**Category 1 Project Narrative – Pass 2**

**Central Counties Services – 081771001.1.5**

**Project Area, Option and Title:** 1.10.2 Enhance improvement capacity through technology

**RHP Project Identification Number:** 081771001.1.5

**Performing Provider Name:** Central Counties Services (Center)

**Performing Provider TPI #:** 081771001

**Project Summary:**

* **Provider Description:** Central Counties Services (Center) is an agency of the state providing publicly-funded adult/ child mental health, intellectual and developmental disability (IDD), and early childhood intervention services for 3 RHP 8 Counties (Bell, Lampasas, Milam = 2,789 square miles/352,218 population) and 2 RHP 16 Counties (Coryell, Hamilton = 1,8878 square miles/91,250 population). The Center as the Single Portal Authority authorizes state psychiatric hospital and IDD state living Center admissions. In FY2012, we helped 8,000 people with 240,000+ units of service. The Texas Department of State Health Services (DSHS) deemed all Center clinics as serving Medically Underserved Populations (MUP).
* **Intervention:** This project provides improved data management and organizational process improvement capacity which the Center wants to focus on reducing readmissions to state psychiatric hospitals and local jails by improving post discharge follow-up services. This project seeks to improve the efficiency of clinical service operations through improved technology, and thus increase the Center’s service capacity.
* **Project Status:** This is a new project.
* **Project Need:** CN.2.11 Improve behavioral health service access and capacity in Bell, Lampasas and Milam Counties. 41% of admissions to the state psychiatric hospital system in FY2012 were re-admissions and the Center overused its share of state psychiatric beds in FY2012 by 10.87%.
* **Target Population:** The focused target population for this project are persons with severe and persistent mental illness who have recently been discharged from a psychiatric hospital (394 in FY2012) or jail. 97% of all of the Center’s patients are Medicaid (41.89%), uninsured or indigent. We anticipate this project will benefit this same population.
* **Category 1 or 2 Expected Project Benefit for Patients:** The Center will create data dashboards to monitor and guide the clinical improvement processes for our 7 other direct service 1115 Waiver Service Enhancement Projects which will impact an additional 1,600 behavioral health encounters in DY4 and an additional 2,600 behavioral health encounters DY5 who will be served through these innovative/transformational behavioral health projects implemented through DYs 3-5. The cumulative impact of this project will be to increase behavioral health encounters by (DY-3: 500; + DY-4: 1,600 + DY-5: 2,600 = 4,700) 4,700. (Our Center serves significantly more people than our DSHS contract requires/pays for. To do this we are serving patients less frequently than desired [many are only seen once every 90 days]. When capacity improves we will provide more adequate/frequent services to existing patients, rather than adding more patients. Therefore increased encounters will better measure the project’s quantity patient impact [QPI]on our existing patient load)
* **Category 3 Outcomes:** IT- 3.14: Behavioral Health 30 day readmission rate: The Center expects to improve access to psychiatry services for our adult patients with severe and persistent mental illness in order to reduce possible readmissions back to a Texas State Psychiatric Hospital within 30 days of being discharged from a Texas State Psychiatric Hospital. The goal is to reduce these readmission rates by 5% in DY-4 over the baseline readmission rates obtained in DY-3, and by 10% in DY-5 over the baseline readmission rates obtained in DY-3 as documented in the Center’s electronic health record system and the Texas Client Assignment Registry (CARE) system used by both the Center and the Texas Psychiatric Hospital System.
* **Collaboration:** There was not a TAMHSC allocation in Pass 2 and, therefore, was not used for a Pass 2 project.

**Project Description:**

*Process Improvements through Technology*

This project seeks to establish a process improvement approach to increasing the Center’s effective utilization of its talent and resources to serve persons in our local area who need behavioral health services, intellectual and developmentally disability services, and early childhood intervention services (addresses infant development/delay needs). For example, the Center had 496 state psychiatric hospital admissions in FY2011 for all 5 counties served (RHP-8: Bell, Lampasas & Milam Counties: RHP-16: Coryell & Hamilton Counties). Of the 496 admissions, 12 were children under 18 years of age. Twenty of these admissions were forensic admissions to restore competency to stand trial, and were discharged back to the referring County jail. 203 (41%) of these admissions were readmissions of people who had been previously hospitalized, while 293 (59%) were first admissions to the state psychiatric hospital system. In FY2011, between 9 and 10 patients were hospitalized each week, 4 of whom were re-admissions. Our Center wants to study the primary causes for these readmissions and, through organizational/service process improvement efforts, lower these readmissions to the state psychiatric hospital system. Finding ways to improve our post-discharge patient follow-up/engagement will be one of these improvement efforts.

