

Category 1 Infrastructure Development

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1.1 Expand Primary Care Capacity

Project Goal:

Expand the capacity of primary care to better accommodate the needs of the regional patient population and community, as identified by the RHP needs assessment, so that patients have enhanced access to services, allowing them to receive the right care at the right time in the right setting. Projects plans related to access to primary care services should address current challenges to the primary care system and patients seeking primary care services, including: expanded and/or enhanced system access points, barriers to transportation, and expanded or enhanced primary care services to include urgent care.

Project Options:

- 1.1.1 Establish more primary care clinics
- 1.1.2 Expand existing primary care capacity
Required core project components:
 - a) Expand primary care clinic space
 - b) Expand primary care clinic hours
 - c) Expand primary care clinic staffing
- 1.1.3 Expand mobile clinics
- 1.1.4 “Other” project option: Implement other evidence-based project to expand primary care capacity in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project. Milestone I-15 includes suggestions for improvement metrics to use with this innovative project option.

Rationale:

In our current system, more often than not, patients receive services in urgent and emergent care settings for conditions that could be managed in a more coordinated manner if provided in the primary care setting. This often results in more costly, less coordinated care and a lack of appropriate follow-up care. Patients may experience barriers in accessing primary care services secondary to transportation, cost, lack of assigned provider, physical disability, inability to receive appointments in a timely manner and a lack of knowledge about what types of services can be provided in the primary care setting. By enhancing access points, available appointment times, patient awareness of available services and overall primary care capacity, patients and their families will align themselves with the primary care system resulting in better health outcomes, patient satisfaction, appropriate utilization and reduced cost of services.

Process Milestones:

- P-1. Milestone: Establish additional/expand existing/relocate primary care clinics
 - P-1.1. Metric: Number of additional clinics or expanded hours or space

- a. Documentation of detailed expansion plans
 - b. Data Source: New primary care schedule or other Performing Provider document or other plans as designated by Performing Provider.
 - c. Rationale/Evidence: It is well known the national supply of primary care does not meet the demand for primary care services. Moreover, it is a goal of health care improvement to provide more preventive and primary care in order to keep individuals and families healthy and therefore avoid more costly ER and inpatient care. RHPs are in real need of expanding primary care capacity in order to be able to implement the kind of delivery system reforms needed to provide the right care at the right time in the right setting for all patients.
- P-2. Milestone: Implement/expand a community/school-based clinics program
- P-2.1. Metric: Number of additional clinics or expanded hours or space
- a. Documentation of detailed expansion plan
 - b. Data Source: New primary care schedule or other document
 - c. Rationale/Evidence: Providing clinics in the community and/or in schools has been shown to be effective because the health care is located conveniently for patients, and is in a setting that is familiar and may feel 'safe'.
- P-3. Milestone: Implement/expand a mobile health clinic program
- P-3.1. Metric: Number of additional clinics or expanded hours or space
- a. Documentation of detailed expansion plan
 - b. Data Source: New primary care schedule or other Performing Provider documents
 - c. Rationale/Evidence: Many RHP plans cover very large counties, including hundreds of miles. In some areas, it may take patients hours to drive to Performing Provider facilities. Therefore, a mobile clinic offers the benefits of taking the services to the patients, which will help keep them healthy proactively.
- P-4. Milestone: Expand the hours of a primary care clinic, including evening and/or weekend hours
- P-4.1. Metric: Increased number of hours at primary care clinic over baseline
- a. Data Source: Clinic documentation
 - b. Rationale/Evidence: Expanded hours not only allow for more patients to be seen, but also provide more choice for patients.
- P-5. Milestone: Train/hire additional primary care providers and staff and/or increase the number of primary care clinics for existing providers
- P-5.1. Metric: Documentation of increased number of providers and staff and/or clinic sites.

- a. Data Source: Documentation of completion of all items described by the RHP plan for this measure. Hospital or other Performing Provider report, policy, contract or other documentation
 - b. Rationale: Additional staff members and providers may be necessary to increase capacity to deliver care.
- P-6. Milestone: Implement a nurse triage software system to assist nurses in determining the acuity of patients
- P-6.1. Metric: Documentation of the availability and utilization of a nurse triage system. The triage system may include many of the following components, which should be detailed in the provided documentation:
- Take messages
 - Contain Nurse access protocols, documentation templates, custom orders, integrated scheduling, paging and faxing
 - Allow for automated portions of the answering service to decrease the need/cost of live operators
 - Enable nurses to track when physicians return pages from nurses or voicemails from other callers
 - Let nurses make calls over the internet
 - Record and store in the system for easy retrieval and review
 - Allow for remote conferencing, training and remote supervision
 - Be flexible enough to be configured for pandemic and other emergency situations
- a. Data Source: Documentation of vendor agreement, staff training in use of system. Vendor agreement, staff training documentation
 - b. Rationale: In order to determine the appropriate setting for some urgent conditions, an automated nurse triage system is an excellent aide for clinical decision making and communication amongst providers, further facilitating follow-up care.
- P-6.2. Metric: Document monitoring parameters of the nurse triage system, like availability of appointments throughout the day, percentage of triaged patients handled by the nurse and percentage handled by the physician, percentage of prebooked appointments, availability of preventive services appointments, average waiting time, patient and staff satisfaction and consultation time.
- a. Data Source: Documentation of vendor agreement, staff training in use of system. Vendor agreement, staff training documentation
 - b. Rationale: In order to determine the appropriate setting for some urgent conditions, an automated nurse triage system is an excellent aide for clinical decision making and communication amongst providers, further facilitating follow-up care.
- P-7. Milestone: Establish a nurse advice line and/or primary care patient appointment unit.
- P-7.1. Metric: Documentation of nurse advice line and/or primary care patient appointment unit.

- a. Data Source: Documentation of advice line and appointment unit implementation, operating hours and triage policies. Advise line system logs, triage algorithms and appointment unit operations/ policies.
 - b. Rationale: In many cases patients are unaware of the appropriate location and timing to seek care for urgent and chronic conditions. Implementation of a nurse advice line allows for primary care to be the first point of contact and offer clinical guidance around how to mitigate symptoms, enhance patient knowledge about certain conditions and seek timely care services.
- P-8. Milestone: Develop an automated tracking system for measuring time to next available offered appointment.
- P-8.1. Metric: Documentation that providers and staff are aware of next available appointment time using real time scheduling data, to ensure that patients can receive primary care services according to acuity and need.
- a. Data Source: Documentation of Performing Provider policies for assessing and communicating time to next available appointment and response to patient care needs reporting and communication tool. Performing Provider administrative records from patient scheduling system
 - b. Rationale: Regular tracking and assessment of time to next available appointment by staff and providers allows for enhanced ability to identify scheduling gaps, patient needs and appropriately triage patients to receive necessary care.
- P-9. Milestone: Develop and implement/expand a plan for proactive management of adult medicine patient panels through a new Office of Panel Management, such that clinic and provider panel capacity is increased and optimized going forward. (must include at least one metric):
- P-9.1. Metric: Documentation of implementation/expansion of Office of Panel Management. Demonstrate improvement over prior reporting period (baseline for DY2).
- a. Data Source: Documentation of Office of Panel Management plan, staff assignments, policies and procedures. Documentation of the panel status (open/closed) and panel capacity at points in time. Performing Provider administrative records
 - b. Rationale: This intervention will optimize the use of available adult medicine panel capacity, ensuring equality and appropriateness of panel size by provider, to best meet patient requests for providers and care needs.
- P-9.2. Metric: Documentation of increased and optimized clinic and provider panel capacity. Demonstrate improvement over prior reporting period.

- a. Data Source: Documentation of panel management dynamics (counts of additions, deletions, and total paneled patients) and results of initial panel “cleaning”. Performing provider administrative records.
- b. Rationale: To ensure accuracy of Provider panels, regular maintenance should be conducted on the Panel Management system. This should include and will allow for enhanced tracking of patient requests for providers, variations in service utilization and outcomes.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]
- P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
 - b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/ procedures, and share lessons learned

Improvement Milestones:

- I-10. Milestone: Enhance patient access to primary care services by reducing days to third next-available appointment. Demonstrate improvement over prior reporting period.
- I-10.1. Metric: Third Next-Available Appointment: The length of time in calendar days between the days a patient makes a request for an appointment with a provider/care team, and the third available appointment with that provider/care team. Typically, the rate is an average, measured periodically (weekly or monthly) as an average of the providers in a given clinic. It will be reported for the most recent month. The ultimate improvement target over time would be seven calendar days (lower is better), but depending on the Performing Provider's starting point, that may not be possible within four years.
- a. Average number of days to third next available appointment for an office visit for each clinic and/or department¹
 - b. Data Source: Practice management or scheduling systems
 - c. Rationale/Evidence: This measure is an industry standard of patients' access to care. For example, the IHI definition white paper on whole system measures cites this metric.²
- I-11. Milestone: Patient satisfaction with primary care services.
- I-11.1. Metric: Patient satisfaction scores: Average reported patient satisfaction scores, specific ranges and items to be determined by assessment tool scores. Demonstrate improvement over prior reporting period.
- a. Numerator: Sum of all survey scores,
 - b. Denominator: Number of surveys completed.
 - c. Data Source: CG-CAHPS³ or other developed evidence based satisfaction assessment tool, available in formats and language to meet patient population.
 - d. Rationale: Patient satisfaction with primary care services is largely related to utilization of primary care services. Understanding strengths, needs and receiving patient feedback allows for providers and staff to better understand how to tailor care delivery to meet their patients' needs.

1 <http://www.qualitymeasures.ahrq.gov/popups/printView.aspx?id=23918>

2 Martin LA, Nelson EC, Lloyd RC, Nolan TW. Whole System Measures. IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2007. (Available on www.IHI.org).

3 http://www.ahrq.gov/cahps/clinician_group/

- I-11.2. Metric: Percentage of patients receiving survey. Specifically, the percentage of patients that are provided the opportunity to respond to the survey. Demonstrate improvement over prior reporting period.
- a. Numerator: number of surveys distributed during the reporting period
 - b. Denominator: total number of primary care visits during the reporting period
 - c. Data Source: Performing provider documentation of survey distribution, EHR
 - d. Rationale: Patient satisfaction with primary care services is largely related to utilization of primary care services. Understanding strengths, needs and receiving patient feedback allows for providers and staff to better understand how to tailor care delivery to meet their patients' needs.
- I-11.3. Metric: Survey response rate. Demonstrate improvement over prior reporting period .
- a. Numerator: number of survey responses
 - b. Denominator: total number of surveys distributed.
 - c. Data Source: CAHPS or other developed evidence based satisfaction assessment tool; Performing provider documentation of survey distribution, EHR
 - d. Rationale: Patient satisfaction with primary care services is largely related to utilization of primary care services. Understanding strengths, needs and receiving patient feedback allows for providers and staff to better understand how to tailor care delivery to meet their patients' needs.
- I-12. Milestone: Increase primary care clinic volume of visits and evidence of improved access for patients seeking services.
- I-12.1. Metric: Documentation of increased number of visits. Demonstrate improvement over prior reporting period.
- a. Total number of visits for reporting period
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.
- I-12.2. Metric: Documentation of increased number of unique patients, or size of patient panels. Demonstrate improvement over prior reporting period.
- a. Total number of unique patients encountered in the clinic for reporting period.
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.

- I-13. Milestone: Enhanced capacity to provide urgent care services in the primary care setting.
- I-13.1. Metric: Percent patients receiving urgent care appointment in the primary care clinic (instead of having to go to the ED or an urgent care clinic) within 2 calendar days of request. Demonstrate improvement over baseline rates
- a. Numerator: number of patients receiving urgent care appointment within 2 days of request
 - b. Denominator: number of patients requesting urgent care appointment.
 - c. Data source: Registry, EHR, claims or other Performing Provider scheduling source
 - d. Rationale: Identifying patient flow as it relates to urgent care needs allow Performing Providers to tailor staffing, triage protocols and service hours to best address patient needs and increase capacity to accommodate both urgent and non-urgent appointments.
- I-14. Milestone: Increase the number of patients served and questions addressed on the nurse advice line and patient scheduling unit. Demonstrate improvement over prior reporting period.
- I-14.1. Metric: Number of patients served by the nurse advice line. Demonstrate improvement over baseline rates.
- a. Numerator: number of unique records created from calls received to the nurse advice line.
 - b. Denominator: total number of calls placed to the nurse advice line (distinct from number of calls answered).
 - c. Data Source: Automated data from call center
 - d. Rationale/Evidence: This measure will indicate how many calls are addressed successfully as well as an overall call abandonment rate. Abandonment rate is the percentage of calls coming into a telephone system that are terminated by the person originating the call before being answered by a staff person. It is related to the management of emergency calls. This metric speaks to the capacity of the nurse advice line.
- I-14.2. Metric: Nurse advice line/patient scheduling line service indicator: Average speed of answer
- a. Numerator: Average delay, in seconds, for all calls to be answered by an agent during the reporting period. ⁴
 - b. Data Source: Call center reports
 - c. Rationale/Evidence: Another very frequently used key performance indicator in a call center is the speed of service at which calls are answered.

⁴ http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/issue_papers/callcentermetricspaperbestpr.pdf

- I-14.3. Metric: Nurse advice line/patient scheduling line service indicator: Longest delay in queue (LDQ)
- a. Numerator: The longest delay, in minutes, for all calls received during the reporting period.
 - b. Data Source: Call center reports
 - c. Rationale/Evidence: The age of the call that has been in queue the longest, or the longest delay in queue (LDQ), is a real-time measure of performance that is used by many call centers to indicate when immediate staffing changes are required. LDQ is also a historical gauge of performance that indicates the “worst-case” experience of a customer over a period of time, such as a day.
- I-14.4. Metric: Nurse advice line/patient scheduling line quality indicator: Knowledge and competency
- a. Numerator: Average score provided by callers on agent knowledge and competency.
 - b. Data Source: Call center reports
 - c. Rationale/Evidence: One component that leads callers to remark that a call was handled with quality is the ability of the agent or counselor to provide correct and thorough product and service information, and to be competent at handling caller questions and problems.
- I-14.5. Metric: Nurse advice line/patient scheduling line quality indicator: First call resolution rate
- a. Numerator: The percentage of calls completed within a single contact during the reporting period
 - b. Data Source: Call center reports
 - c. Rationale/Evidence: The percentage of calls completed within a single contact, often called the “one and done,” or resolution rate, gauges the ability of the center as well as of an individual agent to accomplish the call in a single contact without requiring a transfer to another person or area, or without needing an additional call to assist the caller. The satisfactory resolution of a call is tracked by type of call and, perhaps, by time of day or by group. The one-call resolution rate is also an individual gauge of performance that measures an individual’s capability to handle the call to completion without requiring assistance via a transferred call or a subsequent call, meaning higher efficiency and better service.

- I-14.6. Metric: Nurse advice line/patient scheduling line quality indicator: Adherence to protocol
- a. Numerator: Number of calls in which the protocol(s) was/were followed during the reporting period.
 - b. Denominator: Total number of calls for the reporting period.
 - c. Data Source: Call center reports
 - d. Rationale/Evidence: Adherence to protocols, such as workflow processes or call scripts, is another essential element of quality in the call center. Ensuring callers receive a consistent call-handling experience regardless of the contact channel or the individual agent involved in the contact is particularly important to the perceived quality of the contact. Adherence to protocols and procedures is a crucial element of individual agent performance in the call center. Adherence to telephone procedures and call scripts is typically monitored through both general observation and a more formal quality-monitoring process.
- I-14.7. Metric: Nurse advice line/patient scheduling line efficiency indicator: Average handle time
- a. Numerator: Average time, in minutes from the initiation of a call until resolution for the call, for all calls during the reporting period. Essentially, talk time plus after-call work.
 - b. Data Source: Call center reports
 - c. Rationale/Evidence: The most common measure of contact handling is the average handle time (AHT). AHT is used when determining overall workload and staffing requirements. AHT reports are available from the ACD. To accommodate differences in calling patterns, AHT should be measured and identified by time of day as well as by day of week. It measures overall call center performance and team and individual agent performance. Although handle times will vary based on call content, an agent should typically deliver a consistent handle time within an acceptable range. However, overemphasizing short AHT can reduce the quality of the interaction and decrease the conversion rate. There is no industry standard or recommendation for AHT. AHT numbers should be gathered and analyzed primarily to determine if agents are in an acceptable range of performance and whether differences among agents are associated with different conversion rates.

I-14.8. Metric: Nurse advice line/patient scheduling line efficiency indicator: After-call work time

- a. Numerator: Time, in minutes, after the conversation, that the agent spends filling out associated paperwork, updating files, and doing similar work related to the call before the agent is ready to handle the next contact.
- b. Data Source: Call center reports
- c. Rationale/Evidence: One of the components of AHT that is considered to be the most variable and the most controllable is the after-call work (ACW) portion of the contact. ACW should be measured and evaluated over time to determine the appropriate amount of time needed to accomplish the necessary tasks. This overall call center ACW number will then typically serve as the benchmark against which to measure an individual agent's ACW time. Comparisons between agents should be made with similar types of calls because the requirements of different call-handling situations can vary significantly. ACW should be measured by type of call as well as by individual. Measuring ACW by time of day is also useful. When understaffing results in high occupancy for staff and very little idle time between calls, ACW time is typically higher because agents stay in the non-call state to catch their breath between calls. Observing this type of metric will indicate those agents in need of coaching to prevent their unavailability during already understaffed times.

I-14.9. Metric: Nurse advice line/patient scheduling line efficiency indicator: Average on-hold time

- a. Numerator: Sum of amount of time a caller spends on hold during the course of the conversation for all calls during the reporting period.
- b. Denominator: Number of calls during the reporting period.
- c. Data Source: Call center reports
- d. Rationale/Evidence: On-hold time is the amount of time a caller spends on hold during the course of the conversation. Obviously, the goal is to minimize the number of times a caller is placed on hold, as well as to minimize the length of the on-hold time. Most call centers measure on-hold time, but it is not necessarily one of the top performance indicators. An overall high percentage of on-hold time may indicate that system performance is slow or that access to multiple systems is delaying the agents in processing callers' requests. On-hold time is more typically used as a gauge for individual agents and can indicate insufficient knowledge or other performance gaps. Call centers will want to review the percentage of calls an agent has to put on hold as well as the length of the hold time. There is no industry standard for on-hold time. The goal is to minimize the number for increased call efficiency and service to the caller.

I-14.10. Metric: Nurse advice line/patient scheduling line efficiency indicator: Average cost of call

- a. Numerator: TBD by provider
- b. Data Source: Call center reports
- c. Rationale/Evidence: Cost per call is a key performance indicator for most call center operations. Regardless of whether it is tracked as only a labor cost or as a fully loaded cost, the cost-per-call figure is used to evaluate how efficiently the company's financial resources are being used and what its return on investment is. The cost-per-call rate can track just labor costs per call or it can include all the telecommunications, facilities, and other service costs in addition to labor costs. When determining the cost per call, the components being used must be defined and used consistently in evaluating how the call center is using financial resources over time. Although cost per-call rates are commonly used to compare one company or site with another, this practice is not recommended because the components included and the types of contacts may vary.

I-14.11. Metric: Number of patients served by the patient scheduling line. Demonstrate improvement over baseline rates.

- a. Numerator: total number of appointments made as a result of calls received to the patient scheduling line.
- b. Denominator: total number of calls placed to the patient scheduling line (distinct from number of calls answered).
- c. Data Source: Automated data from call center
- d. Rationale/Evidence: This measure will indicate how many calls are addressed as well as a call abandonment rate. Abandonment rate is the percentage of calls coming into a telephone system that are terminated by the person originating the call before being answered by a staff person. This metric speaks to the capacity of the patient scheduling line as well as a proxy for patient access using the patient scheduling line.

I-15. Milestone: Increase access to primary care capacity. The following metrics are suggested for use with an innovative project option to increase access to primary care capacity but are not required.

I-15.1. Metric: Increase percentage of target population reached.

- a. Numerator: Number of individuals of target population reached by the innovative project.
- b. Denominator: Number of individuals in the target population.
- c. Data Source: Documentation of target population reached, as designated in the project plan.
- d. Rationale/Evidence: This metric speaks to the efficacy of the innovative project in reaching its targeted population.

- I-15.2. Metric: Increased number of primary care visits.
- a. Total number of visits for reporting period
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.
- I-15.3. Metric: Documentation of increased number of unique patients, or size of patient panels. Demonstrate improvement over prior reporting period (baseline for DY2).
- a. Total number of unique patients encountered in the clinic for reporting period.
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- Metric: Target population reached
- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.

1.2 Increase Training of Primary Care Workforce

Project Goal:

Texas has a growing shortage of primary care doctors and nurses due to the needs of an aging population, a decline in the number of medical students choosing primary care, and thousands of aging baby boomers who are doctors and nurses looking towards retirement. The shortage of primary care workforce personnel in Texas is a critical problem that we have the opportunity to begin addressing under this waiver. It is difficult to recruit and hire primary care physicians. The shortage of primary care providers has contributed to increased wait times in hospitals, community clinics, and other care settings. Expanding the primary care workforce will increase access and capacity and help create an organized structure of primary care providers, clinicians, and staff. Moreover, this expansion will strengthen an integrated health care system and play a key role in implementing disease management programs. The extended primary care workforce will also be trained to operate in patient-centered medical homes. A greater focus on primary care will be crucial to the success of an integrated health care system. Furthermore, in order to effectively operate in a medical home model, there is a need for residency and training programs to expand the capabilities of primary care providers and other staff to effectively provide team-based care and manage population health. Therefore, the need to expand the responsibilities of primary care workforce members will be even more important. In summary, the goal for this project is to train more workforce members to serve as primary care providers, clinicians, and staff to help address the substantial primary care workforce shortage and to update training programs to include more organized care delivery models. This project may apply to primary care physicians (including residents in training), nurse practitioners, physician assistants, and other clinicians/staff (e.g., health coaches, community health workers/promotoras) in the following service areas: family medicine, internal medicine, obstetrics and gynecology, geriatrics, and pediatrics.

In 2010, Texas had 176 patient care physicians per 100,000 population and 70 primary care physicians per 100,000 population with a state ranking of 46 and 47, respectively. (Comparable ratios for US Total are 219.5 and 90.5, respectively.) From 2001 to 2011, the Texas physician workforce grew 32.3%, exceeding the population growth of 25.1%. Primary care physician workforce grew only 25% in the same period. From 2002 to 2011, Texas increased medical school enrollment 31% from 1,342 to 1,762 in line with the national call by the Association of American Medical Colleges to increase medical school enrollments by 30%. In 2011, there were 1,445 medical school graduates. Coincidentally, there were 1,445 allopathic entry-level GME positions offered in the annual National Resident Matching program. (There were 31 osteopathic slots.) The Texas Higher Education Coordinating Board recommends a ratio of 1.1 entry-level GME positions for each Texas medical school graduate. The number of Texas medical school graduates is expected to peak at over 1,700 in 2015. This implies a need for 400 additional GME positions by 2015. The shortage of GME positions or residency slots may be the single most problematic bottleneck in Texas' efforts to alleviate the state's physician shortage.⁵

The rate of Primary Care Physicians per 100,000 Population varies by region from 43 (South Texas) to 78 (Central Texas). Resident physicians provide low-cost care to needy populations and tend to remain in the state in which they complete their residency training.

⁵ 2010 physician supply extracted from "Physician Characteristics and Distribution in the U.S.," 2012 Edition, published by American Medical Association. U.S. and Texas population estimates, 2010, extracted from U.S. Census Bureau American Fact Finder Website. Prepared by: Medical Education Dept., Texas Medical Association, 2/2012.

Project Options:

- 1.2.1 Update primary care training programs to include training on the medical home and chronic care models, disease registry use for population health management, patient panel management, oral health, and other identified training needs and/or quality/performance improvement
- 1.2.2 Increase the number of primary care providers (i.e., physicians, residents, nurse practitioners, physician assistants) and other clinicians/staff (such as health coaches and community health workers/promotoras).
- 1.2.3 Increase the number of residency/training program for faculty/staff to support an expanded, more updated program
- 1.2.4 Establish/expand primary care training programs, with emphasis in communities designated as health care provider shortage areas (HPSAs)
- 1.2.5 “Other” project option: Implement other evidence-based project to increase training of the primary care workforce in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project.

Process Milestones:

- P-1. Milestone: Conduct a primary care gap analysis to determine workforce needs.
 - P-1.1. Metric: Gap assessment of workforce shortages
 - a. Submission of completed assessment
 - b. Data Source: Assessment results
 - c. Rationale/Evidence: In order to identify gaps in primary care, specific to gaps in provider types, to best build up supply of primary care practitioners to meet the demand for services and improve primary care access.

- P-2. Milestone: Expand primary care training for primary care providers, including physicians, physician assistants, nurse practitioners, registered nurses, certified midwives, case managers, pharmacists, dentists (must include at least one of the following metrics):
 - P-2.1. Metric: Expand the primary care residency, mid-level provider (physician assistants and nurse practitioners), and/or other clinician/staff (e.g., health coaches, community health workers/promotoras) training programs and/or rotations
 - a. Documentation of applications and agreements to expand training programs
 - b. Data Source: Training program documentation
 - c. Rationale/Evidence: Increasing primary care training may help address the primary care workforce shortage.

 - P-2.2. Metric: Hire additional precepting primary care faculty members. Demonstrate improvement over prior reporting period (baseline for DY2).

