addresses the following Community Need: CN.2.18 – Limited access to behavioral health crisis services and delayed responses to early signs of behavioral health issues in Llano County.
* **Target Population:** The target subpopulation of persons with behavioral health needs who are at risk of being a danger to themselves or others because of their condition will be determined in DY2 of the project. This target population must be broad enough to reach individuals at risk for sheriff transports. Currently, the approximate number of sheriff transports is 60 per year; an estimated 16% of this population (10 individuals per year) is uninsured or are beneficiaries of Medicaid or the Llano County Indigent Care Program. We expect process changes to reach 50 individuals in DY3, 100 individuals in DY4 and 150 in DY5, for a cumulative total of 300 individuals in DYs 2-5. This estimate will be adjusted based on DY2 planning work and individual process changes selected.
* **Category 1 or 2 Expected Project Benefit for Patients:** At the end of the five-year demonstration, we expect to have developed new processes in Llano County for connecting individuals and families to behavioral health resources that will reduce the number of crises they experience, thereby reducing the need for forced transfers of individuals to behavioral health care by the Sheriff’s Department (Improvement Milestone I-13.1). We also expect that this reduction of behavioral health crises will reduce avoidable ED visits.
* **Category 3 Outcomes:** IT-9.2.a: Our goal is to reduce ED visits by 5% over baseline in DY4 (approximately 34 ED visits averted in DY4) and 10% over baseline in DY5 (approximately 56 ED visits averted in DY5).

**Project Description:**

*Partnership to Reduce Avoidable Sheriff Deputy Transport of Persons with Behavioral Health Needs in Llano County*

This project will apply continuous process improvement strategies, guided by the Institute for Healthcare Improvement (IHI) Model for Improvement, to identify causes of avoidable Sheriff Department Transport of behavioral health patients in crisis, prioritize potential solutions, and launch Plan, Do, Study, Act (PDSA) cycles to implement iterations of chosen improvements. A trained quality improvement team facilitator from Baylor Scott & White Healthcare’s System Quality & Safety division will guide a team of community stakeholders through the model to a) identify the problem, b) define metrics of desired change (if any are needed in addition to those outlined in Categories 2 and 3), and c) describe potential changes that may lead to improvement. The team will prioritize these potential changes then launch iterative tests of change to move the community toward reduction of behavioral health transports and related Emergency Department (ED) visits. Initial stakeholders will include representatives Scott & White Hospital--Llano (e.g., ED, mental health), Llano County government (IGT), and Llano County Sheriff’s department. The group will identify additional stakeholders based on their knowledge of the community and scope of identified changes to be tested. These may include, for example, community members with experience in behavioral health, other community-based community health providers, and organizations with whom families of persons with behavioral health needs may have contact (e.g., churches, workplaces). For each test of change, the group will plan the launch of the change for a specified period. They will measure, with the assistance of a project manager as needed, both implementation and impact of each change. They will use data on both to review progress and plan future PDSA cycles.

**Goals and Relationship to Regional Goals:**

The primary goals of this project are to reduce inappropriate utilization of EMS and reduce inappropriate utilization of ED services by identifying and addressing behavioral health needs before crises occur that require Sheriff Department deputies to forcibly transfer individuals to behavioral health facilities. These transfers require medical clearance through EDs, usually the Performing Provider ED. Our goal to reduce inappropriate utilization of these specific services fits within the regional goal of reducing inappropriate service utilization.

**Project Goal:**

* Decrease ED utilization by reducing Sheriff Department transfers of individuals to behavioral health facilities.

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

* Reducing inappropriate utilization of services.

**Challenges:**

The two strongest anticipated challenges are a) facilitating the team’s systematic use of the Model for Improvement, and b) fidelity of implementation of tests of change. Stakeholders will vary dramatically in their experience with quality improvement and may find group work around problem definition and brainstorming possible solutions to be unlike their usual processes. We will mitigate this challenge by setting expectations for use of the model in team meetings and utilizing a trained facilitator who works for Baylor Scott & White Healthcare but on a different campus. Using an outside facilitator will allow the model to come from an outside source and allow the team leader (local to Llano County) to avoid the perception of trying to influence the team’s work by facilitating toward a particular solution. We have also chosen metrics that will require systematic work by the team. For the second challenge, the team will include measures of implementation in its iterative tests of change. For example, they may choose to audit the degree to which new protocols are being fully implemented or the number of personnel using new processes. Information on implementation will help the team design new iterations of process change with both our Category 3 outcomes and full implementation as goals.

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

At the end of the five-year demonstration, we expect to have developed new processes in Llano County for connecting individuals and families to behavioral health resources that will reduce the need for forced transfers of individuals to behavioral health care by the Sheriff’s Department. We also expect that this reduction of behavioral health crises will reduce avoidable ED visits.

**Starting Point/Baseline:**

Baseline will be established in DY2 after the quality improvement team specifies the program targets.

**Rationale:**

**Community Need Addressed:**

* Community Need Area: CN.2 – Limited access to mental health/behavioral health services
* Specific Community Need: CN.2.18 – Limited access to behavioral health crisis services and delayed responses to early signs of behavioral health issues in Llano County.