The key to such an effort is easy, efficient and reliable access to a highly sophisticated clinical data system in which Center staff enter real-time patient demographic and service data that documents the clinical and support activities of Center staff, patient response to these activities and how these service activities interact with the patient to support the patient’s functional improvement. This project will regularly seek system improvement ideas and feedback from Center clinical line staff, support staff, clinical leadership staff, administrative staff and patients to harvest the creative ideas and insights of those who are closest to service production successes and failures. This project will include the implementation of sophisticated software tools and systems with the efficient and error reducing capability of auto-sharing/auto-filing patient demographic and event data across the Center’s internal divisions so that no data needs to be entered more than once and will have robust report writing capabilities. The project will include data/system analyst services that can design/redesign and implement data dashboards for the different parts and functions of our Center, to include the quality control/improvement strategies impacting the approximately 3,100 persons served through the Center’s proposed 1115 Waiver projects. This project will establish data interfaces with other agencies (law enforcement, state psychiatric hospitals, local and regional health agencies, Temple Independent School District, etc.) in order to regularly draw information from them regarding factors that affect Center service access, delivery, and outcomes. This project will proactively explore ways that advancing technology can bring efficiencies to our Center operations, and consequently stretch our service dollars to increase our service access, quality and capacity. This project will form the operational hub for gathering data and monitoring the Center’s performance outcomes associated with its eight Category 3 performance improvement plans. It will also utilize various internal and external sources of information to identify Center operational procedures (scheduling, use of telemedicine vs. in-person services, use of evening/ weekend clinics, etc.), practices (community based services vs. office based services, collaborative patient charting, use of dictation vs. direct record entry, etc.), and patient events (e.g., patient no-show rates by clinic and by provider, medication non-compliance, etc.) that are deemed key to the Center’s improving its operational efficiency, quality of services and service efficiency/capacity. This project will also focus on patient services as a customer service and seek to improve the Center’s workflow so as to increase patient satisfaction with their time spent waiting for and receiving services. This process will seek to identify and remove non-value-added activities in the patient service process, while maximizing the value-added activities in the best possible sequence that supports efficient/effective patient service delivery (p.3, Chapter 44, Patient Safety and Quality: An Evidence-Based Handbook, Ronda Hughes, chapter author-http://www.ncbi.nlm.nih.gov/books/NBK2682/?report=printable).

**Goals and Relationship to Regional Goals:**

**Project Goals:**

The goal of this project is to:

* Improve organizational service delivery efficiency, service quality and effectiveness of its service outcomes by enhancing access and use of operating data;
* Improving our data technology system to be more user-friendly, less cumbersome, highly reliable, high capacity, user responsive system for our 8 clinical operations over long distances (farthest distance between clinics is 120 miles – telemedicine providers are about 200 miles from Center clinics);
* Be able to have the right data at the right place at the right time;
* Use data to inform and support our Center’s improved performance and service capacity; and
* Provide the data management tools and capacity to effectively manage the Center’s direct care 1115 Waiver expansion/transformation projects.

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

* Increasing coordination of prevention and care for residents, including those with multiple needs; and
* Increasing coordination of prevention and care for residents, including those with behavioral or mental health needs.

**Challenges**:

The activities planned for DY2 are complex to accomplish if project approval comes in late-Spring 2013. The Center recognizes this potential challenge and has already begun its work on Milestone 1 (data system planning/selection) to prepare the Center to take action upon project approval notice. We will need to identify a source for the data analyst/system analyst support needed by this project. The Center will be hiring at least one staff person to assist with the data gathering, data monitoring, data analysis, and formulation of system improvement paths based on the analyzed data, so will insure that the person hired has the professional knowledge and skills to support this and the 7 other system improvement projects.

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

In 5 years, the Center expects to have a well-designed, user-friendly, high-speed data system that facilitates and supports multiple, simultaneous organizational improvement projects. The data system/technology will facilitate our service delivery system with unobtrusive, accurate automation support. This support will improve operation efficiency and improved service capacity/access to meet the behavioral health needs of our service area citizens. As a result, patient service episode time will be very efficiently organized and satisfying to the patients.