- a. Documentation: Increased number of additional training faculty/staff members
 - b. Data Source: HR documents, faculty lists, or other documentation
 - c. Rationale/Evidence: More faculty is needed to expand training programs. Increasing primary care training offering alternative training programs may offer additional flexibility for trainees in efforts to address the primary care workforce shortage.
- P-2.3. Metric: Develop alternative primary care training modalities, including but not limited to distance/online training, alternative scheduling and education in non-traditional training settings.
- a. Documentation of applications and agreements to expand alternative training programs.
 - b. Data Source: Training program documentation
 - c. Rationale/Evidence: Non-traditional training and education methods, especially distance learning, offer not only access to learning in the most remote areas but also offers interactive modalities of training which are the quintessential education methodology in the modern world.
- P-3. Milestone: Expand positive primary care exposure for residents/trainees (must include at least one of the following metrics):
- P-3.1. Metric: Develop mentoring program with primary care faculty and new trainees
- a. Documentation of program
 - b. Data Source: Mentoring program curriculum and/or program participant list
 - c. Rationale/Evidence: Mentoring programs have been found to foster primary care trainees' interest in pursuing primary care careers.
- P-3.2. Metric: Train trainees in the medical home model, chronic Care Model and/or disease registry use; have primary care trainees participate in medical homes by managing panels
- a. Documentation of program
 - b. Data Source: Curriculum, rotation hours, and/or patient panels assigned to resident/trainee
 - c. Rationale/Evidence: Training programs in primary care should reflect the evolving primary care delivery models.
- P-3.3. Metric: Include trainees/rotations in quality improvement projects
- a. Documentation of program
 - b. Data Source: Curriculum and/or quality improvement project documentation/data
 - c. Rationale/Evidence: Including primary care trainees in quality improvement has been linked to trainee satisfaction with primary care.
- P-4. Milestone: Develop and implement a curriculum for residents to use their practice data to demonstrate skills in quality assessment and improvement
- P-4.1. Metric: Quality assessment and improvement practicum for residents

- a. Documentation of program
 - b. Data Source: Curriculum description and registration documentation
 - c. Rationale/Evidence: Including primary care trainees in quality improvement has been linked to trainee satisfaction with primary care. Providing practicum opportunities for residents will allow for greater mastery of quality improvement methodology.
- P-5. Milestone: Implement loan repayment program for primary care providers
- P-5.1. Metric:
- a. Documentation of program
 - b. Data Source: Program materials
 - c. Rationale/Evidence: Loan repayment programs can help to make primary care more attractive.
- P-6. Milestone: Develop/Expand enrollment in programs that provide primary care training that lead to retain the graduates and commit to serve in specific communities e.g. HRSA designated Health Care Provider Shortage Areas (HPSAs)⁶ or HRSA FQHCs.
- P-6.1. Metric: Provide training for commitment to serve in specific communities.
- a. Documentation of developed program(s) and enrollment in program(s)
 - b. Data Source: Program materials
 - c. Rationale/Evidence: Training assistance programs that require commitment to serve in specific and/or underserved communities may address primary care workforce shortage areas.
- P-7. Milestone: Create a primary care career pipeline program for secondary school students (specifications to be provided in the RHP plan).
- P-7.1. Metric: Primary care career pipeline program
- a. Documentation of program development and implementation.
 - b. Data Source: Program materials
 - c. Rationale/Evidence: Funnel high school students into primary healthcare careers like primary care medicine, nursing, dentistry, professional counseling, dietitian, public health.
- P-8. Milestone: Establish/expand a faculty development program
- P-8.1. Metric: Enrollment of faculty staff into primary care education and training program
- a. Documentation of program and enrollment
 - b. Data Source: Program documents
 - c. Rationale/Evidence: More primary care faculty is needed to support training programs.
- P-9. Milestone: Develop/disseminate clinical teaching tools for primary care or interdisciplinary clinics/sites
- P-9.1. Metric: Clinical teaching tools
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- a. Submission of teaching tools
- b. Data Source: Enlist institutions that provide clinical teaching as consultants.
- c. Rationale/Evidence: Utilize faculty from the educational institution (hospital) who are not employed or fiscally aligned to the practice site, and who do not provide direct clinical services for the clinical agency in a consulting capacity.

P-10. Milestone: Obtain approval from the Accreditation Council for Graduate Medical Education (ACGME) to increase the number of primary care residents

P-10.1. Metric: Documentation of ACGME approval for residency position expansion

- a. Submit application
- b. Data source: justify the number of residents needed
- c. Rationale: increase in number of primary care residents will increase the access the access to care for population including Medicaid.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- o Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- o Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- o Metric: Community or population outreach and marketing, staff training, implement intervention.
- o Metric: Evaluate intervention, modify intervention as appropriate, develop policies/ procedures, and share lessons learned

Improvement Milestones:

- I-11. Milestone: Increase primary care training and/or rotations
 - I-11.1. Metric: Increase the number of primary care residents and/or trainees, as measured by percent change of class size over baseline. Trainees may include physicians, mid-level providers (physician assistants and nurse practitioners), and/or other clinicians/staff (e.g., health coaches, community health workers/promotoras). Demonstrate improvement over prior reporting period.
 - a. Number trainees enrolled primary care training program(s)
 - b. Data Source: Documented enrollment by class by year by primary care training program
 - c. Rationale/Evidence: As the goal is to increase the primary care workforce to better meet the need for primary care in the health care system by increasing training of the primary care workforce in Texas, the metric is a straightforward measurement of increased training.
 - I-11.2. Metric: Increase the number of primary care trainees rotating at the Performing Provider's facilities
 - a. Number of primary care trainees in rotation at Performing Provider's facilities
 - b. Data Source: Student/trainee rotation schedule
Rationale/Evidence: This metric addresses the capacity of the Performing Provider to directly engage in providing primary care trainees opportunities to build experience and enhance skills.
 - I-11.3. Metric: Increase the number or percent of culturally-competent trainees eligible for existing Texas residency programs
 - a. Number or percent of residency eligible graduates of cultural competency training programs.
 - b. Data Source: Cultural Competency training program matriculation records.
 - c. Rationale/Evidence: This metric aims to address the need for cultural competency training available to Texas primary care residents.
 - I-11.4. Metric: Increase the number of primary care residents and/or trainees, as measured by percent change of class size over baseline or by absolute number.
 - a. Number of primary care residents and/or trainees enrolled
 - b. Data Source: Program enrollment records
 - c. Rationale/Evidence: This metric addresses the need for additional primary care residency and/or trainee slots.

- I-11.5. Metric: Improvement in trainee satisfaction with specific elements of the training program
 - a. Numerator: Sum of trainee satisfaction scores
 - b. Denominator: total number of trainees
 - c. Data Source: Trainee satisfaction assessment tool
 - d. Rationale/Evidence: Regular assessment of trainee satisfaction is critical to adapting programs to address needs and further foster a commitment to serve in primary care. Increased satisfaction helps with the sustainability of the project.

- I-11.6. Metric: Improvement in trainee knowledge assessment scores
 - a. Numerator: Sum of differences in pre and post training assessment scores.
 - b. Denominator: Number of graduates from training program.
 - c. Data Source: Knowledge assessment tool
 - d. Rationale/Evidence: Regular assessment of trainee knowledge is critical to adapting programs to address needs and capacity to serve in primary care settings. Improvement of knowledge reflects effectiveness of the training program vs. just the increase in the number of enrollments.

- I-11.7. Metric: Improvement in number of primary care practitioners that went on to practice primary care after graduating from primary care training/residency.
 - a. Number of training program graduates currently working as primary care practitioners.
 - b. Data Source: Exit survey or other follow-up survey.
 - c. Rationale/Evidence: This metric addresses the efficacy of the training program to produce a measureable difference in the number of primary care practitioners.

- I-12. Milestone: Recruit/hire more trainees/graduates to primary care positions in Performing Provider facilities
 - I-12.1. Metric: Percent change in number of graduates/trainees accepting positions in the Performing Provider's facilities over baseline
 - a. Numerator: number of graduates/trainees accepting positions in facility
 - b. Denominator: total number of graduates/trainees that received training in Performing Provider's facilities.
 - c. Data Source: Documentation, such as HR documents compared to class lists
 - d. Rationale/Evidence: A measure of the success of the training program is how many graduates are choosing to practice primary care at the Performing Provider's facilities.

- I-13. Milestone: Increase the number/proportion of primary care residency/trainee graduates choosing primary care as a career
- I-13.1. Metric: Number of primary care residency/trainee graduates working in primary care settings.
- Numerator: Number of class year residency/trainee graduates working in primary care.
 - Denominator: Number of class year residency/trainee graduates
 - Data Source: Program and follow survey documentation.
 - Rationale/Evidence: Measures success of process measures.
- I-14. Milestone: Increase the number of faculty staff completing educational courses
- I-14.1. Metric: Number of staff completing courses
- Number of faculty staff completing educational courses.
 - Data Source: Certificates of completion or course graduate records.
 - Rationale/Evidence: Measures success of related process measure.
- I-15. Milestone: Increase primary care training in Continuity Clinics,⁷ which may be in diverse, low-income, community-based settings, (must include at least one of the following metrics):
- I-15.1. Metric: Increase number of Continuity Clinic sessions available for primary care trainees.
- Numerator: Number of Continuity Clinic Sessions utilizing primary care trainees.
 - Denominator: Total number of Continuity Clinic Sessions.
 - Data Source: Number of trainee office visits, such as from disease registry, EHR, claims data or other reports
 - Rationale/Evidence: Residents/trainees have the opportunity to treat patients in the clinic setting, offering the trainee an option to provide continuing care to his/her patients in order to build continuity with his/her patients.

⁷ Per the Accreditation Council for Graduate Medical Education (ACGME), "Setting for a longitudinal experience in which residents develop a continuous, long-term therapeutic relationship with a panel of patients." For more information, please see http://www.acgme.org/acWebsite/about/ab_ACGMEglossary.pdf.

- I-15.2. Metric: Increase number of Continuity Clinic patients in primary care residents' panels.
- a. Numerator: Number of patients assigned to primary care resident panels.
 - b. Denominator: Total number of patients seen in the Continuity Clinic during the reporting period.
 - c. Data Source: Patient panel, registry or EHR
 - d. Rationale/Evidence: Residents/trainees have the opportunity to treat patients in the clinic setting, offering the trainee an option to provide continuing care to his/her patients in order to build continuity with his/her patients.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- o Metric: Target population reached
- o Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development.
- o Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- o Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- o Metric: Other program output measure as identified by the performing provider.

1.3 Implement a Chronic Disease Management Registry

Project Goal:

Implement a disease management registry for one or more patient populations diagnosed with a selected chronic disease(s) or with Multiple Chronic Conditions (MCCs). By tracking key patient information, a disease registry can help physicians and other members of a patient’s care team identify and reach out to patients who may have gaps in their care in order to prevent complications, which often lead to more costly care interventions. A disease registry can assist physicians in one or more key processes for managing patients with a chronic disease, including:

- Prompt physicians and their teams to conduct appropriate assessments and deliver condition-specific recommended care;
- Identify patients who have missed appointments, are overdue for care, or are not meeting care management goals;
- Provide reports about how well individual care teams and overall provider organizations are doing in delivering recommended care to specific patient populations;
- Stratify patients into risk categories in order to target interventions toward patients with highest needs.

Project Options:

1.3.1 Implement/enhance and use chronic disease management registry functionalities

Required core project components:

- a) Enter patient data into unique chronic disease registry
- b) Use registry data to proactively contact, educate, and track patients by disease status, risk status, self-management status, community and family need.
- c) Use registry reports to develop and implement targeted QI plan
- d) Conduct quality improvement for project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, identifying “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and identifying key challenges associated with expansion of the project, including special considerations for safety-net populations.

1.3.2 “Other” project option: Implement other evidence-based project to implement a chronic disease management registry in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project. Milestone I-23 includes suggestions for improvement metrics to use with this innovative project option.

Note: All of the project options in project area 1.3 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Rationale:

Utilization of registry functionalities helps care teams to actively manage patients with targeted chronic conditions because the disease management registry will include clinician prompts and reminders, which should improve rates of preventive care.

Process Milestones:

- P-1. Milestone: Identify one or more target patient populations diagnosed with selected chronic disease(s) (e.g. diabetes, CHF, COBP, etc) or with Multiple Chronic Conditions (MCCs).
 - P-1.1. Metric: Documentation of patients to be entered into the registry
 - a. Numerator: Number of patients entered into the registry with target condition;
 - b. Denominator: Total number of patients with the target condition;
 - c. Data source: performing providers records/documentation;
 - d. Rationale/Evidence: Condition specific registries allow providers to focus on quality improvements around clinical outcomes and processes for targeted patients.

- P-2. Milestone: Review current registry capability and assess future needs.
 - P-2.1. Metric: Documentation of review of current registry capability and assessment of future registry needs.
 - a. Numerator: number entered into the registry;0 if documentation is not provided, 1 if it is provided;
 - b. Denominator: total patients with the target condition;
 - c. Data source: EHR systems and/or other performing provider documentation.
 - d. Rationale/Evidence: Used to determine if the necessary elements for a chronic disease registry are in place for optimal care management. Necessary elements may include inpatient admissions, emergency department visits, test results, medications, weight, activity level changes and/or diet changes.

- P-3. Milestone: Develop cross-functional team to evaluate registry program.
 - P-3.1. Metric: Documentation of personnel (clinical, IT, administrative) assigned to evaluate registry program
 - a. Numerator: number of personnel assigned to enter the registry
 - b. Denominator: total number of personnel
 - c. Data source: Team roster and minutes from team meetings
 - d. Rationale/Evidence: Evaluation of current registry functionality and anticipated registry needs should be completed by a variety of team members to ensure compatibility across departments.

- P-4. Milestone: Implement/expand a functional disease management registry.
 - P-4.1. Metric: Registry functionality is available in X% of the Performing Provider's sites and includes an expanded number of targeted diseases or clinical conditions.

- a. Numerator: Number of sites with registry functionality
 - b. Denominator: Total number of sites
 - c. Data Source: Documentation of adoption, installation, upgrade, interface or similar documentation
 - d. Rationale/Evidence: Utilization of registry functionalities helps care teams to actively manage patients with targeted chronic conditions because the disease management registry will include clinician prompts and reminders, which should improve rates of preventive care. Having the functionality in as many sites as possible will enable care coordination for patients as they access various services throughout a Performing Provider's facilities. Registry use can be targeted to clinical conditions/diseases most pertinent to the patient population (e.g., diabetes, hypertension, chronic heart failure).
- P-5. Milestone: Demonstrate registry automated reporting ability to track and report on patient demographics, diagnoses, patients in need of services or not at goal, and preventive care status
- P-5.1. Metric: Documentation of registry automated report
- a. Numerator: number of patients with required information entered in the registry
 - b. Denominator: total number of patients with target condition
 - c. Data Source: Registry
 - d. Rationale/Evidence: To be meaningful for panel management and potentially for population health purposes, registry functionality should be able to produce reports for groups or populations of patients that identify clinical indicators.
- P-5.2. Metric: Expand/enhance registry report services to provide on-demand, operational, and historical capabilities, inclusive of reports to care providers, managers, and executives
- a. Data Source: Sample report demonstrating registry capacity
 - b. Rationale/Evidence: Both providers and management will benefit from reports produced using the registry. This will allow transparency around service utilization and clinical outcomes stratified by provider, condition status, pay source or other patient characteristic.
- P-5.3. Metric: Expand registry functionality to include electronic structured documentation and clinical decision support at the point of care
- a. Data Source: Documentation of registry capacity
 - b. Rationale/Evidence: Integrating structured documentation and clinical decision support into registry functionality allows for a more seamless and coordinated use of health information technology.
- P-6. Milestone: Conduct staff training on populating and using registry functions.
- P-6.1. Metric: Documentation of training programs and list of staff members trained, or other similar documentation
- a. Data Source: HR or training program materials
 - b. Rationale/Evidence: Staff needs to be trained on appropriate use of the registry functions in order to optimize its use and efficacy.

- P-7. Milestone: Develop and implement testing to evaluate the accuracy of the registry and effectiveness in addressing treatment gaps and reducing preventable acute care
- P-7.1. Metric: Implement and document results of test plan.
- a. Data Source: Test plan
 - b. Rationale/Evidence: Develop and implement test plan to determine accuracy of information populated into the registry
- P-8. Milestone: Create/disseminate protocols for registry-driven reminders and reports for clinicians and providers regarding key health indicator monitoring and management in patients with targeted diseases
- P-8.1. Metric: Submitted protocols for the specified conditions and health indicators
- a. Number of protocols for specified conditions and health indicators submitted
 - b. Data Source: Protocols
 - c. Rationale/Evidence: Health indicator (outcome) monitoring and management of patients is a key component of registry utilization. Protocols should be developed so that staff and providers are aware of what services and outcomes are captured for which patients and how/when those patients are notified of recommended services.
- P-9. Milestone: Implement an electronic process to correctly identify number or percent of screening tests that require additional follow-up
- P-9.1. Metric: Documentation of an electronic process to correctly identify number or percent of screening tests that require additional follow-up
- a. Data Source: Process or other reporting documentation
 - b. Rationale/Evidence: To ensure that all patients receive the opportunity for follow-up treatment, these reports should be run regularly and those patients identified should be offered appointments accordingly.
- P-10. Milestone: Implement cross-functional team to staff registry program.
- P-10.1. Metric: Documentation of personnel (clinical, IT, administrative) assigned to staff registry program
- a. Data source: HR records
 - b. Rationale/Evidence: A cross functional team can ensure that the registry capacity is optimized and addresses needs across all departments.
- P-11. Milestone: Plan development of/implement a tethered registry to capture patients enrolled in chronic disease management program
- P-11.1. Metric: Documentation of plan / completion of implementation
- a. Data source: Performing provider's documentation
 - b. Rationale/Evidence: Tethering program records to patient registries allows for enhanced monitoring and decision making at point of contact.
- P-12. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any

solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.

P-12.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.

- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-12.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.

- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-13. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.

P-13.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.

- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
- b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.

P-14. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.

P-14.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.

- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” for performance across all providers.

P-14.2. Metric: Implement the “raise the floor” improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-15. Milestone: Increase the percentage of patients enrolled in the registry.
- I-15.1. Metric: Percentage of patients in the registry; metric may vary in terms of measuring absolute targets versus increasing the proportion of patients meeting a specific criteria (e.g., medical home patients, patients with a targeted chronic condition); below are potential specifications:
- a. Numerator: Number of patients in registry
 - b. Denominator: Number of patients assigned to this clinic for routine care (i.e., the clinic is the "medical home")
 - c. Data Source: Registry or EHR
 - d. Rationale/Evidence: Supports work of panel management. Establishes patient population for a medical home. (For measurement purposes, a clinic may remove patients from denominator who, once offered a medical home, choose to continue to receive care at multiple sites).
- I-16. Milestone: Increase the number of patient contacts recorded in the registry relative to baseline rate.
- I-16.1. Metric: Total number of in-person and virtual (including email, phone and web-based) visits, either absolute or divided by denominator.
- a. Numerator: Number of patient contacts recorded in the registry
 - b. Denominator: Number of targeted patients in the registry ("targeted" as defined by Performing Provider)
 - c. Data source: Internal clinic or hospital records/documentation
 - d. Rationale/evidence: help physicians and other members of a patient's care team identify and reach out to patients who may have gaps in their care.
- I-17. Milestone: Use the registry to identify patients and families that would benefit from targeted patient education services. Develop and implement patient and family training programs, education, and/or teaching tools related to the target patient group using evidence-based strategies such as: teach-back, to reinforce and assess if patient or learner is understanding, patient self-management coaching, medication management, nurse and/or therapist-based education in primary care sites, group classes or patients' homes and standardized teaching materials available across the care continuum.
- I-17.1. Metric: Assess, select, and/or develop patient education tools based on nationally recognized tools previously developed.
- I-17.2. Metric: Development of tool for documenting the existence of patient's self-management goals in patient record for patients with chronic disease(s) at defined pilot sites(s).
- I-17.3. Metric: Establishment of training programs developed and conducted by clinicians.
- a. Numerator: Number of patients of a certain target group involved in training and education programs.
 - b. Denominator: Total number of patients in the target group or the clinic.
 - c. Data Source: Internal clinic or hospital records/documentation.
 - d. Rationale/Evidence: Help patients and their families to manage and self-manage their chronic disease/condition or MCCs.

- I-18. Milestone: Perform routine follow-up monitoring to ensure adherence to the disease management program
- I-18.1. Metric: As measured by the # of patients adhering to the recommended program regimen compared to the total number of patients following a program regimen – using the patient registry
- Numerator: Number of patients of a certain target group involved in disease management programs.
 - Denominator: Total number of patients in the target group or the clinic.
 - Data Source: Internal clinic or hospital records/documentation
 - Rationale/Evidence: Improve effective management of chronic conditions and ultimately improve patient clinical indicators, health outcomes and quality, and reduce unnecessary acute and emergency care utilization.
- I-19. Milestone: Spread registry functionality throughout Performing Provider facilities
- I-19.1. Metric: Increase the number of clinics/sites associated with the Performing Provider’s facility that are providing continuity of care for the defined population using the disease management registry functionality.
- Numerator: Number of sites with registry functionality
 - Denominator: Total number of sites (at one provider level if respective provider has multiple clinics; or at RHP level);
 - Data Source: Registry reports
 - Rationale/Evidence: To enhance coordination and improvement efforts across clinics within a system (unique provider or RHP).
- I-20. Milestone: Generate registry-based reports for each provider/care team for the care delivered outside the office visit, which may include historical and peer comparisons to help providers see how well they are managing their patients chronic health needs compared to other doctors in the hospital/clinic system.
- I-20.1. Metric: Increase or achieve number or reports sent out to a number or percent of primary care providers over the 12-month period.
- Number of unique reports provided during the reporting period.
 - Data Source: Registry and/or EHR.
 - Rationale/Evidence: Registry reports will alert providers to any variations in care across historical trends and peer comparisons.
- I-20.2. Metric: Number or percent of contacted patients for whom a visit is scheduled
- Numerator: number of scheduled visits that result from a contact initiated from a registry prompt.
 - Denominator: Number of contacts initiated from registry prompts.
 - Data Source: Registry reports, schedule management system.
 - Rationale/Evidence: This metric will link the number of patient visits that are a result of staff using the registry reminder system for patients that are overdue for services or need follow-up care.

- I-20.3. Metric: Relative improvement in selected NQF, or other evidence based measure, for disease indicator for targeted disease or MCC group (e.g., for diabetes, improved LDL and HbA1c). Relative improvement to be reported along with baseline and re-measurement values for selected NQF measure. Relative improvement = (baseline – remeasurement)/ baseline
- Numerator: as indicated by selected Milestone
 - Denominator: as indicated by selected Milestone
 - Data Source: EHR, Registry
 - Rationale/Evidence: This metric aims to demonstrate improvements in patient outcomes for provider selected targeted disease.
- I-21. Milestone Increase the number of clinicians and staff using the registry
- I-21.1. Metric: Number of clinicians and staff using the registry
- Numerator: Number of clinicians and staff using the registry
 - Denominator: total number of clinicians and staff
 - Data Source: Registry report
 - Rationale/Evidence: The more staff that are using the registry, the more current it will be; therefore it will be more useful to monitor patients' conditions. Providers can also monitor their patients across a delivery system – such as from primary care to the hospital.
- I-22. Milestone: Increase the percentage of patients with chronic disease entered into registry who receives instructions appropriate for their chronic disease or MCCs, such as: activity level, diet, medication management, etc.
- I-22.1. Metric: Percentage of patients with chronic disease who receive appropriate disease specific discharge instructions
- Numerator: the number of patients with chronic disease who receive appropriate disease specific instructions
 - Denominator: The number of patients with chronic disease or MCCs;
 - Data source: Disease registry and EHR.
 - Rationale/Evidence: A registry functioning at optimal capacity will allow providers to capture and collect data related to patient education. This data is also required for Meaningful Use.
- I-23. Milestone: Interventions to implement a chronic disease management registry. The following metrics are suggested for use with an innovative project option to implement a chronic disease management registry but are not required.
- I-23.1. Metric: Increase percentage of target population captured in the registry.
- Numerator: Number of individuals of target population reached by the innovative project.
 - Denominator: Number of individuals in the target population.
 - Data Source: Documentation of target population reached, as designated in the project plan.
 - Rationale/Evidence: This metric speaks to the efficacy of the innovative project in reaching its targeted population.

- I-23.2. Metric: Increased utilization of targeted recommended service(s).
- a. Numerator: Number of patients that are up to date on targeted service (e.g. HgbA1c testing every 6 months, LDL checked annually, etc.)
 - b. Denominator: total number of patients eligible for that service.
 - c. Data Source: Registry, EHR, claims or other Performing Provider source
 - d. Rationale/Evidence: This measures the increased compliance with care recommendations

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- Metric: Target population reached
- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.

1.4 Enhance Interpretation Services and Culturally Competent Care

Project Goal:

Patients have access to timely, qualified health care interpreter services in their primary language, thereby increasing the likelihood of safe and effective care, open communication, adherence to treatment protocols, and better health outcomes. This Project Area applies to both written and oral interpretation services.

Cultural competence in health care describes the ability of systems to provide care to patients' with diverse values, beliefs and behaviors, including tailoring care delivery to meet patients' social, cultural, and linguistic needs. Cultural competence can be described both as a vehicle to increase access to quality care for all patient populations and as a business strategy to attract new patients and market share.

To achieve **organizational cultural competence** within the health care leadership and workforce, it is important to maximize diversity.

To achieve **systemic cultural competence** (e.g., in the structures of the health care system) it is essential to address such initiatives as conducting community assessments, developing mechanisms for community and patient feedback, implementing systems for patient racial/ethnic and language preference data collection, developing quality measures for diverse patient populations, and ensuring culturally and linguistically appropriate health education materials and health promotion and disease prevention interventions.

To attain **clinical cultural competence**, health care providers must: (1) be made aware of the impact of social and cultural factors on health beliefs and behaviors; (2) be equipped with the tools and skills to manage these factors appropriately through training and education; and (3) empower their patients to be more of an active partner in the medical management.

Project Options:

1.4.1 Expand access to written and oral interpretation services

Required core project components:

- a) Identify and address language access needs and/or gaps in language access
- b) Implement language access policies and procedures (in coordination with statewide and federal policies to ensure consistency across the state)
- c) Increase training to patients and providers at all levels of the organization (and organization-wide) related to language access and/or cultural competency/sensitivity
- d) Increase interpretation staff

1.4.2 Enhance Organizational Cultural Competence

Required core project components:

- a) Hire, promote, and retain minorities at all levels of the organization to increase diversity in the health care workforce.
- b) Develop a program that actively involves community representatives in the health care organization's planning and quality improvement meetings, whether as part of the board or as part of focus groups.