**Project Components:**

The core project components include:

1. *Provide training and education to clinical and administrative staff on process improvement strategies, methodologies, and culture.* Staff members and other stakeholders on our quality improvement team will be trained in the Model of Improvement to establish common language and basic competency for group participation. Teams will be facilitated by Baylor Scott & White Healthcare personnel trained and experienced in quality improvement, implementation and evaluation methodology.
2. *Develop an employee suggestion system that allows for the identification of issues that impact the work environment, patient care and satisfaction, efficiency and other issues aligned with continuous process improvement.* Solicitation of employee suggestions will be systematic and purposeful. It will be important to capture the suggestions of deputies who carry out transfers, ED personnel who conduct exams to provide health clearance for transports, and hospital/clinic personnel who care for persons with poorly controlled behavioral health symptoms. Quality improvement teams will be made up of local champions for change and staff members involved in key process steps (as identified by process mapping exercises). Informal discussions, surveys, and existing feedback mechanisms will be utilized as appropriate to the teams’ work.
3. *Define key safety, quality, and efficiency performance measures and develop a system for continuous data collection, analysis, and dissemination of performance on these measures ((i.e. weekly or monthly dashboard).* Frequency of data feedback to the quality improvement team(s) and broader audiences will be determined by the nature of changes tested—some will require more frequent feedback than others. In all cases, we intend to measure for improvement and for unintended consequences (e.g., adding unintended barriers to care, adding unnecessary steps to processes) of all changes.
4. *Develop standard workflow process maps, staffing and care coordination models, protocols, and documentation to support continuous process improvement.* Implementation guides will be customized to each process improvement iteration.
5. *Implement software to integrate workflows and provide real‐time performance feedback.* Software will be integrated only if determined to be necessary for process improvement but not for the sake of adding software alone.
6. *Evaluate the impact of the process improvement programs and assess opportunities to expand, refine, or change processes based on the results of key performance indicators.* Beyond the indicators of Sheriff Department transfers to behavioral health and ED visits, key performance indicators must be selected for each test of change. This will largely be indicators of implementation—for example, number of people reached with the change, and potential unintended impacts of the change.

At the start of this project, the Sheriff’s Department in Llano County is carrying out multiple transfers to an out-of-county facility each month for persons who are a danger to themselves or others due to behavioral health challenges. These transfers represent potentially avoidable costs for the county, ED visits to determine safety for transport, and disruption of families and individuals. Partners on this project believe these transfers could be avoided in many cases by addressing the needs of behavioral health patients before crises occur. Doing so would reduce burden on the Sheriff’s Department, reduce ED visits (including those required as part of protocols for these transfers), and improve care for behavioral health needs. The solution to the problem is not obvious. By conducting collaborative process improvement work with stakeholders, we will have the opportunity to conduct rapid tests of change to find better ways to meet the needs of behavioral health patients before crises occur.

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

The project does not overlap with other Baylor Scott & White Healthcare initiatives funded by the U.S. Department of Health and Human Services, none of which include inpatient services in Llano County.

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

Selected Category 3 measures include:

* OD-9 Right Care, Right Setting
  + IT-9.2.a ED Appropriate Utilization

ED appropriate utilization was chosen because County stakeholders have indicated that a) some portion of behavioral health transfers are avoidable, possibly with improved access to services before challenges become crises, and b) all such transfers require ED visits for medical clearance of individuals for transfer to behavioral health settings.

**Relationship to Other Projects:**

This project is related to the Pass 1 Category 2 project (#020840701.2.1) submitted by Scott & White Hospital--Llano to undertake continuous quality improvement to address appropriate utilization of EMS services and associated ED utilization in the same County. Efforts on these two projects will be coordinated to leverage the work of teams in ways that makes work on both projects more efficient. For example, we may be able to coordinate solicitation of input from personnel and other stakeholders regarding these two problems in the County. The processes targeted for improvement will be different, but the processes for conducting rapid-cycle improvements will be the same—both are based on the IHI Model for Improvement.

The project is also related to our Pass 2 Category 4 project in that hospital-level reporting will be conducted; however, ED utilization is not among the measures currently included in Category 4.

**Relationship to Other Performing Provider’s Projects and Plan for Learning Collaboratives:**

This project is related to the Category 2 project (#137249208.2.1, #137249208.3.1, and #137249208.3.2) submitted by Scott & White Memorial Hospital for a patient navigator program in Bell County with one of its goals also being reduction of inappropriate ED utilization. The strategies in the two counties will be different, but each was selected in collaboration with the IGT partners and each is expected to best meet the local needs of residents in ways that reduce need or perceived need for ED services. This project is also related to two projects proposed by Williamson County and Cities Health Department. One is for a patient navigation project (#126936702.2.1 and #126936702.3.6). The other is a paramedicine project (#126936702.1.2). Bluebonnet Trails is also proposing an Emergency Services Diversion project (#126844305.2.2). There are several local mental health authorities proposing projects to reduce the number of behavioral health clients from jails. Scott & White Hospital--Llano will participate in a RHP 8 learning collaborative that meets semi-annually to discuss local disparities in care and the ways they have successfully gathered relevant data and ultimately better served the populations in their projects.

**Project Valuation:**

The scope of this project was determined by the availability of funds from IGT entity and the available allotments in Pass 1 and 2, the known history of approximately 60 transports per year in the County, and the estimated need to touch 300 individuals in DY2-5 (100 in DY4, 150 in DY5) with process changes in order to reduce transports and related ED visits. The value is the sum of a) direct posts of program implementation, measurement, and management and b) indirect costs of participation in this waiver and of administering the program (e.g., hiring, communication, offices, personnel management, and information technology). Because data collection and reporting is inextricably tied to process improvement, the project valuation was done across all four categories and four years then divided by 4 to estimate the per-year value or divided by the minimum required percent allocation to each category to estimate the per-category value. When all activities are considered, the average per-year direct program cost is expected to be $98,901. This value includes a process improvement “allowance” for the quality improvement team of $59,555 per year to implement selected changes.

An indirect cost of 19% was applied to average annual direct program costs to account for cost of communication, printing, personnel time for meeting, and other incidental costs of gathering the quality improvement team and conducting program activities. Estimated per-year indirect cost is $18,791.