**Starting Point/Baseline:**

The Center is not currently using an organizational improvement process and does not have in place any quality management dashboards. The Center struggles with a data system that is dragging the clinical staff productivity down to unacceptable levels (around 40%). The data system is slow for our 80+ clinical users (all 5 counties) and at times unreliable due to its applications locking-up, which prompt staff to reboot their computers, having lost all work completed since last saving their work. Our data system is also vulnerable to power outages caused by storm damage, brown-outs due to power grid overuse in the hot summer months, and occasional utility work that disrupts the Center’s electricity. Electrical power interruptions in the Temple area prompt our data system, phone system and telemedicine system to be inaccessible to our 80+ clinical staff whose work depends on access to the Center’s electronic health record system. It is difficult and cumbersome to extract data from this system to be used for system monitoring and performance improvement. The Center recognizes that its 8 clinics all operate differently with various levels of efficiency and patient service satisfaction. Needless to say, we recognize that our service delivery system functions at a lower level than it can or should function. This recognition prompts us to undertake this project to enhance the Center’s improvement capacity through technology.

**Rationale:**

**Community Need Addressed:**

* Community Need Area: CN.2 - Limited access to mental health/behavioral health services
* Specific Community Need: CN2.11- Improve behavioral health service access and capacity in Bell, Lampasas, and Milam Counties

The Center recognizes that technology and operating practices for our current behavioral health service environment are increasingly complex and intrusive to our historical operating style of delivering behavioral health services. Our staff says they are spending more time documenting patient work than they are in delivering actual patient services. The Center has tried to get the best functional use from its technology and now clearly sees that our current data system and how it is applied in our practices is hampering our daily operations and has become a barrier to the Center’s ability to efficiently access operating information needed to undertake an efficient, effective organizational improvement process. We are eager to improve our data system capability and to initiate processes that will engage our staff in a Center-wide organizational improvement process that is within our reach through this project. The Center believes it has committed, willing, professional staff that will promote and support improvement processes to increase our operational efficiency, service capacity and service effectiveness with long term, difficult-to-serve populations. Staff will be energized by their input and inclusion in systems improvement processes. We expect this project’s outcome to be a well-designed workflow pattern that accommodates collaborative documentation (documenting services as they are being provided) and other technology supported efficiencies which enable us to operate with increased service access and capacity within the resources available to the Center. The outcome should also result in a fully functional, efficient data system that will address patient needs in a timely and accurate manner.

**Project Components**:

1. *Provide training and education to clinical and administrative staff on process improvement strategies, methodologies, and culture.* The Center will have training sessions for all Center staff regarding our Center’s process improvement strategies, methodologies and work culture implications within DY2. The Center will also use its established means of communicating organizational change through our quarterly Leadership Forums (all supervisors) and our monthly Human Resources Newsletter.
2. *Develop an employee suggestion system that allows for the identification of issues that impact the work environment, patient care and satisfaction.* The Center will organize a suggestion system that will accommodate both identified and anonymous suggests regarding areas of the Center operations that could be improved upon. We will also utilize periodic electronic surveys (Survey Monkey) on focused topics under consideration/study for improvement.
3. *Design data collection system to collect real-time data that is used to drive continuous quality improvement (possible examples include weekly run charts or monthly dashboards).* This component will be addressed in DY4 through Milestone 6. We will also work with leadership and Quality Management staff to determine what data will be monitored on the continuously evolving Dashboards that we design and put in place to guide and monitor our 7 direct care 1115 Waiver projects and general Center operations in DY4.
4. Continuous Quality Improvement: The Center 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. On a semi-annual basis the Center staff involved with this project will summarize the outcome findings of the Center’s improvement projects, analyze these outcomes to establish the Center’s improvement progress, to set new goals for further organizational improvement, and to recommend new or related performance processes or indicators that would be considered for the Center’s next phase of organizational/operations improvement.

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

This project does not supplant any services or funds currently provided to the Center from the U.S. Department of Health and Human Services. The services proposed to be provided under this project serve to enhance and expand, but not duplicate, the services provided by our Center to persons with severe and persistent behavioral health problems.