1.4.3 Enhance Systemic Cultural Competence

Required core project components:

- a) Develop policies and procedures to measure systemic culture competence, or use existing evidence-based culturally competency assessment tool (e.g., CAHPS Cultural Competency Supplement).
 - b) Adopt and implement all 14 CLAS standards, including those that are not federal mandates.⁸ Conduct CLAS Standards trainings at facilities
 - c) Identify federal and state reimbursement strategies for interpreter services and identify community resources and partnerships to develop the needed workforce.
 - d) Provide staff training around Title VI requirements mandating the provision of interpreter services in health care settings.
 - e) Identify and use tools to detect medical errors that result from lack of systemic cultural competence, including those stemming from language barriers (e.g., taking a prescribed medication incorrectly); misunderstanding health education materials, instructions, or signage (e.g., inappropriately preparing for a diagnostic or therapeutic procedure, resulting in postponement or delay); and misunderstanding the benefits and risks of procedures requiring informed consent.
 - f) Implement projects to address medical errors resulting from systemic cultural competency.
- 1.4.4 Clinical Cultural Competence: Develop cross-cultural training program that is a required, integrated component of the training and professional development of health care providers at all levels. The curricula should:
- increase awareness of racial and ethnic disparities in health and the importance of socio-cultural factors on health beliefs and behaviors;
 - address the impact of race, ethnicity, culture, and class on clinical decision making;
 - develop tools to assess the community members' health beliefs and behaviors
 - Develop human resource skills for cross-cultural assessment, communication, and negotiation.
- 1.4.5 Implement Quality improvement efforts that include culturally and linguistically appropriate patient survey methods as well as process and outcome measures that reflect the needs of multicultural and minority populations.
- 1.4.6 Clinical Cultural Competence: Develop programs to help patients navigate the health care system and become a more active partner in the clinical encounter.
- 1.4.7 "Other" project option: Implement other evidence-based project to enhance interpretation services and culturally competent care in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the "Other" project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project. Milestone I-18 includes suggestions for improvement metrics to use with this innovative project option.

⁸ <http://minorityhealth.hhs.gov/assets/pdf/checked/finalreport.pdf>

Note: All of the project options in project area 1.4 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Rationale:

The 2010 United States Census confirmed that our nation’s population has become more diverse than ever before, and this trend is expected to continue over this century. As we become a more ethnically and racially diverse nation, health care systems and providers need to reflect on and respond to patients’ varied perspectives, values, beliefs, and behaviors about health and well-being. Failure to understand and manage socio-cultural differences may have significant health consequences for minority groups in particular.

Various systemic issues have been identified in the literature and by the health care experts. While this was more obvious in poorly constructed and complicated systems that are not responsive to the needs of diverse patient populations, the issue of language discordance between provider and patient was of foremost importance. Systems lacking interpreter services or culturally and linguistically appropriate health education materials lead to patient dissatisfaction, poor comprehension and adherence, and lower-quality care. According to various studies, care experts in government, managed care, academia, and community health care make a clear connection between cultural competence, quality improvement, and the elimination of racial/ethnic disparities.

Process Milestones:

- P-1. Milestone: Conduct an analysis to determine gaps in language access and culturally competent care⁹. It is recommended that all providers engage in this type of analysis or demonstrate that this analysis has already been completed.
 - P-1.1. Metric: Gap analysis
 - a. Data Source: Gap analysis
 - b. Rationale/Evidence: It is important to identify needs in order to address those needs/gaps.

- P-2. Milestone: Develop a program to enhance organizational, systemic or clinical culture competence as described in the project options.
 - P-2.1. Metric: Develop and implement program to improve cultural competence
 - a. Data Source: Program materials
 - b. Rationale/Evidence: TBD by provider, in response to identified patient needs and opportunities for improvement.

- P-3. Milestone: Implement language access policies and procedures
 - P-3.1. Metric: Submission of policies and procedures, for example based on Straight Talk: Model Hospital Policies & Procedures on Language Access¹⁰

9 <http://www.hrsa.gov/culturalcompetence/healthdlvr.pdf>

10 <http://www.diversityrx.org/resources/straight-talk-model-hospital-policies-and-procedures-language-access>

- a. Data Source: Performing Provider policies and procedures;
 - b. Rationale/evidence: providers involved in cultural competence programs are more likely to be contributing to the community benefit.
- P-4. Milestone: Expand qualified health care interpretation technology
- P-4.1. Metric: Video or audio conferencing interpreter terminals and/or areas/units of the Performing Provider with access to health care interpretation technology, for example:
- a. Numerator: Number of terminals of video or audio conferencing available in each unit/department/clinics.
 - b. Denominator: Total number of video or audio conferencing terminals in the health system.
 - c. Data Source: Automated report (such as from Health Care Interpreter Network or Video Medical Interpretation and/or other encounter data report)
 - d. Rationale/Evidence: Provision of interpreter services results in patients asking more questions, having a better understanding of treatment plans, and reporting higher patient satisfaction scores.
- P-5. Milestone: Train/certify additional health care interpreters
- P-5.1. Metric: Expand capacity of qualified health care interpretation workforce
- a. Numerator: Number of newly trained/certified interpreters
 - b. Denominator: Total number of trained/certified interpreters
 - c. Data Source: HR workforce training data, program materials
 - d. Rationale/Evidence: It is important to make sure staff are fully trained and have the proper certifications necessary to optimize their performance in order to increase language access
- P-6. Milestone: Train/certify health care interpreters in additional/new languages
- P-6.1. Metric: Expand capacity of qualified health care interpretation workforce
- a. Numerator: Number of trained/certified workers certified to interpret in additional/new languages
 - b. Denominator: Total number of trained/certified interpreters
 - c. Data Source: HR workforce training data, program materials
 - d. Rationale/Evidence: Health care interpreters certified to interpret in multiple languages is another mechanism to expand existing workforce capacity.
- P-7. Milestone: Train a number or proportion of providers (and other staff) to appropriately utilize health care interpreters (via video, phone or in-person)
- P-7.1. Metric: Expand language access utilization
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- a. Numerator: Number of trained providers/staff
 - b. Denominator: Total number of relevant providers/staff (relevant as defined by Performing Provider)
 - c. Data Source: HR workforce training data, program materials
 - d. Rationale/Evidence: It is important to make sure that providers and staff knows when and how to appropriately utilize the qualified health care interpretation services available in order to increase language access.
- P-7.2. Metric: Increase number of staff using the available, qualified health care interpreter services.
- a. Numerator: Number of staff that have requested and used interpreter services during the reporting period
 - b. Denominator: number of relevant staff
 - c. Data Source: EHR or other provider administrative records.
 - d. Rationale: This metric explores the impact of interpreter training on staff comfort with using those services.
- P-8. Milestone: Develop program to improve staff cultural competency and awareness
- P-8.1. Metric: Increase number of champions/staff that are designated and trained in a population's culture and unique needs
- a. Numerator: Number of relevant staff trained
 - b. Denominator: Total number of relevant staff members
 - c. Data Source: HR workforce training data, program materials
 - d. Rationale/Evidence: Cultural competency and awareness can improve patient-provider/staff communication and help to build trust in order to provide equitable and appropriate health care.
- P-9. Milestone: Generate prescription labels in a patient's preferred written language with easy-to-understand directions
- P-9.1. Metric: Number of prescriptions labels translated
- a. Numerator: Number of prescription labels translated
 - b. Denominator: Total number of prescriptions filled for patients whose preferred written or spoken language is not English.
 - c. Data Source: Report
 - d. Rationale/Evidence: Translation enables appropriate use of prescriptions, helping to prevent incorrect use of medications, which can result in serious health conditions. See *Medical Care* (June 2009 and JCAHO White Paper¹¹).
- P-10. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the

11 http://www.languageline.com/main/files/wp_joint_commission_022211.pdf

provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.

P-10.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.

- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-10.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.

- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-11. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.

P-11.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.

- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
- b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.

P-12. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.

P-12.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.

- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” for performance across all providers.

P-12.2. Metric: Implement the “raise the floor” improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-13. Milestone: Improve language access
- I-13.1. Metric: The number of qualified health care interpreter encounters per month,¹² based on one of the reporting months within the prior year
- a. Numerator: Total number of remote video/voice and/or in-person interpreter encounters recorded per month.
 - b. Denominator: Total number of encounters recorded per month
 - c. Data Source: Automated report (such as from Health Care Interpreter Network or Video Medical Interpretation and/or other encounter data report)
 - d. Rationale/Evidence: Interpreter encounters per month is the current industry standard for how to measure language access. As a result of high numbers of patients whose primary language is not English, the current provision of interpretation services is not meeting the demand. Provision of interpreter services results in patients asking more questions, having a better understanding of treatment plans, and reporting higher patient satisfaction scores (Ku, *Health Affairs*, 2005).
- I-14. Milestone: Increase number or percent visits by patients whose preferred language is not English that are facilitated by qualified health care interpreters
- I-14.1. Metric: Expand qualified health care interpretation workforce
- a. Numerator: The number of visits by patients whose preferred language is not English that are facilitated by qualified health care interpreters
 - b. Denominator: Total number of visits by patients whose preferred language is not English Data Source: TBD by Performing Provider
 - c. Rationale/Evidence: The metric is one way to potentially measure whether demand and supply are aligned, allowing adjustments to be made so that language access is increased.

¹² "Qualified health care interpreter" is defined as one who has: 1) been trained in healthcare interpreting; 2) adheres to the professional code of ethics and protocols of healthcare interpreters; 3) is knowledgeable about medical terminology; and, 4) can accurately and completely render communication from one language to another. This definition can be found in the JCAHO standards for interpreters which recommends hospital policies and procedures to access interpreters that reflect a commitment to language access, including lists of procedures requiring health care interpretation, a definition of qualified health care interpreter, and maximum wait times for the interpretation encounter. Please see Texas Association of Healthcare Interpreters and Translators.

- I-15. Milestone: Increase preventive and primary care visits for patients whose preferred language is not English within clinics offering interpretation services.
- I-15.1. Metric: Average number of primary or preventive care visits by patients whose preferred language is not English.
- a. Numerator: Number of visits by patients whose preferred language is not English
 - b. Denominator: Number of patients whose preferred language is not English
 - c. Data Source: EHR, Claims
 - d. Rationale/Evidence: Language is often identified as a barrier to seeking primary and preventive care for patients with Limited English Proficiency. Offering language services should increase the use of these services.
- I-16. Milestone: Reduction in the number of medication errors and improvement in medication adherence in patients whose preferred language is not English
- I-16.1. Metric: Number of medication errors
- a. Numerator: Number of documented medication errors due to language preference during the reporting period.
 - b. Denominator: Total number of documented medication errors during the reporting period.
 - c. Data Source: EHR
 - d. Rationale/Evidence: Offering language services should decrease the incidence of medication errors in patients whose preferred language is not English.

- I-16.2. Metric: Medication Adherence (Compliance): Medication Possession Ratio (MPR) for chronic medications for individuals over 18 years of age in patients whose preferred language is not English - NQF 0542- (modified)¹³
- a. Numerator: The sum of the days supply that fall within the measurement window for each class of chronic medications for each patient in the denominator.
 - b. Denominator: MPR for patients whose preferred language is not English:
 - New users: Number of days from the first prescription to the end of measurement period.
 - Continuous users: Number of days from the beginning to the end of the measurement period.
 - c. Data Source: Drug claims data
 - d. Rationale/Evidence: 14,15 Poor adherence to treatment regimens has long been recognized as a substantial roadblock to achieving better outcomes for patients. Data show that as many as half of all patients do not adhere faithfully to their prescription-medication regimens — and the result is more than \$100 billion spent each year on avoidable hospitalizations.¹⁶ Non-adherence to medication regimens also affects the quality and length of life; for example, it has been estimated that better adherence to antihypertensive treatment alone could prevent 89,000 premature deaths in the United States annually. 16Offering language services should increase medication adherence in patients whose preferred language is not English.

¹³ <http://www.qualityforum.org/MeasureDetails.aspx?actid=0&SubmissionId=880#k=medication%20adherence>

¹⁴ https://www.urac.org/MedicationAdherence/includes/Nau_Presentation.pdf

¹⁵ <http://www.pqaalliance.org/files/PDCvsMPRfinal.pdf>

¹⁶ <http://www.nejm.org/doi/full/10.1056/NEJMp1002305>

- I-16.3. Metric: Medication Adherence (Compliance): Proportion of Days Covered (PDC) for chronic medications for individuals over 18 years of age in patients whose preferred language is not English.
- a. Average of individual PDC rates for each chronic medication in all patients whose preferred language is not English.
 - (Patient level) Numerator: number of days covered by the prescription fills during the denominator period.
 - (Patient level) Denominator: number of days between the first fill of the medication during the measurement period and the end of the measurement period
 - b. Data Source: Drug claims data
 - c. Rationale/Evidence: The Pharmacy Quality Alliance (PQA) has developed, tested and endorsed numerous measures of medication-use quality. PQA members identified medication adherence as an important component of medication-use quality, and therefore PQA sought to endorse a standard method for calculation of medication adherence using data that would be widely available across prescription drug plans and pharmacies. After reviewing the extant literature and conducting tests of draft measure specifications, PQA chose to endorse the method known as Proportion of Days Covered (PDC).⁸
- I-17. Milestone: Reduce wait time for interpretation encounters
- I-17.1. Metric: The percentage of encounters in which the patient wait time for an interpreter is 15 minutes or less, as specified in *Speaking Together, National Quality Forum or similar* measures,¹⁷ or Average wait time for interpretation encounter, as measured by *Straight Talk: Model Hospital Policies & Procedures on Language Access, National Quality Forum or similar*.
- a. Numerator: number of encounters with average wait time <15 minutes
 - b. Denominator: total number of encounters that required interpreter;
 - c. Data Source: Interpreter services documentation

17 <http://www.rwjf.org/qualityequality/product.jsp?id=29660> or NQF #1828 L3: Patient wait time to receive interpreter services

- I-18. Milestone: Implement intervention to increase access to language services and culturally competent care. The following metrics are suggested for use with an innovative project option to increase access to language services and culturally competent care but are not required.
- I-18.1. Metric: Increase percentage of target population reached.
- a. Numerator: Number of individuals of target population reached by the innovative project.
 - b. Denominator: Number of individuals in the target population.
 - c. Data Source: Documentation of target population reached, as designated in the project plan.
 - d. Rationale/Evidence: This metric speaks to the efficacy of the innovative project in reaching its targeted population.
- I-18.2. Metric: Increased scores on standardized and evidence based cultural competence assessment tool.¹⁸
- a. Numerator: Total number of patient assessment responses that were satisfactory or better
 - b. Denominator: Total number of assessments administered.
 - c. Data Source: Assessment reports
 - d. Rationale/Evidence: This measures the impact of the innovation project on cultural competence.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- Metric: Target population reached
- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).

18 http://www.nyspi.org/culturalcompetence/what/pdf/NYSPI-CECC_CulturalCompetenceAssessment.pdf

- Metric: Other program output measure as identified by the performing provider.

1.5 Collect Valid and Reliable Race, Ethnicity, and Language (REAL) Data to Reduce Disparities

In 2002, the Institute of Medicine report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*¹⁹, signified a new era of national attention to racial and ethnic disparities in the American health care system. Corroborating that report, many research studies have established that Americans do not all have equal access to health care, or experience similar health care quality and outcomes. Low-income, racial and ethnic minority, limited-English proficient, and other underserved populations often have higher rates of disease, fewer treatment options, reduced access to care, and lower satisfaction with care. A key prerequisite for measuring equity of care and addressing disparities is to collect valid and reliable patient demographic data on race, ethnicity, and preferred language (REAL data). These data elements must be effectively linked to data systems used in health care service delivery (to tailor care to patient needs), as well as data systems used in quality improvement (to identify disparities). Creating organizational systems for capturing REAL data is a long and resource-intensive process. Currently, the processes for analyzing equity of care are mostly piecemeal and limited in scope, taxing organizational resources. However, in the state of Texas there are significant barriers to effective collection and utilization of these patient demographic data for public hospitals. To address these barriers, key next steps for public hospitals systems include developing tools, HIT protocols and training curricula to improve the collection and utilization of REAL data elements, which is the foundation for achieving significantly greater efficiency and cost-effectiveness in measuring equity of care, thus enabling the designs of more successful efforts to eliminate health care disparities.

Project Goal:

To improve the collection of valid and reliable self-reported data on the demographics of patients receiving care, the quality of care delivered, and implementing stratification capabilities to stratify clinical/quality data, and analyzing data by relevant demographic categories: race, ethnicity, sex, primary language and disability status.²⁰ Recently finalized data collection standards for surveys of demographic categories were released by HHS and will be used in the process of developing standards for administrative data collection for the same 5 categories. RHPs will work to implement initiatives, promote training, and accelerate capacity building, community engagement and empowerment. The project focuses on efforts to reduce health and mental health disparities, disparities among racial/ethnic groups, women, seniors, children, rural populations, and those with disabilities and their families.

Project Options:

- 1.5.1 Train patients and staff on the importance of collecting REAL data (For project option 1.5.1, the provider must do both subpart (i) and subpart (ii), If the provider is not using existing curriculum. If the provider is using existing curriculum, only subpart (ii) is required.):
 - i. Develop curriculum that includes effective strategies to explain relevance of collecting REAL data to patients and staff. Education about the value of the information for patient care, with clear examples of the benefits of data collection is central to an effective training.

19 <http://www.iom.edu/Reports/2002/Unequal-Treatment-Confronting-Racial-and-Ethnic-Disparities-in-Health-Care.aspx>

20 <http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlid=208>

- ii. Train patients and staff on the importance of collecting REAL data using developed or existing curricula.
- 1.5.2 Implement intervention that involves collaborating/partnering/ instituting data sharing agreements with Medicaid agencies, public health departments, academic research centers, other agencies, etc. to better assess patient populations and aid in the evaluation of health disparities
- 1.5.3 Implement project to enhance collection, interpretation, and / or use of REAL data. Required core project components:
 - a) Redesign care pathways to collect valid and reliable data on race, ethnicity, and language at the point of care
 - b) 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. NOTE: Providers are encouraged to stratify outcomes and measures using both two-way and three-way interactions (race and quality; gender, race, and quality)
 - c) Develop improvement plans, which include a continuous quality improvement plan, to address key root causes of disparities within the selected population.
 - d) Use data to undertake interventions aimed at reducing health and health care disparities (tackling “the gap”) for target patient populations through improvements in areas such as f preventive care, patient experience, and/or health outcomes.
- 1.5.4 “Other” project option: Implement other evidence-based project to implement and use REAL data in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project. Milestone I-12 includes suggestions for improvement metrics to use with this innovative project option.

Note: All of the project options in project area 1.5 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Rationale:

Several RHPs within Texas focus on health disparities in communities through research, education, and community relations. To build upon the existing infrastructure to address health disparities in Texas, RHPs will select projects appropriate to specific populations based on relevancy to the RHP needs assessment. Some populations experience disparities in health, quality of care, health outcomes, and incidence as related to conditions such as: tuberculosis, congestive heart failure, stroke, COPD, Chlamydia, cervical cancer, liver cancer, stomach cancer, gallbladder cancer, child and adolescent leukemia, neural tube defects, other birth defects, obesity, diabetes, and pesticide poisoning. Disparities can be 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. The collection of REAL data helps providers to delineate potential categories of differences in observed health status.

Process Milestones:

- P-1. Milestone: Develop REAL data template and/or integrate it into data warehouse, electronic health record (EHR), and/or registries
 - P-1.1. Metric: Documentation of REAL data template
 - a. Data Source: Print screen, report, printout or another source of documentation showing capability to integrate REAL data, REAL database, data warehouse, EHR or registry
 - b. Rationale/Evidence: The need to collect REAL data is a widely-recognized best practice in the U.S. health care system (e.g., The Joint Commission, the Institute of Medicine, and others).

- P-2. Milestone: Modify registration screens and written registration materials in order to increase the collection of consistent, valid and reliable data
 - P-2.1. Metric: Documentation of registration screens in place
 - a. Data Source: Submission of registration print-screen, patient registration system
 - b. Rationale/Evidence: Patient registration is the primary point of entry of patient REAL data.

- P-3. Milestone: Develop curriculum or implement an existing evidence-based curriculum that includes effective strategies to explain relevance of collecting REAL data to patients and staff
 - P-3.1. Metric: Number or proportion of staff trained on curriculum
 - a. Number or percent of staff trained over baseline
 - b. Data Source: HR workforce training data
 - c. Rationale/Evidence: Staff training is crucial to overcome discomfort at collecting REAL data²¹ and to ensure valid, reliable collection of data based on best practices.

 - P-3.2. Metric: Improvement in Pre-Post knowledge assessment following training
 - a. Data Source: Assessment tool, HR workforce training data
 - b. Rationale/Evidence: Staff training is crucial to overcome discomfort at collecting REAL data²² and to ensure valid, reliable collection of data based on best practices.

- P-4. Milestone: Implement standardized policies and procedures to ensure the consistent and accurate collection of data
 - P-4.1. Metric: Description of elements of the system

²¹ See, for example, HRET Disparities Toolkit, <http://www.hretdisparities.org>

²² See, for example, HRET Disparities Toolkit, <http://www.hretdisparities.org>

- a. Data Source: Policies, procedures, or other similar sources
 - b. Rationale/Evidence: In order to stratify quality and safety measures by REAL data, an organization first needs to establish processes to routinely conduct such review.

- P-5. Milestone: Develop a plan to propagate, establish, and document standard REAL data in all relevant patient care systems participating in enterprise standard registration approach.
 - P-5.1. Metric: Description of elements of the system
 - a. Data Source: Documentation of system/processes being implemented, Policies, procedures, or other similar sources
 - b. Rationale/Evidence: In order to stratify quality and safety measures by REAL data, an organization first needs to establish processes to routinely conduct such review.

- P-6. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
 - P-6.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.
 - a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

 - P-6.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.
 - a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

- P-7. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim

measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.

P-7.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.

- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
- b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.

P-8. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.

P-8.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.

- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" for performance across all providers.

P-8.2. Metric: Implement the "raise the floor" improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of "raise the floor" improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the "raise the floor" improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" and "raise the bar" for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

I-9. Milestone: Collect valid, reliable REAL data fields as structured data, using a uniform framework.²³ This framework provides a process improvement tool for health care organizations to systematically collect demographic and communications data from patients or their caregivers.

I-9.1. Metric: The number or percent of patients registered with the Performing Provider.

- a. Numerator: Number of unique patients registered with designated REAL data fields
- b. Denominator: Number of total unique patients registered
- c. Data Source: Registry, electronic health record, or other registration system
- d. Rationale/Evidence: The capacity to stratify quality data by REAL data is foundational to being able to identify and address health care disparities.

Note 1: To make sure that data is collected in a way that is comparable, the unit of analysis should be defined very specific; for example in a hospital is anyone in an inpatient stay, an observation unit stay, or an emergency department visit or all. Measures should be collected across different hospital wards or outpatient specialties.

Note 2: In that same vein, entities should identify real data fields and valid values. For example, OMB race categories along with 31 ethnicity categories do not necessarily match ANSI claims race and ethnicity categories or Meaningful Use categories.

²³ <http://www.iom.edu/Reports/2009/RaceEthnicityData.aspx>

- I-10. Milestone: Analyze and report on quality outcomes by REAL data categories to identify potential areas of disparities, (e.g., such as utilization of preventive care, improving patient experience and/or various health outcomes)
- I-10.1. Metric: REAL data analysis of outcomes stratified by REAL data elements
- a. Documentation of REAL data analysis
 - b. Data Source: Data warehouse, EHR or registry
 - c. Rationale/Evidence: Once accurate REAL data are collected on patients, they must be utilized for quality improvement purposes.²⁴ All Performing Providers choosing this project will have a targeted improvement goal for each demonstration year. Providers should tell how and where reporting will happen.
- I-11. Milestone: Identify top three health care disparities within the patient population and develop an improvement plan to address them. Specifically,
- (1) Conduct an analysis of health outcomes by REAL data fields.
 - (2) Submit the top three targeted disparities.
 - (3) Submit the improvement plan to address those disparities.
- I-11.1. Metric: Documentation of disparities and improvement plan.
- a. Data Source: REAL database, data warehouse, EHR or registry
 - b. Rationale/Evidence: The purpose of identifying disparities is to ultimately address root causes through effective quality improvement efforts. Often, providers are not aware of health care disparities. The use of data will help to uncover these disparities. Once the disparities are identified, it is important to put in place a plan to improve them. Thus, payment would be tied to (1) identification of the disparities, including measurement methodology, and (2) submitting a plan to correct the action.
- I-12. Milestone: Implement intervention to make improvements in REAL data collection and use. The following metrics are suggested for use with an innovative project option to make improvements in REAL data collection and use but are not required.
- I-12.1. Metric: Documentation of increased number of unique patients with documented REAL data using innovative program option. Demonstrate improvement over prior reporting period (baseline for DY2).
- a. Numerator: Total number of unique patients encountered in the clinic for reporting period that have documented REAL data collected.
 - b. Denominator: Total number of unique patients encountered in the clinic for reporting period
 - c. Data Source: Registry, EHR, claims or other Performing Provider source
 - d. Rationale/Evidence: This measures the increased capacity to collect and effectively utilize REAL to improve quality of care.

²⁴ See, for example, Disparities Solutions Center's Improving Quality and Achieving Equity: A Guide for Hospital Leaders, <http://www2.massgeneral.org/disparitiessolutions/guide.html>

- I-12.2. Metric: Improved compliance with recommended care regimens for targeted population.
- a. Numerator: % compliance with [recommended care regimen] (TBD by provider) of targeted patients
 - b. Denominator: % compliance with [recommended care regimen] (TBD by provider) of all patients.
 - c. Data Source: EHR, claims
 - d. Rationale: TBD by provider

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- Metric: Target population reached
- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.

1.6 Enhance Urgent Medical Advice

Project Goal:

Provide urgent medical advice so that patients who need it can access it telephonically, and an appropriate appointment can be scheduled so that access to urgent medical care is increased and avoidable utilization of urgent care and the ED can be reduced. The advice line provides callers with direct access to a registered nurse who can address their specific health needs with an on-demand service.

Project Options:

- 1.6.1 Expand urgent care services
- 1.6.2 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.
Required core project components:
 - a) Develop a process (including a call center) that in a timely manner triages patients seeking primary care services in an ED to an alternate primary care site. Survey patients who use the nurse advice line to ensure patient satisfaction with the services received.
 - b) Enhance linkages between primary care, urgent care, and Emergency Departments in order to increase communication and improve care transitions for patients.
 - c) Conduct quality improvement for project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, identifying “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and identifying key challenges associated with expansion of the project, including special considerations for safety-net populations.
- 1.6.3 “Other” project option: Implement other evidence-based project to implement and use urgent medical advice in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project. Milestone I-17 includes suggestions for improvement metrics to use with this innovative project option.

Note: All of the project options in project area 1.6 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Rationale:

Several RHPs within Texas implemented an urgent medical advice line to serve patients within selected populations. To facilitate the diffusion of practices among RHPs, RHPs will have the opportunity to implement an urgent medical advice line to underserved and under privileged areas. Implementation across Texas for an urgent medical advice line is not consistent between RHPs. As such, Texas will promote the implementation of an **urgent medical advice line** for underserved and

underprivileged populations (i.e. rural areas with limited access to healthcare, or areas where cultural differences may disincentivize the use of automated telephone services).

Process Milestones:

- P-1. Milestone: Establish clinical protocols for an urgent medical advice line within 4 years of the demonstration period with a vetting process within the RHP. ED Clinical Protocols are currently used by several hospitals and hospital councils in Texas to determine appropriate and non-appropriate visits to the ED.²⁵
 - P-1.1. Metric: Submission of complete protocols.
 - a. Data Source: Protocol documents
 - b. Rationale/Evidence: The nurse advice line would use the clinical protocols for patient triage.

- P-2. Milestone: Collect baseline data, if medical advice line currently exists within RHP; Develop metrics specific to the medical advice line in use by the performing provider to track access to specified patient populations determined by RHP.
 - P-2.1. Metric: Documentation of baseline assessment.
 - a. Data Source: Provider documentation of baseline data collection
 - b. Rationale/Evidence: A determination of medical advice line needs and tracking metrics will allow providers to determine efficacy in reaching the targeted population.

- P-3. Milestone: Train nurses on clinical protocols
 - P-3.1. Metric: Number of nurses trained
 - a. Numerator: number of nurses trained at baseline
 - b. Denominator: total number of nurses.
 - c. Data source: HR records.
 - d. Rationale/Evidence: Patients will experience expanded access to medical advice and direction to the appropriate level of care as a result of a higher number of nurses trained on clinical protocols.

- P-4. Milestone: Establish/Expand nurse advice line by XX% based on baseline data to increase access to patients based on need within the RHP.
 - P-4.1. Metric: Nurse advice line
 - a. Numerator: Number of nurses staffing nurse advice line per shift
 - b. Denominator: Number of patient calls per shift
 - c. Data Source: Documentation of nurse advice line staffing levels.
 - d. Rationale/Evidence: Patients will experience expanded access to medical advice and direction to the appropriate level of care as a result of a higher ratio of nurses to patient calls.

- P-5. Milestone: Establish a multilingual nurse advice line
 - P-5.1. Metric: Nurse advice line

²⁵ <http://wagner.nyu.edu/chpsr/index.html?p=25>

- a. Numerator: Number of nurses designated to staff a nurse advice line.
 - b. Denominator: number of nurses at baseline.
 - c. Data Source: HR documents or other documentation demonstrating employed and/or contracted nurses to staff a nurse advice line.
 - d. Rational/Evidence: Patients will experience expanded access to medical advice and direction to appropriate care for perceived urgent medical problems as a result of being able to call a nurse 24 hours per day.
- P-6. Milestone: Inform and educate patients on the nurse advice line
- P-6.1. Metric: Number or percent of targeted patients informed/educated
- a. Numerator: Number of targeted patients informed/educated
 - b. Denominator: Number of targeted patients (targeted as defined by Performing Provider)
 - c. Data Source: Documentation in patient's paper or electronic medical record that patient was contacted and received information about accessing the nurse advice line and education about how to use the nurse advice line
 - d. Rationale/Evidence: Patients who are informed on how to access and utilize a nurse advice line are less likely to seek care for non-emergent conditions in the Emergency Department.
- P-7. Milestone: Develop/distribute a bilingual (English and Spanish) patient-focused educational newsletter with proactive health information and reminders based on nurse advice line data/generated report identifying common areas addressed by the nurse advice line.
- P-7.1. Metric: Newsletter distribution
- a. Number of newsletters sent to patients over baseline
 - b. Data Source: Mailer vendor invoice
 - c. Rationale/Evidence: The nurse advice line can collect important data that may be representative of the types of concerns of the larger, general patient population. By monitoring the types of health care needs addressed through the nurse advice line, broader trends can be identified. Based on that, proactive health care guidance (e.g., when to get a screening test/immunization) can be disseminated to the larger patient population. In essence, this shares the learnings from the nurse advice line and disseminates preventive and other health care guidance to the broader patient population.
- P-8. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
- P-8.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.

- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-8.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.
- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-9. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.
- P-9.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.
- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
 - b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.
- P-10. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.
- P-10.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.

- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” for performance across all providers.

P-10.2. Metric: Implement the “raise the floor” improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- c. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- d. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-11. Milestone: Volume of ED visits for the target population who used the help line.
- I-11.1. Metric: % of ED visits for the target patient population using the help line in comparison to total # of ED visits for the target patient population
- a. Numerator: Number ED visits for target population who used the call line
 - b. Denominator: # of people in target population who used the call line
 - c. Data Source: EHR, call line records, billing data
 - d. Rationale/Evidence: Targeted patients that access and utilize a nurse advice line are less likely to seek care for non-emergent conditions in the Emergency Department.
- I-12. Milestone: Proportion of admissions/readmissions of ED visits that used the help line vs. those who did not use the help line.
- I-12.1. Metric: Percent of ED visits for target population who did not use the call line and got admitted/readmitted to the hospital.
- a. Numerator: Number of ED visits for target population who used the call line and got admitted/readmitted.
 - b. Denominator: Number of target population who visited the ED.
 - c. Data Source: Claims, EHR
- I-13. Milestone: Increase in the number of patients that accessed the nurse advice line
- I-13.1. Metric: Utilization of nurse advice line
- a. Numerator: Number or percent of targeted patients that access the nurse advice line
 - b. Denominator: Targeted patients (targeted as defined by DPH system)
 - c. Data Source: TBD by Performing Provider but could include Call Center phone and encounter records and appointment scheduling software records
 - d. Rationale/Evidence: Targeted patients that access and utilize a nurse advice line are less likely to seek care for non-emergent conditions in the Emergency Department.

- I-14. Milestone: Increase patients in defined population who utilized the nurse advice line and were given an urgent medical appointment via the nurse advice and appointment line when needed
- I-14.1. Metric: Number of urgent medical appointments scheduled via the nurse advice line
- a. Numerator: Number of patients in defined population who were scheduled for an urgent medical appointment via the nurse advice line
 - b. Denominator: Total number of patients in defined population (defined by Performing Provider)
 - c. Data Source: TBD by Performing Provider but could include Call Center phone and encounter records and appointment scheduling software records
 - d. Rationale/Evidence: Patients in defined population who utilize the nurse advice line and were given an urgent medical appointment when needed are less likely to seek non-emergency care in the Emergency Department.
- I-15. Milestone: Increase patient satisfaction
- I-15.1. Metric: Increase surveyed patients who believed the advice provided was appropriate
- a. Numerator: Number of surveyed patients who accessed the nurse advice line and reported finding it helpful
 - b. Denominator: Total number of surveyed/respondents who accessed the nurse advice line
 - c. Data Source: Survey Tool Results
 - d. Rationale/Evidence: Patients who report they believed the advice they received was appropriate are more likely to not seek care in the Emergency Department for non-emergent conditions in the future.
- I-16. Milestone: Increase patients in defined population who utilized the nurse advice line and were given a medical home appointment via the nurse advice and appointment line when the condition was not urgent
- I-16.1. Metric: Number of medical home appointments scheduled via the nurse advice line
- a. Numerator: Number of patients in defined population who were scheduled for a medical home appointment via the nurse advice line
 - b. Denominator: Total number of patients in defined population (defined by Performing Provider)
 - c. Data Source: TBD by Performing Provider but could include Call Center phone and encounter records and appointment scheduling software records
 - d. Rationale/Evidence: Patients in defined population who utilize the nurse advice line and were directed to a medical home when the health care needs of the patient are not urgent or emergent are less likely to seek non-emergency care in the Emergency Department. The goal is for the patients to establish a continued relationship with a medical home.

- I-17. Milestone: Implement interventions to improve access to care of patients receiving urgent medical advice. The following metrics are suggested for use with an innovative project option to improve access to care of patients receiving urgent medical advice but are not required.
- I-17.1. Metric: Documentation of increased number of unique patients served by innovative program. Demonstrate improvement over prior reporting period.
- a. Total number of unique patients encountered in the clinic for reporting period.
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.
- I-17.2. Metric: Improved clinical outcomes of target population. The clinical outcomes can be either intermediate (e.g. in Diabetes: HbA1c, lipid profile, blood pressure, serum microalbumin) or end result (e.g. mortality, morbidity, functional status, health status, quality of life or patient satisfaction).
- a. Numerator: Average [clinical outcome] (TBD by provider) of patients participating in Navigator program.
 - b. Denominator: Average [clinical outcome] (TBD by provider) of all patients.
 - c. Data Source: EHR
 - d. Rationale: TBD by provider
- I-17.3. Metric: Improved compliance with recommended care regimens.
- a. Numerator: % compliance with [recommended care regimen] (TBD by provider) of patients participating in Navigator program.
 - b. Denominator: % compliance with [recommended care regimen] (TBD by provider) of all patients.
 - c. Data Source: EHR, claims
 - d. Rationale: TBD by provider

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- o Metric: Target population reached

- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development.
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.

1.7 Introduce, Expand, or Enhance Telemedicine/Telehealth

Project Goal:

Provide electronic health care services to increase patient access to health care. Telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve patients' health status. Closely associated with telemedicine is the term "telehealth," which is often used to encompass a broader definition of remote healthcare that does not always involve clinical services. Videoconferencing, transmission of still images, remote monitoring of vital signs with a focus on the specialty care access challenges in rural communities, and continuing medical education are all considered part of telemedicine and telehealth.²⁶

Telehealth is the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration. Technologies include videoconferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications.²⁷

Telemedicine is viewed as a cost-effective alternative to the more traditional face-to-face way of providing medical care (e.g., face-to-face consultations or examinations between provider and patient) that states can choose to cover under Medicaid. This definition is modeled on Medicare's definition of telehealth services (42 CFR 410.78). Note that the federal Medicaid statute does not recognize telemedicine as a distinct service.²⁸

Telemedicine is not a separate medical specialty. Products and services related to telemedicine are often part of a larger investment by health care institutions in either information technology or the delivery of clinical care. Even in the reimbursement fee structure, there is usually no distinction made between services provided on site and those provided through telemedicine and often no separate coding required for billing of remote services. Telemedicine encompasses different types of programs and services provided for the patient. Each component involves different providers and consumers.²⁹

Telemedicine Services:

Specialist referral services typically involves of a specialist assisting a general practitioner in rendering a diagnosis. This may involve a patient "seeing" a specialist over a live, remote consult or the transmission of diagnostic images and/or video along with patient data to a specialist for viewing later. Recent surveys have shown a rapid increase in the number of specialty and subspecialty areas that have successfully used telemedicine. Radiology continues to make the greatest use of telemedicine with thousands of images "read" by remote providers each year. Other major specialty areas include: dermatology, ophthalmology, mental health, cardiology and pathology. According to reports and studies, almost 50 different medical subspecialties have successfully used telemedicine.

Patient consultations using telecommunications to provide medical data, which may include audio, still or live images, between a patient and a health professional for use in rendering a diagnosis and

²⁶ <http://www.americantelemed.org/i4a/pages/index.cfm?pageid=3333>

²⁷ <http://www.hrsa.gov/ruralhealth/about/telehealth/>

²⁸ <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Delivery-Systems/Telemedicine.html>

²⁹ <http://www.americantelemed.org/i4a/pages/index.cfm?pageid=3333>

treatment plan. This might originate from a remote clinic to a physician's office using a direct transmission link or may include communicating over the Web.

Remote patient monitoring uses devices to remotely collect and send data to a monitoring station for interpretation. Such "home telehealth" applications might include a specific vital sign, such as blood glucose or heart ECG or a variety of indicators for homebound patients. Such services can be used to supplement the use of visiting nurses.

Medical education provides continuing medical education credits for health professionals and special medical education seminars for targeted groups in remote locations.

Consumer medical and health information includes the use of the Internet for consumers to obtain specialized health information and on-line discussion groups to provide peer-to-peer support.

Delivery Mechanisms:

Networked programs link tertiary care hospitals and clinics with outlying clinics and community health centers in rural or suburban areas. The links may use dedicated high-speed lines or the Internet for telecommunication links between sites. Studies by the several agencies within the U.S. Department of Health and Human Services, private vendors and assessments by ATA of its membership place the number of existing telemedicine networks in the United States at roughly 200. These programs involve close to 2,000 medical institutions throughout the country. Of these programs, it is estimated that about half (100) are actively providing patient care services on a daily basis. The others are only occasionally used for patient care and are primarily for administrative or educational use.

Point-to-point connections using private networks are used by hospitals and clinics that deliver services directly or contract out specialty services to independent medical service providers at ambulatory care sites. Radiology, mental health and even intensive care services are being provided under contract using telemedicine to deliver the services.

Primary or specialty care to the home connections involves connecting primary care providers, specialists and home health nurses with patients over single line phone-video systems for interactive clinical consultations.

Home to monitoring center links are used for cardiac, pulmonary or fetal monitoring, home care and related services that provide care to patients in the home. Often normal phone lines are used to communicate directly between the patient and the center although some systems use the Internet.

Web-based e-health patient service sites provide direct consumer outreach and services over the Internet. Under telemedicine, these include those sites that provide direct patient care.

Project Options:

- 1.7.1 Implement telemedicine program to provide or expand specialist referral services in an area identified as needed to the region.
Required core project components:
 - a) Provide patient consultations by medical and surgical specialists as well as other types of health professional using telecommunications

- b) Conduct quality improvement for project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, identifying “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and identifying key challenges associated with expansion of the project, including special considerations for safety-net populations.
- 1.7.2 Implement remote patient monitoring programs for diagnosis and/or management of care. Providers should demonstrate that they are exceeding the requirements of the EHR incentive program.
- 1.7.3 Use telehealth to deliver specialty, psychosocial, and community-based nursing services
- 1.7.4 Develop a teledentistry infrastructure and use telehealth to provide dental and oral health services.
- 1.7.5 Use telehealth services to provide medical education and specialized training for targeted professionals in remote locations.
- 1.7.6 Implement an electronic consult or electronic referral processing system to increase efficiency of specialty referral process by enabling specialists to provide advice and guidance to primary care physicians that will address their questions without the need for face-to-face visits when medically appropriate.
- 1.7.7 “Other” project option: Implement other evidence-based project to expand/establish telemedicine/telehealth program to help fill significant gaps in services in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project. Milestone I-18 includes suggestions for improvement metrics to use with this innovative project option.

Note: All of the project options in project area 1.7 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Rationale³⁰:

One of the greatest challenges facing the U.S. healthcare system is to provide quality care to the large segment of the population, which does not have access to specialty physicians because of factors such as geographic limitations or socioeconomic conditions. The use of technology to deliver health care from a distance, or telemedicine, has been demonstrated as an effective way of overcoming certain barriers to care, particularly for communities located in rural and remote areas. In addition, telemedicine can ease the gaps in providing crucial care for those who are underserved, principally because of a shortage of sub-specialty providers.

³⁰ http://telehealth.utmb.edu/presentations/Benefits_Of_Telemedicine.pdf

The use of telecommunications technologies and connectivity has impacted real-world patients, particularly for those in remote communities. This work has translated into observable outcomes such as:

- improved access to specialists
- increased patient satisfaction with care
- improved clinical outcomes
- reduction in emergency room utilization
- cost savings

Nowhere are these benefits more evident than in Texas. With a land mass area of 268,820 square miles and a growing population of 25.1 million, Texas is the second largest US state by area and population.¹ Its population growth rose more than 18.8 percent between 2000 to 2009, reflecting an increase that is more than double the national growth in this period.² This rapid growth is attributed to a diversity of sources such as natural increases from the total of all births minus all deaths and to a high rate of net in-migration from other states and countries. Along with the increase in population, an ever-growing aging population (the state's older population, 65+, is expected to double that of the previous 8 years) has significantly affected the demand on the healthcare workforce as demands for quality care increased.

In its Statewide Health Plan 2011-2016 report³¹, the Texas Statewide Health Council concluded: "Texas faces particular challenges with respect to physician and other healthcare workforces not primarily because of an overall shortage, but because of sharp disparities in the allocation of healthcare resources to different parts of the state. In the metropolitan areas outside the border, there is one physician in direct patient care for each 573 county residents. In the 32-county border region and in non-metropolitan Texas, the ratios are 2 to 3 times as high."

Although the overall supply of physicians has increased in Texas since 2000 from in-migration, the vast majority of these healthcare professionals resides and practices within four primary areas of Texas: Dallas, Houston, Austin, and San Antonio. Moreover, Texas has consistently lagged behind the US average in the ratio of physician supply per 100,000 of population, and the gap between the two appears to be increasing. In 2009, there were 25 counties with no physicians, and the counties with lowest ratios of providers to populations were by and large in West Texas, South Texas and the Panhandle.

Theoretically, resources such as healthcare would be distributed across the state in accordance with population density and needs. Realistically, however, geographical and economic barriers create significant disparities across the state, with rural and underserved communities enduring significantly greater barriers to accessing the care continuum. The supply ratios for a number of health professionals, including primary care physicians and mental health professionals, are lowest in rural, border and other health professional shortage areas. Data for 2009 indicated that out of the 254 counties in Texas, 118 counties are designated as whole county primary care Health Professional Shortage Areas (HPSAs) due to primary care doctor to patient ratios of 1:3500 or less, and 173 counties (68 percent of the state) are designated as whole county mental health HPSAs²

³¹ Texas Statewide Health Coordinating Council. 2011-2016 Texas State Health Plan Update. Texas Department of State Health Services. <http://www.dshs.state.tx.us/chs/shcc/>. Retrieved February 28, 2011

In Texas, communities are struggling to care for an increasing number of underserved, disadvantaged, and at-risk populations. In most communities, especially in rural areas, care is not organized to promote prevention and early intervention, coordinate services, or monitor access to and quality of care. Moreover, public and private funding to subsidize care remains inadequate, despite growing community needs associated with increases in the uninsured and aging populations. Consequently, many people are left to seek care in emergency rooms, often as a last resort, in an unmanaged and episodic manner. The costs of such care are borne by care-giving institutions, local governments, and, ultimately, taxpayers, many of whom are already burdened with the costs of meeting health-related costs of their own.

Given the various benefits observed through the provision of health care via telemedicine, there is a tremendous amount of momentum toward increasing access to care through the use of health information technologies, thereby creating an exciting and central role for innovation and implementation of new and advanced platforms for service delivery. Two such platforms include the use of wireless and telemonitoring technologies. It is our belief that healthcare delivery is about to make a significant leap forward. The development and installation of high-speed wireless telecommunications networks coupled with large-scale search engines and mobile devices will change healthcare delivery as well as the scope of healthcare services. It will allow for real-time monitoring and interactions with patients without bringing them into a hospital or a specialty care center. This real/near-time monitoring and interacting could enable a healthcare team to address patient problems before they require major interventions, creating a potentially patient-centered approach that could undoubtedly change our expectations of our healthcare system.

In conclusion, the overall goal of the proposed telehealth projects is to reduce disparities in access, outcome, cost and satisfaction that are created by geographic barriers. Specifically, we hope to achieve the following goals for the state's Medicaid population:

- 1.) increase the knowledge and capacity of rural primary care physicians to manage complex chronic conditions
- 2.) increase patients' timely access to specialty care and reduce geographic barriers;
- 3.) create the ability for specialists to provide direct patient consults to patients based at rural clinics
- 4.) improve efficiency in the referral process by letting specialists divert unnecessary referrals and decreasing the wait time for urgent referrals
- 5.) provide services in HPSAs
- 6.) enhance access to other health care services (case management, education, etc.)

Process Milestones:

- P-1. Milestone: Conduct needs assessment to identify needed specialties that can be provided via telemedicine
 - P-1.1. Metric: Needs assessment to identify the types of personnel needed to implement the program and hiring of the respective personnel.
 - a. Submission of completed needs assessment
 - b. Data Source: Needs assessment
 - c. Rationale/Evidence: It is important to expand telemedicine to areas where greatest need and highest potential for impact is demonstrated in order to have optimal effect.

- P-2. Milestone: Conduct needs assessment to identify needed services that could be delivered via telehealth.
- P-2.1. Metric: Needs assessment
- a. Submission of completed needs assessment
 - b. Data Source: Needs assessment
 - c. Rationale/Evidence: It is important to expand telehealth to areas where greatest need and highest potential for impact is demonstrated in order to have optimal effect.
- P-3. Milestone: Implement or expand telemedicine program for selected medical specialties, based upon regional and community need.
- P-3.1. Metric: Documentation of program materials including implementation plan, vendor agreements/ contracts, staff training and HR documents.
- a. Submission of implementation documentation
 - b. Data Source: Program materials
 - c. Rationale/Evidence: It is important to expand telemedicine to areas where greatest need and highest potential for impact is demonstrated in order to have optimal effect.
- P-3.2 Metric: Documentation of the number of consults delivered by each specialty
- a. The number of patients who received diagnostic and treatment services via a specific telemedicine delivered service;
 - b. Data source: clinic log of health services by telemedicine service;
 - c. Rationale: documentation of the quantity of actual services provided via telemedicine after implementation
- P-4. Milestone: Implement or expand telehealth program for targeted health services, based upon regional and local community need.
- P-4.1. Metric: Documentation of program materials including implementation plan, vendor agreements/ contracts, staff training and HR documents.
- a. Submission of implementation documentation
 - b. Data Source: Program materials
 - c. Rationale/Evidence: It is important to expand telehealth to areas where greatest need and highest potential for impact is demonstrated in order to have optimal effect.
- P-4.2 Metric: Documentation of the quantity of actual telehealth services delivered after implementation
- a. Submit the number of telemedicine/telehealth sessions provided via video-conferencing for remote health care providers along with the educational materials from the session;
 - b. Data source: log of tele-services by type of health care professionals and type of service;
 - c. Rationale: ensure that actual implementation occurred;
- P-4.3 Metric: Pre and post-evaluations completed by remote health care providers demonstrating they gained knowledge and capacity on key areas of specialty knowledge

- a. Provide specific survey to test the knowledge accumulated through the tele-service;
 - b. Data source: results of the pre and post teleservice survey;
 - c. Rationale: measure the impact of the teleservice;
- P-5. Milestone: Implement remote patient monitoring program based on evidence based models and adapted to fit the needs of the population and local context.
- P-5.1. Metric: Documentation of program materials including implementation plan, vendor agreements/ contracts, staff training and HR documents.
- a. Submission of implementation documentation
 - b. Data Source: Program materials
 - c. Rationale/Evidence: Telemonitoring allows patients to be maintained in their home. Better follow-up of patients reduces the complications of chronic diseases such as diabetes, hypertension, or chronic heart failure. Telemonitoring may reduce patient travel, time off from work, and overall costs. Several systems have proved to be cost effective, such as home monitoring of high-risk pregnancies, infants, pediatric pacemaker patients, and patients suffering from chronic diseases. The cost of simple telemonitoring was evaluated to be approximately \$70 per month. A standard emergency room charge is \$260.11. Telemonitoring also responds to the emerging needs for home care.³²
- P-6. Milestone: Implement or expand medical education and specialized training programs via telehealth program
- P-6.1. Metric: Submission and number of distinct curriculums delivered
- a. Submission of documentation for all offered curriculums
 - b. Data Source: Program materials
 - c. Rationale/Evidence: Medical education provides continuing medical education credits for health professionals and special medical education seminars for targeted groups in remote locations.
- P-6.2. Metric: Number of trainees attending via telehealth
- a. Numerator: Number of trainees utilizing medical education program via telehealth
 - b. Data Source: Submission of program registration documents
 - c. Rationale/Evidence: Medical education provides continuing medical education credits for health professionals and special medical education seminars for targeted groups in remote locations.
- P-7. Milestone: Create plan to monitor and enhance technical properties, bandwidth, of telemedicine/telehealth program.
- P-7.1. Metric: Documentation of bandwidth capacity in relationship to program needs

³² http://www.orcatech.org/papers/home_monitoring/05_Meystre_telemonitoring_current_state.pdf

- a. Submission of bandwidth capacity assessment and anticipated bandwidth needs for optimal program functioning/expansion.
- b. Data source: Bandwidth assessment and program plan
- c. Rationale/Evidence: Greater bandwidth allows for more data to be transmitted more quickly. As demand and use of bandwidth increase in all areas of telecommunication, associated costs of each individual area of use will decrease. As other applications use bandwidth, the cost burden on any particular application, including telemedicine, will be reduced. Greater bandwidth enables greater resolution, use of real-time vs. store-forward images, full-motion imaging, and other properties that will expand the technical capacity of telemedicine.³³

P-8. Milestone: Create plan to monitor and enhance internet use for telemedicine/telehealth program.

P-8.1. Metric: Documentation of expansion of services utilizing the internet as a medium.

- a. Submission of plan identifying which services can be made available through internet applications as well as steps to implement these services.
- b. Data source: Program plan
- c. Rationale/Evidence: The Internet has considerable potential as a medium for tele-consultations, monitoring patient condition, and other unforeseen applications in telemedicine. Use of the Internet for tele-consultations and other telemedicine applications will move these applications into the mainstream of other communications used by physicians and other health care providers, decreasing the need for separate facilities (equipment, space, etc.), procedures, and telecommunications standards for telemedicine. Any developments that reduce the "separateness" of telemedicine from other parts of the health care system will improve its acceptance and efficiency.