**Related Category 3 Outcome Measures:**

IT- 3.14: Behavioral Health 30 day readmission rate: The Center expects to improve access to psychiatry services for our adult patients with severe and persistent mental illness in order to reduce possible readmissions back to a Texas State Psychiatric Hospital within 30 days of being discharged from a Texas State Psychiatric Hospital. The goal is to reduce these readmission rates by 5% in DY-4 over the baseline readmission rates obtained in DY-3, and by 10% in DY-5 over the baseline readmission rates obtained in DY-3 as documented in the Center’s electronic health record system and the Texas Client Assignment Registry (CARE) system used by both the Center and the Texas Psychiatric Hospital System.

**Relationship to Other Projects:**

This project relates to the Center’s telemedicine project (#081771001.1.2; RHP 16 #081771001.1.1) which seeks to use highly reliable telemedicine and high-speed clinical EHR technology to increase timely access to psychiatric services in our service area. This project also relates to our School-based Mental Health project (#081771001.1.1) which will need to flawlessly access the Center’s EHR system in a remote wireless, secure manner to interact with the Center’s data system and make patient EHR entries. This project also relates to our Crisis Respite Services Project (#081771001.1.4; RHP 16 #081771001.1.2) that will need to use the Center’s new telemedicine technology, the EHR clinical data system and the VOIP telephone system in a quick and reliable manner. This project relates to all of our Category 3 Quality Improvement Outcome Projects (#081771001.3.1, #081771001.3.2, #081771001.3.3, #081771001.3.4, #081771001.3.5, #081771001.3.6, #081771001.3.7, and #081771001.3.8) which will depend on a robust, user-friendly, high-speed reliable data system to collect, monitor and manipulate data into reports that document our Center’s accomplishments through these projects.

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

Our Center is not aware of other Provider’s Projects which relate to this project. We are committed to service improvement and broad-level delivery system transformation. We are willing to participate in learning collaboratives with providers in RHP 8 to share successes, challenges, and lessons learned to better serve our target population and meet our community needs. Sharing this information at least on a yearly basis will allow providers to strengthen their partnerships and to continue providing services efficiently so there is maximum positive impact on the healthcare delivery system in RHP 8 (see Milestones 5, 7, 8, 9 and 10).

**Project Valuation:**

This project’s valuation includes the very core data functions and capabilities that are necessary for our Center to meet and manage the data needs of the Center’s eight Medicaid 1115 Waiver Transformation Projects (including this project) that are proposed by our Center (See“Relationship to Other Projects”paragraph above). This project’s valuation includes the value of improved service access by the people we serve, their improved quality of life and the cost-avoidance value gained from reduced psychiatric hospital readmissions through better discharge follow-up (over 900+ patients are expected to be discharged from a psychiatric hospital in DY3 through DY5 and will need this follow-up), as shown in the Project Description section above. It also reflects the value of the clinical hours gained by the ability to complete patient records while serving the patient, and being able to complete EHRs in the field rather than traveling back to offices to accomplish this – both of which translate into increased service capacity. It includes the cost-avoidance value of an inaccessible data system that halts the work of 80+ clinical staff. The valuation also includes the technology assessment team’s time spent in reviewing data systems, narrowing the choices, making site visits where different data systems are in use, understanding the computer hardware systems needed by each option, and then coming to a final data system recommendation. In addition, the valuation includes:

* Receiving our IT Department’s technical support to this team process;
* Procuring, implementing and training IT staff needed to efficiently update our data system and stabilize its power supply to insure its 24/7 availability;
* Establishing the external data interfaces with key organizations in our service area;
* Providing staff training for those who will use the new data system, to include the costs of taking them away from their regular work duties to participate in the training;
* Composing, assembling and printing instructional/procedural manuals to help staff learning how to operate and get the best organizational use from the updated data system, to include computer lab instruction for those staff who will train others (train-the-trainer);
* Getting data analyst and system analyst assistance in designing our use of our data system to support Center’s process improvement projects;
* Implementing process improvement training, the production of training documents/visual training presentations/ setting up an employee suggestion system and overseeing its use – evaluating the feasibility of suggestions for process improvement projects, etc.;
* Identifying technology applications that facilitate the Center’s workflow and efficiency (e.g. technology that assists with the reduction of patient no-show events, etc.);
* Reviewing and analyzing the data for its organizational improvement implications, and formulate a report/presentation for the RHP Collaborative Learning conferences; and
* The Center’s indirect program and central administrative costs.

This valuation reflects 79.5% of the total valuation (Region 8 contains 79.5% of our service region’s population) while 20.5% of this project’s valuation will be reflected in our project submitted to Region 16 (081771001.1.2).