As noted by the Association of Telehealth Services Providers, the potential impacts of the Internet and greater bandwidth in advancing the technical properties of telemedicine are linked³⁴:

³³ <http://aspe.hhs.gov/health/reports/AAET/aaet.htm#Ra>

³⁴ <http://aspe.hhs.gov/health/reports/AAET/aaet.htm#Ra>

The Internet has become the common standard for transmission of nearly all types of data, including web-based data transfer, audio, and video. The reason that we don't use the Internet more for all of these things is that the bandwidth and switching capacity is not there. These will clearly grow in time, however, making the Internet Protocol the lingua franca of data transmission of all types. In the next ten years, virtually all telehealth transmissions will happen using Internet Protocol, whether or not the transmissions happen over the Internet. As Internet capacity grows, we expect that nearly all telehealth transactions will be done via the Internet. -- Association of Telehealth Service Providers (2000)

- P-9. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
- P-9.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.
- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-9.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.
- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-10. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.
- P-10.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.

- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
 - b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.
- P-11. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.
- P-11.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.
- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" for performance across all providers.
- P-11.2. Metric: Implement the "raise the floor" improvement initiatives established at the semiannual meeting.
- a. Data Source: Documentation of "raise the floor" improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the "raise the floor" improvement initiative after the semiannual meeting.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" and "raise the bar" for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]
- P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
 - b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/ procedures, and share lessons learned

Improvement Milestones:

- I-12. Milestone: Increase number of telemedicine visits for each specialty identified as high need
- I-12.1. Metric: Number of telemedicine visits
- a. Numerator: Number of visits in which patients are seen using telemedicine services for each type of medical or surgical subspecialty provided by specified timeframe (e.g. one year) and geographic area in a RHP or for individual provider.
 - b. Denominator: Number of patients referred to medical specialties
 - c. Data Source: EHR or electronic referral processing system; encounter records from telemedicine program
 - d. Rationale: demonstrate increase in access due to teleservices
- I-12.2. Metric: RHPs and providers should provide analysis demonstrating how the telemedicine services provided align with their needs assessment.
- a. Document the needs identified in needs assessment have been addressed;
 - b. Data source: List of Needs Assessment prioritized by year;
 - c. Rationale: demonstrate that health care providers are providing telemedicine specialty consults for the specialties identified as the greatest need for the community.
- I-12.3. Metric: The telemedicine program and primary care providers will need to obtain a commitment from all specialists providing telemedicine consults that they will perform necessary diagnostic or therapeutic procedures that the specialist determines are necessary after the telemedicine consult (since many of the clinics do not have the on-site capacity for these procedures and lack adequate referral networks for Medicaid and uninsured patients).
- a. Document commitment from all specialists they will provide the procedures determined during and following the teleconsult;
 - b. Data source: written agreement between PCP and specialist;
 - c. Rationale: ensure that specialists provide any indicated diagnostic or therapeutic procedures they determine are needed after the initial consult for uninsured and Medicaid patients

- I-13. Milestone: Increase number of electronic “curbside consults” provided by specialists to primary care physicians through an electronic consults or electronic referral processing system.
- a. Numerator: Number of electronic referrals that specialists can provide direct advice to the primary care providers on diagnosis and treatment without needing to actually have an encounter with the patient
 - b. Denominator: Number of patients referred to all medical specialties using referral processing system
 - c. Data Source: EHR or electronic referral processing system
 - d. Rationale/Evidence: Increased e-consultations will result in the patient’s issue being resolved more frequently without need for a face-to-face visit with the specialist.
- I-14. Milestone: Reduce wait times in high-impact specialty for consult for patient’s condition.
- I-14.1. Metric: Number of days until first available time for review and consultation for patient referred for telemedicine services
- a. Numerator: Average number of days between referral date and first available appointment for patients referred for telemedicine specialty services
 - b. Denominator: Average number of days between referral date and first available appointment for all patients referred for specialty services
 - c. Data Source: Appointment scheduling software and or electronic referral management software
 - d. Rationale/Evidence: Patients are more likely to receive appropriate care when the wait time for review and consult of the condition for which they were referred is shortened.
- I-15. Milestone: Reduce wait times for when patients are actually seen by high-impact specialists.
- I-15.1. Metric: Number of days until referral initiated and patient is actually seen by each type of medical or surgical specialist via telemedicine services
- a. Numerator: Average number of days between referral date and date that telemedicine consult is provided by specialist
 - b. Denominator: Average number of days between referral date and date that in-person consult is provided by specialist
 - c. Data Source: Appointment scheduling software and or electronic referral management software
 - d. Rationale/Evidence: Patients are more likely to receive appropriate care when the wait time for review and consult of the condition for which they were referred is shortened.
- I-16. Milestone: Expand telemedicine program to additional clinics.
- I-16.1. Metric: New telemedicine-enhanced clinics
- a. Numerator: Number of clinics providing at least ten telemedicine visits per month.
 - b. Denominator: Number of clinics in system, community or region
 - c. Data Source: Appointment scheduling software records
 - d. Rationale/Evidence: Expanding to additional clinics allows increased access and is representative of system uptake of telemedicine or telehealth services.

- I-17. Milestone: Improved access to specialists care or other needed services, e.g. community based nursing, case management, patient education, counseling, etc.
- I-17.1. Metric: Percentage of patients in the telemedicine/telehealth program that are seeing a specialist or using the services for the first time.
- a. Numerator: Number of patients participating in program that are using the each service for the first time during the reporting period
 - b. Denominator: Number of patients that are participating in the program or are in the target population.
 - c. Data source: EHR or other program records
 - d. Rationale/Evidence: In evaluation, utilization is often used as a proxy for access to care. For example, in one network's telepsychiatry program, 46% of those patients taking part in the program were seeing a psychiatrist for the first time, suggesting that psychiatric assistance was not available to these individuals before it was offered through telemedicine. It is important to note, however, that an initial surge in telemedicine utilization may reflect pent-up demand and may subside once this consultation backlog is handled. That is, an evaluation of access may reveal a spike in patient volume at the onset of a telemedicine program as patients who have yet to seek care may have their initial appointment via telemedicine. Following these initial visits, the immediate needs of the population have been met and thus the number of visits may drop until a steady, maintainable level is reached. Further, any estimate of the rate of patients seeing a provider for the first time in a telemedicine program should be compared to the rate for patients in conventional settings.³⁵
- I-17.2. Metric: Improved access to health care services for residents of communities that did not have such services locally before the program.
- a. Numerator: Number of unique patients from geographically underserved area, HPSA, that receive each type of telemedicine or telehealth services.
 - b. Denominator: Number of residents in HPSA
 - c. Data Source: EHR
 - d. Rationale/Evidence: This is a measure of impact of the program on residents in counties that have been previously underserved.
- I-17.3. Metric: Improved access to care coordination in a way that would otherwise not have occurred.
- a. Number of real time multidisciplinary conferences with health care providers, including e-consultations, family and/or other non-clinical parties
 - b. Data Source: EHR
 - c. Rationale/Evidence: Real-time conferences rarely occur at a single location given the difficulty of having a team of local providers (e.g., teachers, parents, and therapists) travel to a larger health care center, or having specialists from the health care center travel to a remote location.⁷

³⁵ <http://aspe.hhs.gov/health/reports/AAET/aaet.htm#Ra>

- I-18. Milestone: Implement interventions to achieve improvements in access to care of patients receiving telemedicine/telehealth services using innovative project option. The following metrics are suggested for use with an innovative project option to increase access to achieve improvements in access to care of patients receiving telemedicine/telehealth services but are not required.
- I-18.1. Metric: Target population reached through telemedicine/telehealth program
- a. Numerator: Number of individuals of target population reached by the telemedicine/telehealth program.
 - b. Denominator: Number of individuals in the target population.
 - c. Data Source: Documentation of target population reached, as designated in the project plan.
 - d. Rationale/Evidence: This metric speaks to the efficacy of the innovative project in reaching its targeted population.
- I-18.2. Metric: Number of telemedicine/telehealth visits
- a. Total number of visits for each type of telemedicine/telehealth service provided for reporting period
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.
- I-18.3. Metric: Improved access to health care services for residents of communities that did not have such services locally before the program. Demonstrate improvement over prior reporting period.
- a. Total number of unique patients encountered for the reporting period.
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- o Metric: Target population reached

- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.

1.8 Increase, Expand, and Enhance Oral Health Services

Project Goal:

Dental health is a key component of overall health. Oral disease can lead to poor nutrition; serious systemic illnesses and conditions such as poor birth outcomes, diabetes, and cardiovascular disease; and a diminished quality of life and life expectancy.³⁶ Inadequate access to oral health services compounds other health issues. It can result in untreated dental disease that not only affects the mouth, but can also have physical, mental, economic, and social consequences.³⁷ Fortunately, many of the adverse effects associated with poor oral health can be prevented with quality regular dental care, both at home and professionally. Increasing, expanding, and enhancing oral health services will improve health outcomes.

Barriers to Oral Health Care:

- Distribution of dental providers/lack of dental providers in underserved areas
- Inconvenient hours and location of dental clinic/services
- Transportation issues
- Low oral health literacy within the community
- Cultural and language competency of dental providers
- Cost of services/health insurance coverage
- Providers' limited experience treating special groups (medically compromised, elderly, special needs, pregnant women, young children)

Specific Project Goals:

- Close gaps/disparities in access to dental care services
- Enhance the quality of dental care
- Increase and enhance the dental workforce
- Redistribute and retain the dental workforce to/in underserved areas

Project Options:

Increase dental provider training, education, recruitment and/or retention, as well as expand workforce capacity through one of the following project options:

- 1.8.1 The development of academic linkages with the three Texas dental schools, to establish a multi-week externship program for fourth year dental students to provide exposure and experience in providing dental services within a rural setting during their professional academic preparation.
- 1.8.2 The establishment of a clinical rotation, continuing education within various community settings for dental residents to increase their exposure and experience providing dental services to special populations such as the elderly, pregnant women, young children, medically compromised, and/or special needs patients.
- 1.8.3 The establishment of a loan repayment program or scholarships for advanced training/education in a dental specialty with written commitments to practice in

³⁶ <http://www.perio.org/consumer/media/releases.htm#pregnancy>

³⁷ Building Better Oral Health: A Dental Home for All Texans. A Report Commissioned by the Texas Dental Association. Fall 2008

underserved markets after graduation for fourth year dental students, new dental and dental hygiene graduates, and dental residents.

Increase interdisciplinary training and education opportunities for dentists and other health care providers to promote an interdisciplinary team approach to addressing oral health through one of the following project options:

- 1.8.4 Grand rounds, in-service trainings, and other continuing education events that integrate information on oral health issues and implications as related to chronic diseases, such as diabetes and cardiovascular disease, and the importance of good oral health during pregnancy and perinatal period.
- 1.8.5 Establishing a referral system/network that provides medically complex patients with coordinated care between dental and medical providers such as cardiologists, pediatricians, OB/GYNs, endocrinologists, oncologists, etc.

Increase and expand services by increasing clinics, clinic hours, using satellite mobile clinics with an affiliated fixed-site dental clinic location, school-based/school-linked health centers or other approaches to increase oral health services to underserved populations through one of the following project options:

- 1.8.6 The expansion of existing dental clinics, the establishment of additional dental clinics, or the expansion of dental clinic hours.
- 1.8.7 The expansion or establishment of satellite mobile dental clinics with an affiliated fixed-site dental clinic location.
- 1.8.8 The development of a tele-dentistry infrastructure including Medicaid reimbursement to expand access to dental specialty consultation services in rural and other limited access areas.
- 1.8.9 The implementation or expansion of school-based sealant and/or fluoride varnish programs that provide sealant placement and/or fluoride varnish applications to otherwise unserved school-aged children by enhancing dental workforce capacity through collaborations and partnerships with dental and dental hygiene schools, local health departments (LHDs), federally qualified health centers (FQHCs), and/or local dental providers.
- 1.8.10 The addition or establishment of school-based health centers that provide dental services for otherwise unserved children by enhancing dental workforce capacity through collaborations and partnerships with dental and dental hygiene schools, LDHs, FQHCs, and/or local dental providers.
- 1.8.11 The implementation of dental services for individuals in long-term care facilities, intermediate care facilities, and nursing homes, and for the elderly, and/or those with special needs by enhancing dental workforce capacity through collaborations and partnerships with dental and dental hygiene schools, LHDs, FQHCs, and/or local dental providers.
- 1.8.12 “Other” project option: Implement other evidence-based project to enhance oral health services in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project.

Note 1: All of the project options in project area 1.8 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities

may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Note 2: The following project components to implement or enhance efforts to improve quality of care and quality assurance in the delivery of dental care may be included as a part of the above project options:

- Integrating oral health information with electronic medical record.
- Establishing dental care coordination collaboratives where dental case studies are reviewed by dental and medical healthcare providers in an effort to identify best practices and to evaluate health outcomes as a result of the dental interventions and services provided.

Process Milestones:

- P-1. Milestone: Enhance and expand dental care provider training, (must include at least one of the following metrics):
- P-1.1. Metric: Establish/increase externship training opportunities for fourth year dental students to provide exposure and experience to providing dental services within a rural environment during their professional academic preparation
- a. The number of externship opportunities available to fourth year dental students in a rural setting
 - b. Data Source: Externship opportunity descriptions
 - c. Rationale/Evidence: Externship opportunities for fourth year dental students will allow them to be exposed to underserved populations and areas of the state to consider as areas to serve/establish dental practices in after graduation.
- P-1.2. Metric: Establish/increase rotations, continuing education, in-service trainings, lunch and learn presentations for dental residents and private practice dentists to enhance their exposure and experience providing dental services to special populations such as elderly, pregnant women, young children, medically compromised, and/or special needs patients.
- a. Number of rotations, continuing education, in-service trainings, and lunch and learn presentations given to dental residents
 - b. Data Source: Training and presentation announcements
 - c. Rationale/Evidence: Increasing specialized training will allow dental providers to be more comfortable with treating special populations.
- P-2. Milestone: Increase recruitment or retention program for dental care providers in underserved markets
- P-2.1. Metric: Establish and market available loan repayment programs to fourth year dental students, dental residents, and dental hygienists
- a. Documentation of loan repayment program
 - b. Data Source: Program materials
 - c. Rationale/Evidence: These programs can help to attract dentist and dental hygienists to practice in underserved markets.

- P-2.2. Metric: Establish or increase scholarships for advanced training/education in a dental specialty with written commitments to practice in underserved markets after graduation
 - a. Documentation of scholarships
 - b. Data Source: Program materials
 - c. Rationale/Evidence: These programs will help to attract dentists and dental hygienist to practice in underserved areas, while pursuing additional specialized training.

- P-3. Milestone: Increase interdisciplinary training and education opportunities for dental and other health care providers to promote an interdisciplinary team approach to addressing oral health
 - P-3.1. Metric: Increase grand rounds, in-service trainings, and continuing education that focus on oral health issues and implications as related to chronic diseases, such as diabetes and cardiovascular disease, and pregnancy.
 - a. Number of grand rounds and number of participants at in-service trainings, continuing education
 - b. Data Source: Roster/attendance sheets for grand rounds and trainings, CE certificates
 - c. Rationale/Evidence: Training programs for dental care should reflect impact on other health conditions and coordination with health homes in coordinated health care delivery models.

- P-4. Milestone: Establish additional/expand existing/relocate dental care clinics or space
 - P-4.1. Metric: Number of additional clinics, expanded space, or existing available space used to capacity
 - a. Documentation of expansion or efficient use of existing space
 - b. Data Source: New dental care schedule or other document, completed exams, treatment plans
 - c. Rationale/Evidence: Additional, expanded or relocated dental clinics will allow for more convenient access of dental services, help address transportation issues, and increase dental resources

 - P-4.2. Metric: Number of school-based health centers with dental services

- a. Documentation of establishment or expansion of school-based health center with dental services provided. Documentation should include descriptions of all services provided as well as program management activities. Examples could include:
 - Classroom dental screening;
 - A mobile sealant and hygiene program;
 - Referral and linkage with appropriate dental provider;
 - Parent education and empowerment of families;
 - Follow-up of findings from screenings;
 - Referral of severe-needs children to appropriate specialists;
 - Incentives for initial dental visit;
 - Needs assessment and data collection; and
 - Evaluation and accountability.
 - b. Data Source: Provider records
 - c. Rationale/Evidence: School-based health programs decrease oral health disparities that affect children and adolescents from low-income families by increasing access to dental care.³⁸
- P-5. Milestone: Expand the hours of a dental care clinic or office, including both evening and/or weekend hours
- P-5.1. Metric: Increased number of hours at dental care clinic or office over baseline, number of patients served during extended hours
- a. Documentation of increased hours and patients served
 - b. Data Source: Clinic or office hour documentation, patient records, patient schedule
 - c. Rationale/Evidence: Expanded hours can not only allow for more patients to be seen, but also provides more choice for patients.
- P-6. Milestone: Implement/expand alternative dental care delivery systems to underserved populations
- P-6.1. Metric: Implement/expand a mobile dental clinic program with an affiliated fixed-site dental clinic location

38 From the American Academy of Pediatrics: Policy Statement: School-Based Health Centers and Pediatric Practice. Pediatrics Vol. 129 No. 2 February 1, 2012 pp. 387 -393

- a. Documentation of expansion. Documentation should include descriptions of all services provided as well as program management activities.
- b. Data Source: Dental records documenting exams, treatment, consultations, and referrals
- c. Rationale/Evidence: Many RHPs and providers cover very large counties, including hundreds of miles. In some areas, it may take patients hours to drive to existing dental care sites. Mobile clinics will increase access to dental care by ameliorating transportation and inconvenient location of dental clinic issues. In addition, the affiliated fixed-site location will be able to provide follow-up care as needed.

P-6.2. Metric: Develop tele-dentistry infrastructure

- a. Number of exams and/or consultations provided by dentists through tele-dentistry, number of patients served by tele-dentistry
- b. Data Source: Dental exams and/or consultations
- c. Rationale/Evidence: Tele-dentistry has the potential to reduce costs and facilitate access to oral health care in rural and underserved areas.

P-6.3. Metric: Implement or expand school-based sealant program

- a. Number of schools participating in school-based sealant program
- b. Data Source: MOUs, contracts with sealant partners
- c. Rationale/Evidence: Identified by the CDC as a preventive measure that has strong evidence demonstrating effectiveness in the prevention of dental caries and allow for low-income high risk children to receive sealants that otherwise may not have the opportunity to receive them.

P-6.4. Metric: Implement program to increase dental services to improve maternal and early childhood oral health

- a. Documentation of implementation. Documentation should include descriptions of all services provided as well as program management activities
- b. Data Source: Referrals, other documentation
- c. Rationale/Evidence: During pregnancy, women are prone to physiological changes that adversely affect their oral health. In addition, it is a critical time to educate pregnant women on caries prevention since they can transmit caries causing bacteria to their child.³⁹

P-6.5. Metric: Implement program to increase dental services to individuals in long-term care facilities, intermediate care facilities, nursing homes, the elderly, and/or individuals with special needs.

³⁹ Oral Health Care During Pregnancy and Early Childhood: A Summary of Practice Guidelines. 2008. National Maternal and Child Oral Health Resource Center. Georgetown University.

- a. Documentation of implementation. Documentation should include descriptions of all services provided as well as program management activities.
 - b. Data Source: Referrals, contract with facility and partners providing dental services, documentation of visitation to facility, other documents
 - c. Rationale/Evidence: Residents in these facilities may not have the physical or cognitive ability to take care of their teeth or access dental care in a traditional setting and are at high risk for oral diseases that can impact their overall health.
- P-6.6. Metric: Increase the number of memoranda of understanding (MOUs)/collaborative agreements (CAs) with dental hygiene programs to offer available hygiene services to underserved populations
- a. Documentation of the establishment of MOUs/CAs with dental hygiene programs
 - b. Data Source: MOUs/CAs documents
 - c. Rationale/Evidence: dental hygiene programs have the facilities and the need to offer hygiene students the education experience associated with treating patients at a reduce cost to the patient. All dental hygiene programs have an associated dentist who can professionally evaluate the dental needs of the patients and make referrals to external resources to address the needs.
- P-7. Milestone: Enhance efforts to improve quality of care and quality assurance in the delivery of dental care
- P-7.1. Metric: Integrate oral health information into electronic health records
- a. Documentation of oral health information section included in electronic health records
 - b. Data Source: patient electronic health records
 - c. Rationale/Evidence: Incorporation of dental records within electronic health records allows the facilitation of coordination of care between different health care providers, including dental care providers, leading to better overall health management of the patient.
- P-7.2. Metric: Increase collaboratives where dental case studies are reviewed by dental and medical providers
- a. Number of medically complex dental cases reviewed by both dental and medical providers
 - b. Data Source: dental and medical consultation and referral forms, meeting minutes, documentation of phone and/or email consultations
 - c. Rationale/Evidence: Collaboration between dental and medical healthcare providers allows identification of best practices and evaluation of health outcomes as a result of the dental interventions and services provided leading to better overall health management of the patient.
- P-8. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around

shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.

P-8.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.

- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-8.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.

- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-9. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.

P-9.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.

- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
- b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.

P-10. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.

- P-10.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.
- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” for performance across all providers.
- P-10.2. Metric: Implement the “raise the floor” improvement initiatives established at the semiannual meeting.
- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]
- P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]
- c. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
 - d. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-11. Milestone: Increase dental care training:
- I-11.1. Metric: Increase the number of fourth year dental school students that have participated in externships that provide experience in a rural setting
 - a. Number of fourth year dental students participating in the externship opportunities, the number of externship opportunities
 - b. Data Source: Participation roster, externship contracts with dental schools
 - c. Rationale/Evidence: Externship opportunities for fourth year dental students will allow them to be exposed to underserved populations and areas of the state to consider as areas to practice in after graduation.

 - I-11.2. Metric: Increase the number of dental residents participating in the externship opportunities, number of rotations, continuing education, in-service training, and lunch and learn presentations.
 - a. Number of dental residents participating in externship opportunities, number of rotations, continuing education, in-service training, and lunch and learn presentations.
 - b. Data Source: Roster/attendance sheets for training and presentations, CE certificates
 - c. Rationale/Evidence: Increasing specialized training will allow dental specialty providers to be more comfortable with treating special populations.

 - I-11.3. Metric: Increase the number or percent of healthcare providers that have participated in additional training related to an interdisciplinary approach to providing oral health care including but not limited to: physicians (pediatricians, family practitioners, endocrinologists, cardiologists, etc.), physician assistants, advanced practice nurses, registered nurses, social workers, mental health professionals, and pharmacists.
 - a. Number/percent of healthcare providers that have participated in additional training related to an interdisciplinary approach to providing oral health care over the number of providers invited to participate
 - b. Data Sources: Enrollment/attendance at training
 - c. Rationale/Evidence: Since it is important to promote interdisciplinary healthcare with coordination among medical and dental providers to improve health outcomes and lower cost, the metric will measure increased interdisciplinary training.

 - I-11.4. Metric: Percentage of dentists incorporating special population patients into their practices following special population continuing education, in-service trainings, lunch and learn presentations.
 - a. Numerator: Total number of dentists who attended special population training and incorporated special population patients into their practices
 - b. Denominator: Total number of dentists who attended special population training
 - c. Data Source: Post-training survey

- d. Rational/Evidence: Through additional training, dentists will enhance their skills and comfort level in treating special populations and will expand their patient base to include special population patients.
- I-12. Milestone: Increase the number of patients treated by fourth year dental students and dental residents during special population externships and rotations.
- I-12.1. Metric: Increase number of patients treated by fourth year dental students during externship training opportunities
 - a. Numerator: Total number of special population patients treated by fourth year dental students during externship opportunities (with appropriate faculty oversight)
 - b. Denominator: Total number of special population patients treated during externship opportunities (by site staff only)
 - c. Data Source: Billing and treatment records
 - d. Rationale/Evidence: The externship training opportunities should expand the capacity of the site to provide dental services.
- I-13. Milestone: Increase access to dental care in rural and underserved areas of the state
- I-13.1. Metric: Increased number of dental care professionals serving rural and unserved populations
 - a. Numerator: Provider:patient ratio after intervention
 - b. Denominator: Original provider:patient ratio
 - c. Data Source: Survey of local rural dental resources
 - d. Rational/Evidence: Through financial incentives, e.g. loan repayment, scholarship with written service commitments, access to dental services in rural areas would be improved.
 - e.
 - I-13.2. Metric: Additional rural areas with local dental access (Local dental access is defined as a dental care facility within 75 miles)
 - a. Numerator: Number of additional rural areas with local dental access
 - b. Denominator: Number of original rural areas with local dental access
 - c. Data Source: Survey of local rural dental resources
 - d. Rational/Evidence: Through financial incentives, e.g. loan repayment, scholarship with written service commitments, access to dental services in rural areas would be improved.

- I-14. Milestone: Increase number of special population members that access dental services
- I-14.1. Metric: Increasing the number of children, special needs patients, pregnant women, and/or the elderly accessing dental services
- a. Number of children, special needs patients, pregnant women, and/or the elderly that have seen by a dental provider within the past 12 months
 - b. Data Source: Billing, consent forms, other documentation of dental services
 - c. Rationale/Evidence: Measuring increase in special high risk populations accessing dental services reflects the goals of addressing disparities in access to dental care.
- I-14.2. Metric: Increasing the number of children receiving dental sealants
- a. Number of school aged children with at least one dental sealant on their primary or permanent molars
 - b. Data Source: Billing, other documentation of preventive services
 - c. Rationale/Evidence: Children with dental sealants are less likely to experience dental decay.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- e. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - f. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- o Metric: Target population reached
- o Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- o Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- o Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- o Metric: Other program output measure as identified by the performing provider.

1.9 Expand Specialty Care Capacity

Project Goal:

To increase the capacity to provide specialty care services and the availability of targeted specialty providers to better accommodate the high demand for specialty care services so that patients have increased access to specialty services. With regard to specialty areas of greatest need, the recent report of the Committee on Physician Distribution and Health Care Access cites psychiatry, general/preventive medicine, and child/adolescent psychiatry where the ratios per 100,000 population are 56.7%, 60.2%, and 67% of the US ratios, respectively. Federal funding (Medicare Direct Graduate Medical Education or DGME) for residency training is capped at 1996 levels for the direct support of graduate medical education. The cap only supports a third of the costs of 4,056 of the 4,598 actual positions in Texas, leaving the residency programs to cover the cost of two-thirds of the 4,056 positions and the full cost of 542 positions. Texas is currently over its Medicare cap by 13%.

Residency programs require 3 to 8 years of training, depending on the specialty. Medicare funding only covers years 1 through 3. In 2011, Texas had more than 550 residency programs, offering a total of 6,788 positions. Only 22% (1,494) of these were first-year residency positions. According to the Coordinating Board, conservative estimates indicate that the cost to educate a resident physician for one year is \$150,000.

Hence, a great need for extended residency programs in Texas and increase in the number of specialists.

Project Options:

- 1.9.1 Expand high impact specialty care capacity in most impacted medical specialties
Required core project components:
- a) Identify high impact/most impacted specialty services and gaps in care and coordination
 - b) Increase the number of residents/trainees choosing targeted shortage specialties
 - c) Design workforce enhancement initiatives to support access to specialty providers in underserved markets and areas (recruitment and retention)
 - d) Conduct quality improvement for project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, identifying "lessons learned," opportunities to scale all or part of the project to a broader patient population, and identifying key challenges associated with expansion of the project, including special considerations for safety-net populations.
- 1.9.2 Improve access to specialty care
Required core project components:
- a) Increase service availability with extended hours
 - b) Increase number of specialty clinic locations
 - c) Implement transparent, standardized referrals across the system.
 - d) Conduct quality improvement for project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, identifying "lessons learned," opportunities to scale all or part of the project to a broader patient population, and identifying key challenges associated with expansion of the project, including special considerations for safety-net populations.

- 1.9.3 “Other” project option: Implement other evidence-based project to expand specialty care capacity in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project. Milestone I-33 includes suggestions for improvement metrics to use with this innovative project option.

Rationale:

Inadequate access to specialty care has contributed to the limited scope and size of safety net health systems. To achieve success as an integrated network, gaps must be thoroughly assessed and addressed.

Process Milestones:

- P-1. Milestone: Conduct specialty care gap assessment based on community need
- P-1.1. Metric: Documentation of gap assessment. Demonstrate improvement over prior reporting period (baseline for DY2).
- a. Data Source: Needs Assessment
 - b. Rationale/Evidence: In order to identify gaps in high-demand specialty areas to best build up supply of specialists to meet demand for services and improve specialty care access
- P-2. Milestone: Train care providers and staff on processes, guidelines and technology for referrals and consultations into selected medical specialties
- P-2.1. Metric: Training of staff and providers on referral guidelines, process and technology
- a. Numerator: Number of staff and providers trained and documentation of training materials
 - b. Denominator: Total number of staff and providers working in specialty care and medical specialty clinics
 - c. Data Source: Log of specialty care personnel trained and Curriculum for training.
 - d. Rationale/Evidence: Training all staff and providers working in specialty care and in medical specialty clinics on referral guidelines, process, and technology creates the capacity to consistently and uniformly manage all referrals into medical specialties.
- P-3. Milestone: Collect baseline data for wait times, backlog, and/or return appointments in specialties
- P-3.1. Metric: Establish baseline for performance indicators
- a. Numerator: TBD by the Performing Provider
 - b. Denominator: TBD by the Performing Provider
 - c. Data Source: TBD by the Performing Provider
 - d. Rationale/Evidence: TBD by the Performing Provider
- P-4. Milestone: Expand the ambulatory care medical specialties referral management department and related functions

- P-4.1. Metric: Referral Management system utilization
 - a. Numerator: Number of unique referrals placed and tracked within the system during the reporting period. Denominator: Total number of referrals made to the specialty practice during the reporting period. Data Source: Reports generated by the Referral Management system, EHR and other administrative reports as needed.
 - b. Rationale/Evidence: A robust referral management department or clinic function can ensure that referrals are processed, reviewed and the patient's clinical issue addressed in a timely manner.
- P-4.2. Metric: Policy development for and staff training for utilization of Referral Management system
 - a. Number of staff trained on Referral Management System
 - b. Data Source: Number of FTEs/Written description for process of managing referrals into medical specialties
 - c. Rationale/Evidence: A robust referral management department or clinic function can ensure that referrals are processed, reviewed and the patient's clinical issue addressed in a timely manner
- P-5. Milestone: Provide reports on the number of days to process referrals and/or wait time from receipt of referral to actual referral appointment
- P-5.1. Metric: Generate and provide reports on average referral process time and/or time to appointment (to providers, staff, and referring physicians).
 - a. Numerator: Sum, for all referrals, of the number of days between when request for referral is received from referring provider and the referral appointment during the reporting period.
 - b. Denominator: Total number of referrals during the reporting period.
 - c. Data source: EHR, Referral Management system, Administrative records. (Generated Reports on file).
 - d. Rationale/Evidence: This measure allows for assessment of Referral Management System efficacy.
- P-6. Milestone: Develop and implement standardized referral and work-up guidelines
- P-6.1. Metric: Referral and work-up guidelines
 - a. Documentation of referral and work-up guidelines
 - b. Data Source: Referral and work-up policies and procedures documents
 - c. Rationale/Evidence: More standardized and extensive pre-visit workups and referral guidelines will help to ensure that (1) patients must meet a common criteria to require a specialty care visit (versus receiving treatment in the primary care setting); (2) patients are triaged by urgency/need to increase specialty care access to those who need it most; and (3) the work required prior to the visit is performed before the visit is scheduled, eliminating the occurrence of multiple, initial specialist visits
- P-7. Milestone: Complete a planning process/submit a plan to implement electronic referral technology (choose at least one metric):
 - P-7.1. Metric: Development of a staffing plan for referral system

- a. Data Source: Referral plan, describes the number and types and staff and their respective roles needed to implement the system.
- P-7.2. Metric: Development of an implementation plan for e-referral
 - a. Data Source: Referral plan, which describes the technical mechanisms needed to operate e-referral system.
- P-8. Milestone: Develop the technical capabilities to facilitate electronic referral
- P-8.1. Metric: Demonstrate technical mechanisms to be used to operate referral system are in place
 - a. Data Source: TBD by Performing Provider
 - b. Rationale/Evidence: In order to implement referral technology, other technical capabilities may need to be put in place first.
- P-9. Milestone: Implement referral technology and processes that enable improved and more streamlined provider communications
 - a. Documentation of referrals technology
 - b. Data Source: Referral system
 - c. Rationale/Evidence: According to a University of California at San Francisco (UCSF) report⁴⁰, access to specialists is a common barrier for primary care clinicians trying to deliver high-quality, coordinated care, especially when their patients are poor or uninsured. To offer the standard of care required by the patient-centered medical home model, clinicians must be able to tap into a "medical neighborhood" of specialists and hospitals to obtain timely consultations, diagnostic services, and needed treatments. The way many healthcare networks still communicate is through telephone, paper and fax, which creates process inefficiencies, inaccurate data and slow information updates.
- P-10. Milestone: Increase referral coordination resources for primary care and medical specialty clinics by developing and implementing bi-directional communication functionality in the system
- P-10.1. Metric: Number of primary care and medical specialty clinics that manage referrals utilizing the bi-directional communication function of the referral management system.

40 See A Safety-Net System Gains Efficiencies Through 'eReferrals' To Specialists report. Alice Hm Chen, Margot B. Kushel, Kevin Grumbach, and Hal F. Yee, Jr. <http://content.healthaffairs.org/cgi/content/extract/29/5/969>

- a. Numerator: Number of referrals into medical specialty clinics over a defined period of time that are managed utilizing the bi-directional communication function of the referral management system.
 - b. Denominator: Total number of referrals into medical specialty clinics over a defined period of time.
 - c. Data Source: Patient or electronic medical record that shows the bi-directional communication between primary and medical specialty clinics.
 - d. Rationale/Evidence: Enhanced communication about a patient's condition between primary care and medical specialty providers creates the opportunity for better coordinated care and also for the patient to be treated in the most appropriate clinical setting.
- P-11. Milestone: Launch/expand a specialty care clinic (e.g., pain management clinic)
- P-11.1. Metric: Establish/expand specialty care clinics
- a. Number of patients served by specialty care clinic
 - b. Data Source: Documentation of new/expanded specialty care clinic
 - c. Rationale/Evidence: Specialty care clinics improve access for targeted populations in areas where there are gaps in specialty care. Additionally, specialty care clinics allow for enhanced care coordination for those patients requiring intensive specialty services.
- P-12. Milestone: Implement a specialty care access plan to include such components as statement of problem, background and methods, findings, implication of findings in short and long term, conclusions
- P-12.1. Metric: Documentation of specialty care access plan
- a. Data Source: Documentation of Provider plan
 - b. Rationale/Evidence: TBD by Performing Provider.
- P-13. Milestone: Complete planning and installation of new specialty systems (e.g., imaging systems).
- P-13.1. Metric: Documentation of planning and installation of new systems
- a. Data Source: Documentation of specialty system implementation plan.
 - b. Rationale/Evidence: TBD by Performing Provider
- P-14. Milestone: Expand targeted specialty care (TSC) training (must include at least one of the following metrics):
- P-14.1. Metric: Expand the TSC residency, mid-level provider (physician assistants and nurse practitioners), and/or other specialized clinician/staff training programs and/or rotations
- a. Documentation of applications and agreements to expand training programs
 - b. Data Source: Training program documentation
 - c. Rationale/Evidence: Increasing TSC training may help improve access to targeted specialty services.
- P-14.2. Metric: Hire additional precepting TSC faculty members

- a. Number of additional training faculty/staff members
 - b. Data Source: HR documents, faculty lists, or other documentation
 - c. Rationale/Evidence: More faculty is needed to expand training programs.
- P-15. Milestone: Implement loan repayment program for TSC providers
- P-15.1. Metric: Loan repayment program documentation
- a. Number of TSC providers participating in loan repayment program.
 - b. Data Source: Program materials
 - c. Rationale/Evidence: Loan repayment programs can help to make TSC more attractive.
- P-16. Milestone: Obtain approval from the Accreditation Council for Graduate Medical Education (ACGME) to increase the number of TSC residents
- P-16.1. Metric: ACGME approval for residency position expansion
- a. Number of newly approved TSC residency slots
 - b. Data Source: Documentation of ACGME approval for residency position expansion
 - c. Rationale/Evidence: Increasing TSC training may help improve access to targeted specialty services.
- P-17. Milestone: Implement the re-design of medical specialty clinics in order to increase operational efficiency, shorten patient cycle time and increase provider productivity.
- P-17.1. Metric: Number of medical specialty clinics that have completed clinic redesign.
- a. Numerator: Average cycle time of appointments in medical specialty clinics that have undergone re-design.
 - b. Denominator: Overall average cycle time of appointments in all medical specialty clinics.
 - c. Data Source: Specialty clinic appointment tracking system.
 - d. Rationale/Evidence: Re-designing medical specialty clinics in order to shorten appointment cycle time and maximize provider productivity allows the most efficient utilization of specialty provider resources.
- P-18. Milestone: Analyze occurrence of unnecessary specialty clinic follow-up appointments that are a result of sub-optimal care coordination.
- P-18.1. Metric: Number of unnecessary specialty clinic follow-up appointments
- a. Number of encounters where patient receives services and does not see the provider.
 - b. Data Source: Chart review with protocol for determining unnecessary follow up visits
 - c. Rationale/Evidence: Well coordinated visits, specifically where the patient receives follow-up services (lab, pharmacy, diagnostics, etc.) as well as having follow-up with provider.
- P-19. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the

provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.

P-19.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.

- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-19.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.

- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

P-20. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.

P-20.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.

- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
- b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.

P-21. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.

P-21.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.

- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” for performance across all providers.

P-21.2. Metric: Implement the “raise the floor” improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-22. Milestone: Increase the number of specialist providers, clinic hours and/or procedure hours available for the high impact/most impacted medical specialties
- I-22.1. Metric: Increase number of specialist providers, clinic hours and/or procedure hours in targeted specialties
- a. Numerator: Number of specialist providers in targeted specialties over baseline or change in the number of specialist providers in targeted specialties
 - b. Denominator: Number of monthly or annual referrals into targeted medical specialties clinic or number of specialist providers in targeted specialties at baseline
 - c. Data Source: HR documents or other documentation demonstrating employed/contracted specialists
 - d. Rationale/Evidence: Increased number of specialists to meet demand and referral demand for in-person visits and procedures will allow patients to receive more timely services.
- I-23. Milestone: Increase specialty care clinic volume of visits and evidence of improved access for patients seeking services.
- I-23.1. Metric: Documentation of increased number of visits. Demonstrate improvement over prior reporting period (baseline for DY2).
- a. Total number of visits for reporting period
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.
- I-23.2. Metric: Documentation of increased number of unique patients, or size of patient panels. Demonstrate improvement over prior reporting period (baseline for DY2).
- a. Total number of unique patients encountered in the clinic for reporting period.
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.

- I-24. Milestone: Implement specialty care access programs (e.g., referral technologies)
- I-24.1. Metric: Number of primary care and medical specialty clinics with specialty care access programs
- a. Numerator: Number of primary care and medical specialty clinics with specialty care access programs
 - b. Denominator: Total number of primary and medical specialty clinics
 - c. Data Source: Written workflows of referral management processes, documentation of specialty care access program, documentation of utilization of specialty care access program in patient's paper or electronic medical record.
 - d. Rationale/Evidence: An intentional and well-designed specialty care access program can increase the opportunity for patients to receive timely care in the most appropriate setting.
- I-25. Milestone: Increase the number of referrals for the most impacted specialties that are reviewed and assigned into appropriate categories (i.e., urgent appointment, routine appointment, or e-consult)
- I-25.1. Metric: Proportion of referrals appropriately categorized
- a. Numerator: Number of referrals appropriately categorized
 - b. Denominator: Total number of referrals
 - c. Data Source: Referral management system, patient's paper or electronic medical record.
 - d. Rationale/Evidence: Reviewing and assigning referrals into categories by urgency as mutually agreed upon by primary and medical specialty providers enhances the likelihood that medical specialists are consistently seeing patients that most need their care in the shortest amount of time possible.
- I-26. Milestone: Reduce the rate of inappropriate or rejected referrals / or increase the rate of appropriate or accepted referrals
- I-26.1. Metric: Rate of Rejected/Accepted Primary Care Provider-Initiated Referrals to Specialty Care. This rate will be calculated on a quarterly basis and reported for most recent quarter.
- a. Numerator: Number of referrals from primary care providers to specialists that were rejected/accepted by specialists
 - b. Denominator: Total number of referrals made by primary care providers to specialists
 - c. Data Source: eReferral or other referrals system
 - d. Rationale/Evidence: Currently, specialty providers have very little ability to provide feedback to primary care providers prior to an appointment being scheduled. Therefore immediately after implementation of referral system improvements, we expect a significant number of referrals will be "rejected." As primary care providers become more familiar with the guidelines and receive more pre-visit guidance from the specialist, this rejection rate will start to decrease.

- I-27. Milestone: Patient satisfaction with specialty care services.
- I-27.1. Metric: Patient satisfaction scores: Average reported patient satisfaction scores, specific ranges and items to be determined by assessment tool scores. Demonstrate improvement over prior reporting period.
- a. Numerator: Sum of all survey scores,
 - b. Denominator: Number of surveys completed.
 - c. Data Source: CG-CAHPS⁴¹ or other developed evidence based satisfaction assessment tool, available in formats and language to meet patient population.
 - d. Rationale: Patient satisfaction with specialty care services is largely related to utilization of specialty care services. Understanding strengths, needs and receiving patient feedback allows for providers and staff to better understand how to tailor care delivery to meet their patients' needs.
- I-27.2. Metric: Percentage of patients receiving survey. Specifically, the percentage of patients that are provided the opportunity to respond to the survey. Demonstrate improvement over prior reporting period.
- a. Numerator: number of surveys distributed during the reporting period
 - b. Denominator: total number of specialty care visits during the reporting period
 - c. Data Source: Performing provider documentation of survey distribution, EHR
 - d. Rationale: Patient satisfaction with specialty care services is largely related to utilization of specialty care services. Understanding strengths, needs and receiving patient feedback allows for providers and staff to better understand how to tailor care delivery to meet their patients' needs.
- I-27.3. Metric: Survey response rate. Demonstrate improvement over prior reporting period (baseline for DY2).
- a. Numerator: number of survey responses
 - b. Denominator: total number of surveys distributed.
 - c. Data Source: CAHPS or other developed evidence based satisfaction assessment tool; Performing provider documentation of survey distribution, EHR
 - d. Rationale: Patient satisfaction with specialty care services is largely related to utilization of specialty care services. Understanding strengths, needs and receiving patient feedback allows for providers and staff to better understand how to tailor care delivery to meet their patients' needs.

41 http://www.ahrq.gov/cahps/clinician_group/

- I-28. Milestone: Reduce cycle times for specialty report
- I-28.1. Metric: Report dictation cycle time
- Time (in hours) between end of specialist visit and report dictation and inclusion in patient medical record, or accessible by referring provider.
 - Data Source: EHR
- I-28.2. Metric: Referring physician report review cycle time
- Time (in hours) between availability of specialist report and review by referring provider.
 - Data Source: EHR
- I-29. Milestone: Increase the number of referrals of targeted patients to the specialty care clinic
- I-29.1. Metric: Targeted referral rate
- Number of referrals of targeted patients
 - Data Source: Registry and/or paper documentation as designated by Performing Provider
 - Rationale/Evidence: Targeted patients are at high-risk of admissions and/or readmissions, and getting the patients to the specialty care clinics can help manage their conditions and therefore avoid unnecessary ED utilization, hospitalizations or readmissions.
- I-30. Milestone: Reduce the number of specialty clinics with waiting times for next routine appointment
- I-30.1. Metric: Next routine appointment of more than X calendar days and/or to no more than X of X specialty clinics or specialty practices
- Time to next available appointment; number of clinics with time to next available appointment greater than X
 - Data Source: Performing Provider appointment scheduling system
 - Rationale/Evidence: This measure addresses the accessibility of specialty care clinics.
- I-31. Milestone: Increase TSC training and/or rotations (must select one of the following metric):
- I-31.1. Metric: Increase the number of TSC residents and/or trainees, as measured by percent change of class size over baseline. Trainees may include physicians, mid-level providers (physician assistants and nurse practitioners), and/or other specialized clinicians/staff.
- Percent increase of TSC resident class size.
 - Data Source: Documented enrollment by class by year by TSC training program
 - Rationale/Evidence: As the goal is to increase the TSC workforce to better meet the need for TSC in the health care system by increasing training of the TSC workforce in Texas, the metric is a straightforward measurement of increased training.

- I-31.2. Metric: Increase the number of TSC trainees rotating at the Performing Provider's facilities
 - a. Number of TSC trainees in Performing Provider's facility
 - b. Data Source: Student/trainee rotation schedule
 - c. Rationale/Evidence: As the goal is to increase the TSC workforce to better meet the need for TSC in the health care system by increasing training of the TSC workforce in Texas, the metric is a straightforward measurement of increased training.

- I-31.3. Metric: Increase the number or percent of culturally-competent trainees eligible for existing Texas residency programs.
 - a. Number or percent of cultural competency program trainees that are eligible for residency programs.
 - b. Data Source: Cultural competency program records
 - c. Rationale/Evidence: Cultural competency training is integral to the success residency curriculums and should be promoted as best practice.

- I-31.4. Metric: Increase the number of TSC care residents and/or trainees, as measured by percent change of class size over baseline or by absolute number
 - a. Percent change of TSC care resident and/or trainees class size
 - b. Data Source: Documented enrollment by class by year by TSC training program
 - c. Rationale/Evidence: As the goal is to increase the TSC workforce to better meet the need for TSC in the health care system by increasing training of the TSC workforce in Texas, the metric is a straightforward measurement of increased training.

- I-32. Milestone: Recruit/hire more trainees/graduates to TSC positions in the Performing Provider's facilities or practices
 - I-32.1. Metric: Percent change in number of graduates/trainees accepting positions in the Performing Provider's facilities or practices over baseline
 - a. Number of TSC graduates accepting position in Performing Provider's facility.
 - b. Data Source: Documentation, such as HR documents compared to class lists
 - c. Rationale/Evidence: A measure of the success of the training program is how many graduates are choosing to practice in TSC at the Performing Provider's facilities.

- I-33. Milestone: Increase specialty care capacity using innovative project option. The following metrics are suggested for use with an innovative project option to increase specialty care capacity but are not required.
- I-33.1. Metric: Increase percentage of target population reached.
- a. Numerator: Number of individuals of target population reached by the innovative project.
 - b. Denominator: Number of individuals in the target population.
 - c. Data Source: Documentation of target population reached, as designated in the project plan.
 - d. Rationale/Evidence: This metric speaks to the efficacy of the innovative project in reaching its targeted population.
- I-33.2. Metric: Increased number of specialty care visits.
- a. Total number of visits for reporting period
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: This measures the increased volume of visits and is a method to assess the ability for the Performing Provider to increase capacity to provide care.
- I-33.3. Metric: Documentation of increased number of unique patients, or size of patient panels. Demonstrate improvement over prior reporting period.
- a. Total number of unique patients encountered in the clinic for reporting period.
 - b. Data Source: Registry, EHR, claims or other Performing Provider source

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- o Metric: Target population reached
- o Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- o Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- o Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- o Metric: Other program output measure as identified by the performing provider.

1.10 Enhance Performance Improvement and Reporting Capacity

Project Goal: To expand quality improvement capacity through people, processes and technology so that the resources are in place to conduct, report, drive and measure quality improvement.

The goal of this project is to implement process improvement methodologies to improve safety, quality, and efficiency. Providers may design customized initiatives based on various process improvement methodologies such as Lean, Six Sigma, Care Logistics, and Nurses Improving Care for Health system Elders (NICHE) among others.

The Lean methodology as applied to medicine evaluates the use of resources, measures the value to the patient, considers the use of resources in terms of their value to the patient, and eliminates those that are wasteful. Focus on Lean is especially valuable to safety net providers because of its emphasis on waste reduction. Denver Health a safety net hospital in Denver, Colorado has identified more than \$124 million in cost savings that the health system has achieved due to Lean Rapid Improvement Events since implementing Lean in 2005⁴². Using methodologies such as Lean that are proven to eliminate waste and redundancies and optimize patient flow, providers may customize a project that will develop and implement a program of continuous improvement that will increase communication, integrate system workflows, provide actionable data to providers and patients, and identify and improve models of patient-centered care that address issues of safety, quality, and efficiency. Implementation frequently requires a new “operational mindset” using tools such as Lean to identify and progressively eliminate inefficiencies while at the same time linking human performance, process performance and system performance into transformational performance in the delivery system.⁴³ The process improvement, as a further example, may include elements such as identifying the value to the patient, managing the patient’s journey, facilitating the smooth flow of patients and information, introducing “pull” in the patient’s journey (e.g. advanced access), and/or continuously reducing waste by developing and amending processes awhile at the same time smoothing flow and enhancing quality and driving down cost.⁴⁴

Rationale:

Performance improvement and reporting is a very large component of success of all of the project areas across the categories. The necessity for quality and safety improvement initiatives permeates health care.^{2,3} Quality health care is defined as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”³ (p. 1161). According to the Institute of Medicine (IOM) report, *To Err Is Human*,⁴⁵ the majority of medical errors result from faulty systems and processes, not individuals.

Processes that are inefficient and variable, changing case mix of patients, health insurance, differences in provider education and experience, and numerous other factors contribute to the complexity of

⁴² <http://denverhealth.org/LEANAcademy.aspx>

⁴³ Oujiri J, Ferrara C. “The Phoenix Project – Integrating Effective Disease Management Into Primary Care Using Lean Six-Sigma Tools.” *Duluth Clinic Presentation*. 2010.

⁴⁴ Bibby J. “Lean in Primary Care: The Basics – Sustaining Transformation.” *Asian Hospital and Healthcare Management* (2011) 18.

⁴⁵ Hughes RG. Tools and Strategies for Quality Improvement and Patient Safety. In: Hughes RG, editor. *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Apr. Chapter 44. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK2682/>

health care. With this in mind, the IOM also asserted that today's health care industry functions at a lower level than it can and should, and it put forth the following six aims of health care: effective, safe, patient-centered, timely, efficient, and equitable.³ The aims of effectiveness and safety are targeted through process-of-care measures, assessing whether providers of health care perform processes that have been demonstrated to achieve the desired aims and avoid those processes that are predisposed toward harm. The goals of measuring health care quality are to determine the effects of health care on desired outcomes and to assess the degree to which health care adheres to processes based on scientific evidence or agreed to by professional consensus and is consistent with patient preferences.

Because errors are caused by system or process failures, it is important to adopt various process-improvement techniques to identify inefficiencies, ineffective care, and preventable errors to then influence changes associated with systems. Each of these techniques involves assessing performance and using findings to inform change. This chapter will discuss strategies and tools for quality improvement—including failure modes and effects analysis, Plan-Do-Study-Act, Six Sigma, Lean, and root-cause analysis—that have been used to improve the quality and safety of health care.⁴⁶

Whatever the acronym of the method (e.g., TQM, CQI) or tool used (e.g., FMEA or Six Sigma), the important component of quality improvement is a dynamic process that often employs more than one quality improvement tool. Quality improvement requires five essential elements for success: fostering and sustaining a culture of change and safety, developing and clarifying an understanding of the problem, involving key stakeholders, testing change strategies, and continuous monitoring of performance and reporting of findings to sustain the change.

Project Options:

- 1.10.1 Enhance improvement capacity within people
Required core project components
 - a) Provide training and education to clinical and administrative staff on process improvement strategies, methodologies, and culture.
 - b) 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.
- 1.10.2 Enhance improvement capacity through technology
Required core project components
 - a) Provide training and education to clinical and administrative staff on process improvement strategies, methodologies, and culture.
 - b) 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.
 - c) Design data collection systems to collect real-time data that is used to drive continuous quality improvement (possible examples include weekly run charts or monthly dashboards)
- 1.10.3 Enhance improvement capacity within systems

⁴⁶ Hughes RG. Tools and Strategies for Quality Improvement and Patient Safety. In: Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Apr. Chapter 44. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK2682/>

Required core project components

- a) Provide training and education to clinical and administrative staff on process improvement strategies, methodologies, and culture.
- b) 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.

1.10.4 “Other” project option: Implement other evidence-based project to enhance performance improvement and reporting capacity in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project.

Note: All of the project options in project area 1.10 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Process Milestones:

- P-1. Milestone: Establish a performance improvement office to collect, analyze, and manage real-time data and to monitor the improvement trajectory and improvement activities across the Performing Provider’s delivery system
- P-1.1. Metric: Documentation of the establishment of performance improvement office
- a. Documentation of establishment of office
 - b. Data source: HR documents, office policies and procedures
 - c. Rationale/Evidence: Having an office responsible for performance improvement will increase organizational capacity to and demonstration organizational commitment to performance improvement activities ongoing.
- P-1.2. Metric: Documentation that the performance improvement office is engaged in collecting, analyzing, and managing real-time data (examples could include weekly run charts or monthly dashboards).
- a. Submission of performance improvement reports
 - b. Data Source: TBD by provider
 - c. Rationale/Evidence: Real time data collection and regular reporting to providers is critical to demonstrate the efficacy of improvement
- P-1.3. Metric: Documentation of quality improvement activities implemented by the performance improvement office (examples could include number of Rapid Improvement Events (RIE) with documentation of the participants in the RIE, the value-stream map produced by the team, description of the new process developed based on the value-stream map, and the results after implementation of the new process)

- a. Submission of performance improvement reports
 - b. Data Source: TBD by provider
 - c. Rationale/Evidence: Real time reporting of improvement activities and resulting improvement in patient care to providers is critical in building support and creating a culture of change within the organization.
- P-2. Milestone: Establish a program for trained experts on process improvements to mentor and train other staff, including front-line staff, for safety and quality care improvement. All staff trained in this program should be required to lead an improvement project in their department within 6 months of completing their training.
- P-2.1. Metric: Train the trainer program established
- a. Number of staff trained through the train the trainer program
 - b. Data Source: HR, training program materials (including documentation of the number of hours of training required).
 - c. Rationale/Evidence: Ongoing training throughout the organization in quality care improvement will increase capacity for quality improvement activities on an ongoing basis.
- P-2.2. Metric: Improvement projects led by staff trained through the train the trainer program
- a. Number of improvement projects led by staff trained through the train the trainer program within 6 months of completion of their training.
 - b. Data Source: Documentation of improvement projects
 - c. Rationale/Evidence: Newly trained staff should immediately implement their new improvement skills and contribute to quality improvement across the organization. This will solidify their skills and drive the entire organization on a more rapid trajectory of improvement.
- P-3. Milestone: Participate in statewide, regional, public hospital or national learning collaborative to drive targeted quality improvements. This should include collaboratives using clinical database(s) for standardized data sharing.
- P-3.1. Metric: Documentation of collaborative membership
- a. Submission of membership materials and description of activities related to provider participation.
 - b. Data Source: Collaborative membership materials
 - c. Rationale/Evidence: Participating in a collaborative has been shown to drive targeted and concerted quality improvement activities with the support of peers and the program.
- P-4. Milestone: Participate in/present to quality/performance improvement conferences, webinars, learning sessions or other venues
- P-4.1. Metric: Number of learning events attended and number of learning events at which a presentation was delivered summarizing the provider's improvement activities and results

- a. Submission of all learning event materials and description of activities related to provider
 - b. Data Source: Learning events' agendas, abstracts or materials related to provider's presentation
 - c. Rationale/Evidence: It is also important to share the learnings of quality improvement efforts – what worked and what did not work.
- P-5. Milestone: Enhance or expand the organizational infrastructure and resources to store, analyze and share the patient experience data and/or quality measures data, as well as utilize them for quality improvement
- P-5.1. Metric: Increased collection of patient experience and/or quality measures data
- a. Number of new quality measures and/or patient experience measures being collected
 - b. Data Source: Documentation of methodology for patient experience and or quality measures data collection and reporting.
 - c. Rationale/Evidence: It is important to accurately collect patient experience data and have the data in a format that can be analyzed in a way to draw meaningful and actionable conclusions.
- P-6. Milestone: Hire/train quality improvement staff in well-proven quality and efficiency improvement principles, tools and processes, such as rapid cycle improvement and/or data and analytics staff for reporting purposes (e.g., to measure improvement and trends)
- P-6.1. Metric: Increase Number of staff trained in quality and efficiency improvement principles
- a. Numerator: Number of staff trained
 - b. Denominator: Total number of staff
 - c. Data Source: HR, training programs
 - d. Rationale/Evidence: It is essential to have the resources in place and brainpower to drive performance improvement work.
- P-6.2 Metric: Increase number of data analysts hired who are responsible for collecting and analyzing real-time data to measure improvement and trends and to drive rapid-cycle performance improvement.
- a. Number of data analysts hired
 - b. Data Source: HR, job descriptions
 - c. Rationale/Evidence: It is essential to have individuals with the right technical expertise to collect and analyze the real-time data that is critical to driving performance improvement work.
- P-7. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
- P-7.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.

- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-7.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.
- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-8. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.
- P-8.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.
- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
 - b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.
- P-9. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.
- P-9.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.

- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” for performance across all providers.

P-9.2. Metric: Implement the “raise the floor” improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-7. Milestone: Implement quality improvement data systems, collection, and reporting capabilities
- I-7.1. Metric: Increase the number of reports generated through these quality improvement data systems
- a. Numerator: Number of reports generated
 - b. Data Source: Quality improvement data systems
 - c. Rationale/Evidence: It is important to accurately collect data on quality outcomes and patient experience as well as present the data in a format that can be analyzed in a way to draw meaningful and actionable conclusions. These reports should be generated monthly, if not more frequently, to measure the impact of improvement activities on the improvement goals/targets.
- I-7.2. Metric: Demonstrate how quality reports are used to drive rapid-cycle performance improvement.
- Number of performance activities that were designed and implemented based on the data in the reports.
- a. Data Source: Documentation from quality improvement office
 - b. Rationale/Evidence: It is important to use the data on quality outcomes and patient experience to design new processes and measure the results once these new processes are implemented in order to continuously improve the interventions over time.
- I-8. Milestone: Create a quality dashboard or scoreboard to be shared with organizational leadership and at all levels of the organization on a regular basis that includes outcome measures and patient satisfaction measures
- I-8.1. Metric: Submission of quality dashboard or scorecard
- a. Data Source: Quality improvement data systems
 - b. Rationale/Evidence: It is important to accurately collect patient experience and quality outcome data and have the data in a format that can be analyzed in a way to draw meaningful and actionable conclusions. Examples of dashboards that may be used include: (1) Clinical Dashboard: Nursing Unit Census, Current Patients for Emergency Room, Average Patient Length of Stay; (2) Hospital Dashboard: Admissions, Emergency Room Wait Times, Quarterly Income, Departmental Spending; (3) Patient Dashboard: Physician Dashboard: Number of Patients, Patient Satisfaction, Number of New Patients; or (4) Physician Dashboard: Number of Patients, Patient Satisfaction, Number of New Patients.
- I-8.2. Metric: Demonstration of how quality dashboard is used to drive rapid-cycle performance improvement
- a. Number of performance activities that used data from the dashboard or scoreboards to inform design and implementation of a process improvement.
 - b. Data Source: Documentation from quality improvement office
 - c. Rationale/Evidence: It is important to use the data on quality outcomes and patient experience to design new processes and measure the

results once these new processes are implemented in order to continuously improve the interventions over time.

- I-9. Milestone: Demonstrated improvement in X number of selected quality measures
 - I-9.1. Metric: Improvement in selected quality measures
 - a. Numerator: Number of quality measures showing improvement
 - b. Denominator: Total number of quality measures captured
 - c. Data source: Quality improvement data systems
 - d. Rationale/Evidence: It is important to accurately collect real-time data on quality outcomes and patient experience and have the data in a format that can be analyzed in a way to draw meaningful and actionable conclusions.

- I-10. Milestone: Enhance performance improvement and reporting capacity. The following metrics are suggested for use with an innovative project option to enhance performance improvement and reporting capacity but are not required.
 - I-10.1. Metric: Increase the number of reports generated through these quality improvement data systems
 - a. Number of reports generated
 - b. Data Source: Quality improvement data systems
 - c. Rationale/Evidence: It is important to accurately collect patient experience and quality outcome data and have the data in a format that can be analyzed in a way to draw meaningful and actionable conclusions.

 - I-10.2. Metric: Demonstrate how quality reports are used to drive rapid-cycle performance improvement.
 - a. Number of performance activities that were designed and implemented based on the data in the reports.
 - b. Data Source: Documentation from quality improvement office
 - c. Rationale/Evidence: It is important to use the data on quality outcomes and patient experience to design new processes and measure the results once these new processes are implemented in order to continuously improve the interventions over time.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
 - I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
 - a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

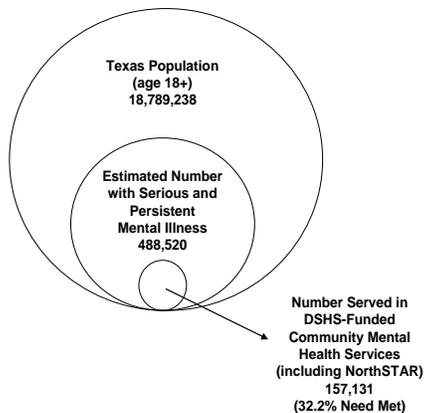
- Metric: Target population reached
- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development.
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.

CATEGORY 1: BEHAVIORAL HEALTH INFRASTRUCTURE PROJECTS

GOAL: Improve the infrastructure for delivery of mental health and substance use disorder (AKA behavioral health) services.

The goals of infrastructure-related mental health and substance use disorder (behavioral health) projects are to improve the access to appropriate behavioral health interventions and specialists throughout Texas. This is an especially critical need in Texas for several reasons:

- State funding for behavioral health indigent care is limited. Texas ranks 50th in per capita funding for state mental health authority (DSHS) services and supports for people with serious and persistent mental illness and substance use disorders. Medically indigent individuals who are not eligible for Medicaid have no guarantee of access to needed services and may face extended waiting periods.
- Texas ranks highest among states in the number of uninsured individuals per capita. One in four Texans lack health insurance. People with behavioral health disorders are disproportionately affected. For example, 60 percent of seriously mentally ill adults served in the public mental health system are uninsured.⁴⁷



- The supply of behavioral health care providers is inadequate in most of the State. In April of 2011, 195 (77%) of Texas' 254 counties held federal designations as whole county Health Provider Shortage Areas (HPSAs). This is an increase from the 183 counties designated in 2002.⁴⁸

Projects / project elements under this heading are designed to increase the supply of behavioral health professionals practicing in the State, extend the capacity of behavioral health providers to offer expertise to other health care providers, such as primary care physicians and enhance the capacity of behavioral health and other providers to

effectively serve patients with behavioral health conditions. Examples of such projects could include training and residency programs for behavioral health providers, programs which expand access to certified peer support services, telehealth consultation programs in which behavioral health providers offer timely expertise to primary care providers and extended clinic hours / mobile clinics.

⁴⁷ DSHS Decision Support, 2012

⁴⁸ "Highlights: The Supply of Mental Health Professionals in Texas -2010", Texas Department of State Health Services Center for Health Statistics, E-Publication No. E25-12347. Accessed at: <http://www.dshs.state.tx.us/chs/hprc/publicat.shtm>

1.11 Implement technology-assisted services (telehealth, telemonitoring, telementoring, or telemedicine) to support, coordinate, or deliver behavioral health services

Project Goal:

Texas faces several access barriers that make the deployment of workable integrated health care models a challenge. Specifically, Texas is composed of 254 counties, the majority of which can be classified as either “rural” or “frontier”. The availability of health care providers is severely limited in many of these sparsely populated areas. While these shortages make access to physical healthcare difficult for those who reside in these rural areas, the impact on individuals with behavioral health needs is even more severe. For example, in 2009, 171 Texas counties did not have a psychiatrist, 102 counties did not have a psychologist, 40 counties did not have a social worker and 48 counties did not have a licensed professional counselor.

There are 195 Texas counties (77% of all Texas counties) that have been designated by the Health Resources and Services Administration (HRSA) as Health Professional Shortage Areas (HPSAs) in relation to behavioral health. Furthermore, certain specialties (such as Child Psychiatrists) are virtually non-existent in the vast majority of the rural and frontier areas of the state.

Additionally, the size of the state makes travel from these underserved areas to larger urban settings difficult. For individuals who lack reliable transportation or have disabilities that restrict driving, the challenge of accessing health care may be virtually insurmountable.

Furthermore, there are many non-rural areas of the state where the availability of health care professionals is greatly limited. For example, in Bexar county, which has one of the largest urban populations in Texas, there are 123 areas within the county that have been designated as HPSAs by HRSA. Similar shortages can be found in most Texas urban counties.

Modern communications technology holds the greatest promise of bridging the gap between medical need in underserved areas and the provision of needed services. The developments in internet-based communications that began with voice messaging have been extended to video in the form of widely available video compression technologies that allow for high quality, real time, face-to-face communications and consultations over relatively inexpensive telecommunications equipment. With this new technology, in any area of the state where high speed broadband internet access is available, access to many forms of health care can become a reality. To leverage the promise of this new technology, Texas would like to expand the use of telemedicine, telehealth, and telemonitoring to thereby increase access to, and coordination of, physical and behavioral healthcare.

Televideo technology can be used to provide a variety of what have been referred to as “Telemental Health” services. These services may include mental health assessments, treatment, education, monitoring, mentoring and collaboration. These services may be used in a variety of locations (schools, nursing facilities, and even in homes) in any geographical location where traditional service providers are in short supply. Providers can include psychiatrists, nurse practitioners, physician assistants, social workers, pharmacists, psychologists, counselors, PCPs, and nurses. For example, telemental health could be used to provide follow-up outpatient consults with a psychiatrist or other mental health professional within 7 or 30 days of discharge from the inpatient hospital. These virtual follow-up visits could focus on monitoring for remission of symptoms, adjusting psychotropic medications, and developing a treatment plan to prevent readmissions in partnership with the primary care provider. Telemental services could also be used to provide medication management services to community

mental health patients with severe mental illness to ensure appropriate medication treatment and compliance, preventing psychiatric crises which would require psychiatric hospitalization.

The use of telemedicine could provide direct video access to a psychiatrist while the use of telementoring would provide a General Practitioner with access to consultation with psychiatrists with expertise in managing complex medication regimens. Additionally, telehealth could provide direct access to Cognitive Behavioral Therapy and other evidence-based counseling protocols that have proven to be effective in addressing major depression, trauma, and even schizophrenia in some populations.

Telecommunications technology can also be used to foster peer support and mentoring efforts among providers and among consumers (e.g., support groups, peer mentors).

For example, The University of New Mexico has successfully utilized a telementoring program (Project ECHO) to successfully train and provide ongoing support to Primary Care Physicians (PCPs) who provide care to persons with addiction. This initiative provides weekly didactic sessions as well as case presentations to address challenging clinical cases and get feedback from specialists based at the University and from colleagues around the state.⁴⁹

Project Options:

- 1.11.1 Procure and build the infrastructure needed to pilot or bring to scale a successful pilot of the selected forms of service in underserved areas of the state (this must be combined with one of the two interventions below).
Required core project components:
 - a) Identify existing infrastructure for high speed broadband communications technology (such as T-3 lines, T-1 lines) in rural, frontier, and other underserved areas of the state;
 - b) Assess the local availability of and need for video communications equipment in areas of the state that already have (or will have) access to high speed broadband technology.
 - c) Assess applicable models for deployment of telemedicine, telehealth, and telemonitoring equipment.
- 1.11.2 Implement technology-assisted behavioral health services from psychologists, psychiatrists, substance abuse counselors, peers and other qualified providers).
Required core project components:
 - a) Develop or adapt administrative and clinical protocols that will serve as a manual of technology-assisted operations.
 - b) Determine if a pilot of the telehealth, telemonitoring, telementoring, or telemedicine operations is needed. Engage in rapid cycle improvement to evaluate the processes and procedures and make any necessary modifications.
 - c) Identify and train qualified behavioral health providers and peers that will connect to provide telemedicine, telehealth, telementoring or

⁴⁹ Project ECHO: a model for expanding access to addiction treatment in a rural state
Miriam Komaromy, MD, 2010.

telemonitoring to primary care providers, specialty health providers (e.g., cardiologists, endocrinologists, etc.), peers or behavioral health providers. Connections could be provider to provider, provider to patient, or peer to peer.

- d) Identify modifiers needed to track encounters performed via telehealth technology
 - e) Develop and implement data collection and reporting standards for electronically delivered services
 - f) Review the intervention(s) impact on access to specialty care and identify “lessons learned,” opportunities to scale all or part of the intervention(s) to a broader patient population, and identify key challenges associated with expansion of the intervention(s), including special considerations for safety-net populations.
 - g) Scale up the program, if needed, to serve a larger patient population, consolidating the lessons learned from the pilot into a fully-functional telehealth, telemonitoring, telementoring, or telemedicine program. Continue to engage in rapid cycle improvement to guide continuous quality improvement of the administrative and clinical processes and procedures as well as actual operations.
 - h) Assess impact on patient experience outcomes (e.g. preventable inpatient readmissions)
- 1.11.3 “Other” project option: Implement other evidence-based project to implement technology-assisted services to support, coordinate, or deliver behavioral health services in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project.

Note: All of the project options in project area 1.11 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Process Milestones:

- P-1. Milestone: Identify Texas counties having availability of high speed broadband communications lines.
 - P-1.1. Metric: Documentation of assessment of counties that identifies areas of the state that have or lack capacity for high speed broadband connections capable of supporting telemedicine, telehealth, telementoring, and telemonitoring
 - a. Data source: Results of the assessment Rationale/Evidence: See project goal.
- P-2. Milestone: Establish the number of providers and / or peer specialists in underserved areas that have or do not have telecommunications equipment / software that can be used to provide telemedicine, telehealth, telementoring or telemonitoring services.

Further, determine the number of providers or peer specialists that would make use of such equipment / software if it were made available.

- P-2.1. Metric: Survey of providers / peer organizations to identify need for and willingness to use advanced telecommunications equipment in the delivery or telemedicine, telehealth, telementoring, or telemonitoring.
 - a. Data source: Provider / peer responses to the survey.
 - b. Rationale/Evidence: See project goal.

- P-3. Milestone: Evaluate effective and efficient models for the delivery of telehealth, telemedicine, telementoring, and telemonitoring.
 - P-3.1. Metric: Examine existing technology and models as well as information from leading providers of telemedicine, telehealth, telementoring, and telemonitoring services.
 - a. Data source: Information from literature and interviews of leading providers of these services.
 - b. Rationale/Evidence: See project goal.

- P-4. Milestone: Procurement of telehealth, telemedicine, telementoring, and telemonitoring equipment
 - P-4.1. Metric: Inventory of new equipment purchased
 - a. Data Source: Review of inventory or receipts for purchase of equipment
 - b. Rationale/Evidence: See project goal.

- P-5. Milestone: Procurement of Broadband Connection
 - P-5.1. Metric: Documentation of presence of active broadband connection
 - a. Data Source: Review of purchase receipt or demonstration of equipment
 - b. Rationale/Evidence: See project goal.

- P-6. Milestone: Establishment of the Remote Site Locations where equipment /software will be available to consumers
 - P-6.1. Metric: Documentation of completion of site acquisition
 - a. Data Source: Purchase, lease, grant, or rental agreement
 - b. Rationale/Evidence: See project goal.

- P-7. Milestone: Hiring of tele-presenters, as needed, for remote site equipment operation.
 - P-7.1. Metric: Documentation of acquisition of proper staff / training to operate equipment at remote locations
 - a. Data Source: Interviews with staff, review of hiring or payroll records
 - b. Rationale/Evidence: See project goal.

- P-8. Milestone: Training for providers / peers on use of equipment / software
 - P-8.1. Metric: Documentation of completions of training on use of equipment / software
 - a. Data Source: Training roster.
 - b. Rationale/Evidence: See project goal.

- P-9. Milestone: Development of manual of telemedicine or telehealth operations with administrative protocols and clinical guidelines.
- P-9.1. Metric: Documentation of completion of manual and of use of manual in training sessions of providers/peers.
- a. Data Source: Operations manual with written protocols and guidelines
- P-10. Milestone: Evaluate and continuously improve telemedicine, telehealth, or telemonitoring service
- P-10.1. Metric: Project planning and implementation documentation that describes plan, do, study act quality improvement cycles
- a. Project reports including examples of how real-time data is used for rapid-cycle improvement to guide continuous quality improvement (i.e. how the project continuously uses data such as weekly run charts or monthly dashboards to drive improvement). Project reports also include output measures which describe the number and type of telemental transactions which occur.
- P-11. Milestone: Individuals residing in underserved areas that have used telemedicine, telehealth, telementoring, and / or telemonitoring services for treatment of mental illness or alcohol and drug dependence.
- P-11.1. Metric: NX% increase in number of individuals residing in underserved areas of the health partnership region who have used telemedicine, telehealth and telemonitoring services for treatment of mental illness or alcohol and drug dependence.
- a. Numerator: Number of individuals residing in underserved areas that have used telemedicine, telehealth, telementoring, and / or telemonitoring services for treatment of mental illness or substance use disorders
 - b. Denominator: Number of individuals residing in underserved areas of the health partnership region who have received treatment for mental illness or substance use disorders.
 - c. Data Source: Encounter and Claims data (based on coding modifiers (e.g. HCPCs level II Modifiers)...
 - d. Rationale/Evidence: See project goal.
- P-12. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
- P-12.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.

- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-12.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.
- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-13. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.
- P-13.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.
- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
 - b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.
- P-14. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.
- P-14.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.

- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” for performance across all providers.

P-14.2. Metric: Implement the “raise the floor” improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- c. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- d. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-15. Milestone: Satisfaction with telemental services
- I-15.1. Metric: XX # % of consumer, peer and provider surveys indicate satisfaction with telemental services
- a. Numerator: Number of patients, peers and providers reporting satisfaction
 - b. Denominator: Number of patients, peers and providers surveyed
 - c. Data Source: Satisfaction survey results.
 - d. Rationale/Evidence: See project goal.
- This would be measured at baseline and various points during the project to measure satisfaction.
- I-16. Milestone: Adherence to antipsychotics for individuals with schizophrenia who have used telemedicine, telehealth, and/or telemonitoring services (based on Medicaid Adult Core Measure/NQF# 1879).
- I-16.1. Metric: X% of individuals with schizophrenia receiving telemental services who are prescribed an antipsychotic medication that had a Proportion of Days Covered (PDC) for antipsychotic medications greater or equal to 0.8 during the measurement period (12 consecutive months).
- a. Numerator: Individuals with schizophrenia who filled at least two prescriptions for any oral antipsychotic medication and have a Proportion of Days Covered (PDC) for antipsychotic medications of at least 0.8.
 - b. Denominator: Individuals at least 18 years of age as of the end of the measurement period with schizophrenia with at least two claims for an antipsychotic during the measurement period (12 consecutive months) who used telehealth, telemedicine, or telemonitoring services.
 - c. Data Source: Claims and Encounter data
- I-17. Milestone: Anti-depressant medication management
Description: Anti-depressant medication management over six months or Major Depressive Disorder anti-depressant medication during acute phase over 12 weeks (NQF# 0105)
- I-17.1. Metric: The percentage of individuals 18 years of age and older receiving telemental who were diagnosed with a new episode of major depression and treated with antidepressant medication, and who remained on an antidepressant medication treatment:
- a. Numerator:
 - Effective Acute Phase Treatment: The number of individuals receiving telemental services with at least 84 days (12 weeks) of continuous treatment with antidepressant medication during the 114-day period following the Inpatient Service Day (IPSD) (inclusive).
 - Effective Continuation Phase Treatment: The number of individuals receiving telemental services with at least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-D) during the 231-day period following the IPSD (inclusive).

- b. Denominator: The number of individuals receiving telemental services who are diagnosed with a New Episode of major depression and treated with antidepressant medication.
 - c. Data Source: Claims and Encounter Data
 - d. Rationale/Evidence: See project goal.

- I-17.2. Metric: Percentage of individuals 18 years of age and older receiving telemental services who are treated for bipolar disorder with evidence of level-of-function evaluation at the time of the initial assessment and again within 12 weeks of initiating treatment (NQF# 0112)
 - a. Numerator: Level of functioning of individuals 18 years of age and older treated for bipolar disorder receiving telemental services
 - b. Denominator: individuals 18 years of age and older receiving telemental services with an initial or new episode of bipolar disorder
 - c. Data Source: Standardized Instruments (e.g. SOFAS, GARF, GAF, WASA), patient self-report, clinician assessment.
 - d. Rationale/Evidence: See project goal.

- I-17.3. Other metrics measuring mental illness as endorsed by the National Quality Forum or other nationally recognized sources.

- I-18. Milestone: Improve access to substance abuse treatment for individuals residing in underserved areas that have used telemedicine, telehealth, and/or telemonitoring services.
 - I-18.1. Metric: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: (a) Initiation, (b) Engagement for individuals with alcohol or other drug dependence who have used telemedicine, telehealth, and/or telemonitoring services (based on PQRS#305 and NQF#0004)
 - I-18.2. Metric: Percentage of adolescent and adult patients with a new episode of alcohol or other drug (AOD) dependence who initiate treatment through an outpatient telehealth or telemedicine visit within 14 days of the diagnosis and who initiated treatment AND who had two or more additional services with an AOD diagnosis within 30 days of the initial visit
 - a. Numerator: Patients who initiated treatment within 14 days of the initial diagnosis of AOD or intervention for AOD AND had two or more additional services with an AOD diagnosis within 30 days of the initial telemedicine or telehealth visit.
 - b. Denominator: Patients aged 13 years and older with a new episode of alcohol and other drug (AOD) dependence who are referred for telemedicine, telehealth, or telemonitoring services.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]

- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
 - a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- Metric: Target population reached
- Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development.
- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.

1.12 Enhance service availability (i.e., hours, locations, transportation, mobile clinics) of appropriate levels of behavioral health care

Project Goal

Positive healthcare outcomes are contingent on the ability of the patient to obtain both routine examinations and healthcare services as soon as possible after a specific need for care has been identified. However, many Texans are unable to access either routine services or needed care in a timely manner either because they lack transportation or because they are unable to schedule an appointment due to work scheduling conflicts (or school scheduling conflicts in the case of children) or because they have obligations to provide care for children or elderly relatives during normal work hours. While such barriers to access can compromise anyone's ability to make or keep scheduled appointments, individuals with behavioral health needs may be especially negatively affected. Many individual with behavioral health needs are reticent to seek treatment in the first place and such barriers may be sufficient to prevent access entirely. Others may be easily discouraged by such barriers and may drop out of treatment. Any such delay in accessing services or any break or disruption in services may result in functional loss and the worsening of symptoms. These negative health outcomes come at great personal cost to the individual and also result in increased costs to payers when care is finally obtained.

In order to mitigate the effects of these barriers to accessing care, Texas proposes to take specific steps to broaden access to care that will include an expansion of operating hours in a select number of clinics, an expansion of community-based service options (including the development of mobile clinics), and an expanded transportation program that will support appointments that are scheduled outside of normal business hours.

Project Options:

- 1.12.1 Establish extended operating hours at a select number of Local Mental Health Center clinics or other community-based settings in areas of the State where access to care is likely to be limited.
Required core project component:
- a) Evaluate existing transportation programs and ensure that transportation to and from medical appointments is made available outside of normal operating hours. If transportation is a significant issue in care access, develop and implement improvements as part of larger project.
 - b) Review the intervention(s) impact on access to behavioral health services and identify "lessons learned," opportunities to scale all or part of the intervention(s) to a broader patient population, and identify key challenges associated with expansion of the intervention(s), including special considerations for safety-net populations.
- 1.12.2 Expand the number of community based settings where behavioral health services may be delivered in underserved areas
- 1.12.3 Develop and staff a number of mobile clinics that can provide access to care in very remote, inaccessible, or impoverished areas of Texas.
- 1.12.4 "Other" project option: Implement other evidence-based project to enhance service availability of appropriate levels of behavioral health care in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the "Other" project option may select among the process and improvement milestones specified in this project area or

may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project.

Process Milestones

- P-1. Milestone: Identify areas which lack sufficient transportation to appointments and extended operating hours
- P-1.1. Metric: Assessment of gaps in accessibility to establish / prioritize geographic areas for intervention
- a. Data Source: Survey of inpatient and outpatient providers; interviews with key stakeholders; Clinic records regarding kept and missed appointments
- P-2. Milestone: Identify licenses, equipment requirements and other components needed to implement and operate options selected.
- P-2.1. Metric: Develop a project plan and timeline detailing the operational needs, training materials, equipment and components
- Research existing regulations pertaining to the licensure requirements of psychiatric clinics in general to determine what requirements must be met.
 - When required, obtain licenses and operational permits as required by the state, county or city in which the clinic will operate.
 - (For mobile clinics) In consultation with medical professionals, determine the specific types of equipment and internal infrastructure that should be available in a mobile behavioral health clinic.
 - (For mobile clinics) develop specific training materials for staff members. Examples of training could include travel and road safety, clinic operations, evidence based behavioral health practices, engagement and outreach strategies.
- a. Data Source: Project Plan
- P-3. Milestone: Develop administrative protocols and clinical guidelines for projects selected (i.e. protocols for a mobile clinic or guidelines for a transportation program).
- P-3.1. Metric: Manual of operations for the project detailing administrative protocols and clinical guidelines
- a. Data Source: Administrative protocols; Clinical guidelines
- P-4. Milestone: Hire and train staff to operate and manage projects selected.
- P-4.1. Metric: Number of staff secured and trained
- a. Data Source: Project records; Training curricula as develop in P-2
- P-5. Milestone: Establish extended hours, transportation and / or mobile clinic options
- P-5.1. Metric: Number of areas prioritized for intervention with options in operation
- a. Number of patients served in these options
- P-6. Milestone: Establish behavioral health services in new community-based settings in underserved areas.

- P-6.1. Metric: Number of new community-based settings where behavioral health services are delivered
 - a. Number of patients served at these new community-based sites
- P-7. Milestone: Evaluate and continuously improve services
 - P-7.1. Metric: Project planning and implementation documentation demonstrates plan, do, study act quality improvement cycles
 - a. Data Source: Project reports including examples of how real-time data is used for rapid-cycle improvement to guide continuous quality improvement (i.e. how the project continuously uses data such as weekly run charts or monthly dashboards to drive improvement)
- P-8. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
 - P-8.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.
 - a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
 - P-8.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.
 - a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-9. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.
 - P-9.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.

- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
 - b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.
- P-10. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.
- P-10.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.
- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" for performance across all providers.
- P-10.2. Metric: Implement the "raise the floor" improvement initiatives established at the semiannual meeting.
- a. Data Source: Documentation of "raise the floor" improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the "raise the floor" improvement initiative after the semiannual meeting.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" and "raise the bar" for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]
- P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
 - b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- Metric: Community or population outreach and marketing, staff training, implement intervention.
- Metric: Evaluate intervention, modify intervention as appropriate, develop policies/ procedures, and share lessons learned

Improvement Milestones:

- I-11. Milestone: Increased utilization of community behavioral healthcare
- I-11.1. Metric: Percent utilization of community behavioral healthcare services.
- a. Numerator: Number receiving community behavioral healthcare services from mobile clinics after access expansion
 - b. Denominator: Number of people receiving community behavioral health services after access expansion.
 - c. Data source: Claims data and encounter data from community behavioral health sites and expanded transportation programs.
- I-12. Milestone: Use of Emergency Department Care by individuals with mental illness or substance use disorders.
- I-12.1. Metric: X Percent decrease in inappropriate utilization of Emergency Department.
- a. Numerator: total number of individuals receiving services through mobile clinics or expanded access sites who inappropriately use emergency department.
 - b. Denominator: total number of individuals receiving services through mobile clinics or expanded access sites
 - c. Data Source; Claims data and encounter data from ED and expanded access or mobile clinic sites
 - d. Rationale: see project description.
- I-13. Milestone: Adherence to scheduled appointments.
- I-13.1. Metric: X% Decrease in the number of canceled or no-show appointments.
- a. Numerator: number of canceled or “no-show” appointments for individuals receiving services through mobile clinics or expanded access sites
 - b. Denominator: number of individuals receiving services through mobile clinics or expanded access sites.
Note: This would be measured at specified time intervals throughout the project to determine if there was a decrease.
 - c. Data Source: Clinical records from mobile clinics or expanded access sites

- I-14. Milestone: Improved Consumer satisfaction with Access
- I-14.1. Metric: X% of people reporting satisfaction with access to care
- a. Numerator: The number of individuals receiving services through mobile clinics or expanded access sites that have expressed satisfaction with services.
 - b. Denominator: The number of individuals receiving services through mobile clinics or expanded access sites
 - c. Data Source: Survey data from CAHPS, MHSIP or other validated instrument; Data from completed consumer satisfaction surveys.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

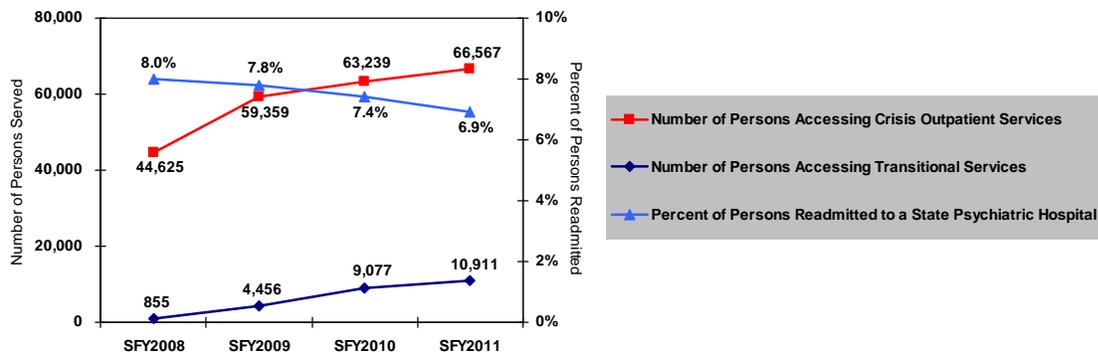
- o Metric: Target population reached
- o Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development.
- o Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- o Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- o Metric: Other program output measure as identified by the performing provider.

1.13 Development of behavioral health crisis stabilization services as alternatives to hospitalization.

Project Goal

When a consumer lacks appropriate behavioral health crisis resolution mechanisms, first responders are often limited in their options to resolve the situation. Sometimes the choice comes down to the ER, jail or an inpatient hospital bed. Crisis stabilization services can be developed that create alternatives to these less desirable settings. Building on existing systems, communities can develop crisis alternatives such as sobering units, crisis residential settings and crisis respite programs with varying degrees of clinical services based on the needs of clients. While hospitalization provides a high degree of safety for the person in crisis, it is very expensive and is often more than what is needed to address the crisis. Community-base crisis alternatives can effectively reduce expensive and undesirable outcomes, such as preventable inpatient stays. For example, state psychiatric hospital recidivism trended downward coincident with implementation of crisis outpatient services in some Texas communities. The percent of persons readmitted to a Texas state psychiatric hospital within 30 days decreased from 8.0% in SFY2008 (before implementation of alternatives) to 6.9% in SFY2011.⁵⁰

Figure 2. Number of persons accessing crisis outpatient services and transitional services at DSHS-funded community mental health centers compared to percent of persons readmitted to a state psychiatric hospital within 30 days, SFY2008-2011.



Project Options

1.13.1 Develop and implement crisis stabilization services to address the identified gaps in the current community crisis system

Required core project components:

- a) Convene community stakeholders who can support the development of crisis stabilization services to conduct a gap analysis of the current community crisis system and develop a specific action plan that identifies specific crisis stabilization services to address identified gaps (e.g. for example, one community with high rates of incarceration and/or ED visits for intoxicated patients may need a sobering unit while another community

⁵⁰ Behavioral Health NEWS BRIEF Vol. 7 Issue 3 - May 25, 2012 , http://www.dshs.state.tx.us/sa/_BHNb/

with high rates of hospitalizations for mild exacerbations mental illness that could be treated in community setting may need crisis residential programs).

- b) Analyze the current system of crisis stabilization services available in the community including capacity of each service, current utilization patterns, eligibility criteria and discharge criteria for each service.
 - c) Assess the behavioral health needs of patients currently receiving crisis services in the jails, EDs, or psychiatric hospitals. Determine the types and volume of services needed to resolve crises in community-based settings. Then conduct a gap analysis that will result in a data-driven plan to develop specific community-based crisis stabilization alternatives that will meet the behavioral health needs of the patients (e.g. a minor emergency stabilization site for first responders to utilize as an alternative to costly and time consuming Emergency Department settings)
 - d) Explore potential crisis alternative service models and determine acceptable and feasible models for implementation.
 - e) Review the intervention(s) impact on access to and quality of behavioral health crisis stabilization services and identify “lessons learned,” opportunities to scale all or part of the intervention(s) to a broader patient population, and identify key challenges associated with expansion of the intervention(s), including special considerations for safety-net populations
- 1.13.2 “Other” project option: Implement other evidence-based project to develop behavioral health crisis stabilization services in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project.

Note: All of the project options in project area 1.13 should include a component to conduct quality improvement for the project using methods such as rapid cycle improvement. Activities may include, but are not limited to, identifying project impacts, “lessons learned,” opportunities to scale all or part of the project to a broader patient population, and key challenges associated with expansion of the project, including special considerations for safety-net populations.

Process Milestones:

- P-1. Milestone: Conduct stakeholder meetings among consumers, family members, law enforcement, medical staff and social workers from EDs and psychiatric hospitals, EMS, and relevant community behavioral health services providers.
 - P-1.1. Metric: Number of meetings and participants.
 - a. Data Source: Attendance lists
- P-2. Milestone: Conduct mapping and gap analysis of current crisis system.
 - P-2.1. Metric: Produce a written analysis of community needs for crisis services.
 - a. Data Source: Written plan
- P-3. Milestone: Develop implementation plans for needed crisis services.

- P-3.1. Metric: Produce data-driven written action plan for development of specific crisis stabilization alternatives that are needed in each community based on gap analysis and assessment of needs.
 - a. Data Source: Written plan

- P-4. Milestone: Hire and train staff to implement identified crisis stabilization services.
 - P-4.1. Metric: Number of staff hired and trained.
 - a. Staff rosters and training records
 - b. Data Source: Training curricula

- P-5. Milestone: Develop administration of operational protocols and clinical guidelines for crisis services.
 - P-5.1. Metric: Completion of policies and procedures.
 - a. Data Source: Internal policy and procedures documents and operations manual.

- P-6. Milestone: Evaluate and continuously improve crisis services
 - P-6.1. Metric: Project planning and implementation documentation demonstrates plan, do, study act quality improvement cycles
 - a. Data Source: Project reports include examples of how real-time data is used for rapid-cycle improvement to guide continuous quality improvement (i.e. how the project continuously uses data such as weekly run charts or monthly dashboards to drive improvement)

- P-7. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
 - P-7.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.
 - a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.

 - P-7.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.

- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-8. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.
- P-8.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.
- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
 - b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.
- P-9. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.
- P-9.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.
- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" for performance across all providers.
- P-9.2. Metric: Implement the "raise the floor" improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]
- P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
 - b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- o Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- o Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- o Metric: Community or population outreach and marketing, staff training, implement intervention.
- o Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

- I-10. Milestone: Criminal Justice Admissions/Readmissions
- I-10.1. Metric: X% decrease in preventable admissions and readmissions into Criminal Justice System;
- a. Numerator: The number of individuals receiving crisis stabilization who had a potentially preventable readmission to a criminal justice setting (e.g. jail, prison, etc.) within the measurement period.
 - b. Denominator: The number of individuals receiving crisis stabilization. This would be measured at specified time intervals throughout the project to determine if there was a decrease.
 - c. Data Source: Criminal justice system records, and data from local crisis stabilization sites.

- I-11. Milestone: Costs avoided by using lower cost crisis alternative settings
- I-11.1. Metric: Costs avoided by comparing utilization of lower cost alternative settings with higher cost settings such as ER, jail, hospitalization.
- a. Numerator: Cost of services for individuals using the crisis alternative settings.
 - b. Denominator: Total cost for crisis care to individuals in the regional partnership study area.
 - c. Data Source: Claims, encounters and service event data from ER, forensic records, communality mental health uniform assessment data
- I-12. Milestone: Utilization of appropriate crisis alternatives
- I-12.1. Metric: X% increase in utilization of appropriate crisis alternatives.
- a. Numerator: Number of people receiving community behavioral healthcare services from appropriate crisis alternatives
 - b. Denominator: Number of people receiving community behavioral health services in RHP project sites.
This would be measured at specified time intervals throughout the project to determine if there was an increase.
 - c. Data source: Claims, encounter, and clinical record data.
 - d. Rationale: see project goals.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- o Metric: Target population reached
- o Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development).
- o Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- o Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- o Metric: Other program output measure as identified by the performing provider.

1.14 Develop Workforce enhancement initiatives to support access to behavioral health providers in underserved markets and areas (e.g., psychiatrists, psychologists, LMSWs, LPCs and LMFTs.)

Project Goal:

The goal of this project is to enhance access and reduce shortages in specialty behavioral health care to improve local integration of behavioral health care into the overall health delivery system; improve consumer choice and increase availability of effective, lower-cost alternatives to inpatient care, prevent inpatient admissions when possible and promote recovery from behavioral health disorders. The supply of behavioral health care providers is inadequate in most of the State. In 2011, 195 (77%) of Texas' 254 counties held federal designations as whole county Health Provider Shortage Areas (HPSAs) in relation to behavioral health.⁵¹ Indeed, Texas ranks far below the national average in the number of mental health professionals per 100,000 residents. These shortages are even greater in rural, poor and Texas – Mexico border communities.

Project Options:

- 1.14.1 Implement strategies defined in the plan to encourage behavioral health practitioners to serve medically indigent public health consumers in HPSA areas or in localities within non-HPSA counties which do not have access equal to the rest of the county. Examples of strategies could include marketing campaigns to attract providers, enhanced residency programs or structured financial and non-financial incentive programs to attract and retain providers, identifying and engaging individual health care workers early in their studies/careers and providing training in identification and management of behavioral health conditions to other non-behavioral health disciplines (e.g., ANPs, PAs).
- Required core project components:
- a) Conduct a qualitative and quantitative gap analysis to identify needed behavioral health specialty vocations lacking in the health care region and the issues contributing to the gaps.
 - b) Develop plan to remediate gaps identified and data reporting mechanism to assess progress toward goal. This plan will specifically identify:
 - The severity of shortages of behavioral health specialists in a region by type (psychiatrists, licensed psychologists, nurse practitioners, physicians assistants, nurses, social workers, licensed professional counselors, licensed marriage and family therapists, licensed chemical dependency counselors, peer support specialists, community health workers etc.)
 - Recruitment targets by specialty over a specified time period.
 - Strategies for recruiting healthcare specialists
 - Strategies for developing training for primary care providers to enhance their understanding of and competency in the delivery of behavioral health services and thereby expand their scope of practice.
 - c) Assess and refine strategies implemented using quantitative and qualitative data. Review the intervention(s) impact on behavioral health workforce in

⁵¹ “Highlights: The Supply of Mental Health Professionals in Texas -2010”, Texas Department of State Health Services Center for Health Statistics, E-Publication No. E25-12347. Accessed at: <http://www.dshs.state.tx.us/chs/hprc/publicat.shtm>

- HPSA areas and identify “lessons learned,” opportunities to scale all or part of the intervention(s) to a broader patient population, and identify key challenges associated with expansion of the intervention(s), including special considerations for safety-net populations
- 1.14.2 “Other” project option: Implement other evidence-based project to develop workforce enhancement initiatives to support access to behavioral health providers in underserved markets in an innovative manner not described in the project options above. Providers implementing an innovative, evidence-based project using the “Other” project option may select among the process and improvement milestones specified in this project area or may include one or more customizable process milestone(s) P-X and/or improvement milestone(s) I-X, as appropriate for their project.

Process Milestones:

- P-1. Milestone: Conduct gap analysis
- P-1.1. Metric: Baseline analysis of behavioral health patient population, which may include elements such as consumer demographics, proximity to sources of specialty care, utilization of Emergency Department , other crisis and inpatient services including state hospital services used by residents of the region, incarceration rates, most common sites of mental health care, most prevalent diagnoses, co-morbidities; existing provider caseload, provider demographics and other factors of regional significance
- a. Data Source: HPSA data; Provider licensing and enrollment data from state and local sources; Claims and encounters from regional and state data sources; Provider and consumer survey, interview and focus group data
- P-2. Milestone: Remediation Plan
- P-2.1. Metric: Remediation plan which addresses elements relating to shortages identified in the gap analysis
- a. Data Source: written plan from Regional Partnerships
- P-3. Milestone: Resource Identification
- P-3.1. Metric: Identify specific disciplines and knowledge base that would assist primary care providers to expand their scope of practice to address the needs of individuals with complex behavioral health conditions
- a. Data Source: Written plan from Regional Partnerships
- P-4. Milestone: Evaluate and continuously improve strategies
- P-4.1. Metric: Project planning and implementation documentation describes plan, do, study act quality improvement cycles
- a. Data Source: Project reports including examples of how real-time data is used for rapid-cycle improvement to guide continuous quality improvement (i.e. how the project continuously uses data such as weekly run charts or monthly dashboards to drive improvement)

- P-5. Milestone: Number of behavioral health providers serving medically indigent public health clients
- P-5.1. Metric: Track and report the number of behavioral health providers serving medically indigent public health clients by provider type on at least a quarterly basis.
- a. Numerator: Number of behavioral health and related providers serving medically indigent consumers in the RHP study area
 - b. Denominator: Number of behavioral health and related providers in the RHP study area.
This would be measured at specified time intervals throughout the project to determine if there was an increase.
 - c. Data Source: Provider registration and survey data.
- P-6. Milestone: Non-behavioral health provider training
- P-6.1. Metric: Track and report the number of non-behavioral health providers who have been trained to recognize and assist in management of behavioral health conditions.
- a. Numerator: Number of non-behavioral health providers who have been trained to recognize and assist in management of behavioral health conditions in the RHP study area.
 - b. Denominator: Number of non-behavioral health providers who are in the RHP study area.
This would be measured at specified time intervals throughout the project to determine if there was an increase.
 - c. Data Source: Training rosters
- P-7. Milestone: Participate in at least bi-weekly interactions (meetings, conference calls, or webinars) with other providers and the RHP to promote collaborative learning around shared or similar projects. Participation should include: 1) sharing challenges and any solutions; 2) sharing results and quantitative progress on new improvements that the provider is testing; and 3) identifying a new improvement and publicly commit to testing it in the week to come.
- P-7.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP that the provider participated in.
- a. Data Source: Documentation of weekly or bi-weekly phone meetings, conference calls, or webinars including agendas for phone calls, slides from webinars, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-7.2. Metric: Share challenges and solutions successfully during this bi-weekly interaction.

- a. Data Source: Catalogue of challenges, solutions, tests, and progress shared by the participating provider during each bi-weekly interaction. Could be summarized at quarterly intervals.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers to share best practices, learn how other providers have overcome similar challenges, and rapidly disseminate successful improvement ideas from other providers.
- P-8. Milestone: Review project data and respond to it every week with tests of new ideas, practices, tools, or solutions. This data should be collected with simple, interim measurement systems, and should be based on self-reported data and sampling that is sufficient for the purposes of improvement.
- P-8.1. Metric: Number of new ideas, practices, tools, or solutions tested by each provider.
- a. Data Source: Brief description of the idea, practice, tool, or solution tested by each provider each week. Could be summarized at quarterly intervals
 - b. Rationale/Evidence: The rate of testing of new solutions and ideas is one of the greatest predictors of the success of a health care system's improvement efforts.
- P-9. Milestone: Participate in face-to-face learning (i.e. meetings or seminars) at least twice per year with other providers and the RHP to promote collaborative learning around shared or similar projects. At each face-to-face meeting, all providers should identify and agree upon several improvements (simple initiatives that all providers can do to "raise the floor" for performance). Each participating provider should publicly commit to implementing these improvements.
- P-9.1. Metric: Participate in semi-annual face-to-face meetings or seminars organized by the RHP.
- a. Data Source: Documentation of semiannual meetings including meeting agendas, slides from presentations, and/or meeting notes.
 - b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to "raise the floor" for performance across all providers.
- P-9.2. Metric: Implement the "raise the floor" improvement initiatives established at the semiannual meeting.

- a. Data Source: Documentation of “raise the floor” improvement initiatives agreed upon at each semiannual meeting and documentation that the participating provider implemented the “raise the floor” improvement initiative after the semiannual meeting.
- b. Rationale/Evidence: Investment in learning and sharing of ideas is central to improvement. The highest quality health care systems promote continuous learning and exchange between providers and decide collectively how to “raise the floor” and “raise the bar” for performance across providers.

Customizable Process Milestone P-X: This milestone(s) may be used to include process milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

P-X Milestone: [Plan should include text describing process milestone intended to assist in achieving improvements in project area]

P-X.1 Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the process milestone]

- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the process metric]
- b. Data Source: [Plan should include data source]

Examples of Metrics to be further refined and described by the performing provider for Process Milestone P-X:

- o Metric: Conduct needs assessment, literature review for evidence-based practices and tailor intervention to local context
- o Metric: Engage stakeholders, identify resources and potential partnerships, and develop intervention plan (including implementation, evaluation, and sustainability).
- o Metric: Community or population outreach and marketing, staff training, implement intervention.
- o Metric: Evaluate intervention, modify intervention as appropriate, develop policies/procedures, and share lessons learned

Improvement Milestones:

I-10. Milestone: Emergency Department Use

I-10.1. Metric: X% reduction in inappropriate use of Emergency Department Care by individuals with mental illness or substance use disorders.

- a. Numerator: total number of individuals receiving behavioral health services through provider enhancements created under this initiative.
- b. Denominator: total number of individuals receiving behavioral health services in the RHP project site.
- c. Data Source: Claims data and encounter data from ED and project service data.
- d. Rationale: see project description.

- I-11. Milestone: Consumer satisfaction with Care
- I-11.1. Metric: X% People reporting satisfaction with care
- a. Numerator: The number of individuals receiving behavioral health services through enhanced provider base that have expressed satisfaction with services.
 - b. Denominator: The number of individuals receiving behavioral health services through enhanced provider base
 - c. Data Source: Survey data from CAHPS, MHSIP or other validated instrument. Data from completed consumer satisfaction surveys.
- I-11.2. Metric: X% State Psychiatric Facility Bed Utilization
- a. Numerator: The number of individuals receiving behavioral health services through enhanced provider base that have been admitted into state psychiatric facilities.
 - b. Denominator: The number of individuals admitted to state psychiatric facilities
 - c. Data Source: Claims/ encounter and clinical record data from Avatar (state hospital clinical system), and project data.
- I-12. Milestone: Cultural and Linguistic Diversity
- I-12.1. Metric: X% increase in number of culturally and linguistically diverse behavioral health providers, especially in HPSA's along the Texas/ Mexico border.
- a. Numerator: Number of culturally and linguistically diverse behavioral health serving consumers in the RHP study area
 - b. Denominator: Number of behavioral health providers serving RHP consumers in the study area.
This would be measured at baseline and specified time intervals throughout the project to determine if there was an increase.
 - c. Data Source: Project data, Provider registration, and survey data.

Customizable Improvement Milestone I-X: This milestone(s) may be used to include improvement milestones and metrics that are not otherwise included for this project area. If customizable milestones are included, the provider should explain the justification for using this milestone and the rationale and evidence supporting its use in the project narrative in the RHP Plan.

- I-X. Milestone: [Plan should include text describing improvement milestone]
- I-X.1. Metric: [Plan should include text describing a quantitative or qualitative indicator of progress toward achieving the improvement milestone]
- a. Baseline/goal [Plan should include the appropriate baseline or goal relevant to the improvement metric]
 - b. Data Source: [Plan should include data source]

Examples of metrics to be further refined and described by the Performing Provider for Improvement Milestone I-X:

- o Metric: Target population reached
- o Metric: Short-term outcomes (e.g., increased knowledge and awareness, increased skills, adoption of new guidelines, policies or practices, policy development.

- Metric: Intermediate outcomes (e.g., changes in provider norms, increased adherence to guidelines by providers, increased adherence to guidelines by patients)
- Metric: Long-term outcomes (e.g., changes in patient utilization rates, changes in provider behavior).
- Metric: Other program output measure as identified by the performing provider.