

Category 2 Innovation and Redesign

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2.1 Enhance/Expand Medical Homes

Project Goal:

The goal of projects under this heading is to expand or enhance the delivery of care provided through the Patient-Centered Medical Home (PCMH) model¹. The PCMH provides a primary care "home base" for patients. Under this model, patients are assigned a health care team who tailors services to a patient's unique health care needs, effectively coordinates the patient's care across inpatient and outpatient settings, and proactively provides preventive, primary, routine and chronic care.

Project Options:

2.1.1 Develop, implement, and evaluate action plans to enhance/eliminate gaps in the development of various aspects of PCMH standards.

Required core project components:

- a) Utilize a gap analysis to assess and/or measure hospital-affiliated and/or PCPs' NCQA PCMH readiness.
- b) Conduct feasibility studies to determine necessary steps to achieve NCQA PCMH status
- c) Conduct educational sessions for primary care physician practice offices, hospital boards of directors, medical staff and senior leadership on the elements of PCMH, its rationale and vision.
- 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.

2.1.2 Collaborate with an affiliated Patient-Centered Medical Home to integrate care management and coordination for shared, high-risk patients.

Required core project components:

- a) Improve data exchange between hospitals and affiliated medical home sites.
- b) Develop best practices plan to eliminate gaps in the readiness assessment.
- c) Hire and train team members to create multidisciplinary teams including social workers, health coaches, care managers, and nurses with a diverse skill set that can meet the needs of the shared, high-risk patients
- d) Implement a comprehensive, multidisciplinary intervention to address the needs of the shared, high-risk patients
- e) Evaluate the success of the intervention at decreasing ED and inpatient hospitalization by shared, high-risk patients and use this data in rapid-cycle improvement to improve the intervention.
- f) 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

1 http://www.aafp.org/online/etc/medialib/aafp_org/documents/about/pcmh.Par.0001.File.dat/PCMH.pdf

challenges associated with expansion of the project, including special considerations for safety-net populations.

2.1.3 Implement medical homes in HPSA and other rural and impoverished areas using evidence-based change concepts for practice transformation developed by the Commonwealth Fund's Safety Net Medical Home Initiative:

Required core project components:

- a) Empanelment: Assign all patients to a primary care provider within the medical home. Understand practice supply and demand, and balance patient load accordingly.
- b) Restructure staffing into multidisciplinary care teams that manage a panel of patients where providers and staff operate at the top of their license. Define roles and distribute tasks among care team members to reflect the skills, abilities, and credentials of team members.
- c) Link patients to a provider and care team so both patients and provider/care team recognizes each other as partners in care.
- d) Assure that patients are able to see their provider or care team whenever possible.
- e) Promote and expand access to the medical home by ensuring that established patients have 24/7 continuous access to their care teams via phone, e-mail, or in-person visits.
- f) 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.

Note: PCMH models include investments in projects that are the foundation of delivery system change and a complete package of change. Therefore, it is preferable to pursue a full continuum of projects (PCMH readiness preparations, the establishment or expansion of medical homes which may include gap analyses and eventual application for PCMH recognition² to a nationally recognized organization such as NCQA, as well as educating various constituent groups within hospitals and primary care practices about the essential elements of the NCQA medical home standards).^{3,4,5,6,7,8,9}

Rationale:

Federal, state, and health care providers share goals to promote more patient-centered care focused on wellness and coordinated care. In addition, the PCMH model is viewed as a foundation for the ability to accept alternative payment models under payment reform. PCMH development is a multi-year

2 http://www.medicalhomeinfo.org/national/recognition_programs.aspx

3 <http://www.commonwealthfund.org/Topics/Patient-Centered-Care.aspx>

4 <http://www.qhmedicalhome.org/pcmh-qualis-health/change-concepts>

5 http://www.pcmh.ahrq.gov/portal/server.pt/community/pcmh__home/1483

6 <http://www.medicalhomeforall.com/>

7 http://www.acponline.org/running_practice/pcmh/

8 <http://www.pediatricmedhome.org/>

9 Transformed: <http://www.transformed.com/index.cfm>

transformational effort and is viewed as a foundational way to deliver care aligned with payment reform models and the Triple Aim goals of better health, better patient experience of care, and ultimately better cost-effectiveness. By providing the right care at the right time and in the right setting, over time, patients may see their health improve, rely less on costly ED visits, incur fewer avoidable hospital stays, and report greater patient satisfaction. These projects all are focused on the concepts of the PCMH model; yet, they take different shapes for different providers.¹⁰

This initiative aims to eliminate fragmented and uncoordinated care, which can lead to emergency department and hospital over-utilization. The projects associated with Medical Homes establish a foundation for transforming the primary care landscape in Texas by emphasizing enhanced chronic disease management through team-based care.

Process Milestones:

- P-1. Milestone: Implement the medical home model in primary care clinics
 - P-1.1. Metric: Increase number of primary care clinics using medical home model
 - a. Numerator: Number of primary care clinics using medical home model
 - b. Data Source: PCMH readiness surveys or other clinic documentation demonstrating achievement of PCMH standards
 - c. Rationale/Evidence: NAPH found that nearly 40% of programs could offer either anecdotal or quantitative evidence of reduced ED usage—attributed to the redirection of primary care-seeking patients from the ED to a medical home.¹¹ In addition to reductions in ED utilization, the medical home model has helped improve the delivery and quality of primary care and reduce costs.

- P-2. Milestone: Put in place policies and systems to enhance patient access to the medical home. Enhanced access to care is available through systems such as open scheduling, expanded hours and new options for communication between patients, their personal physician, and practice staff.¹²
 - P-2.1. Metric: Performing Provider policies on medical home
 - a. Data Source: Performing Provider’s “Policies and Procedures” documents
 - b. Rationale/Evidence: Operationalizing the work as part of the “Policies and Procedures” for an organization will make the work the “norm” or expectation for the organization and its employees.

- P-3. Milestone: Reorganize staff into primary care teams responsible for the coordination of patient care. Teams can be designed in a variety of ways depending on the size and needs of the patient population and the resources of the practice. Ideally, primary care practices should be structured to respond to all common problems for which their patients seek care. Most

10 <http://www.pccp.net/content/pcmh-vision-reality>

11 NAPH Research Brief February 2010 Safety Net Medical Homes Establish “Medical Homes”

12 http://www.aafp.org/online/etc/medialib/aafp_org/documents/policy/fed/jointprinciplespcmh0207.Par.0001.File.tmp/022107medicalhome.pdf

successful practices are organized around an accountable clinician (usually a physician or advanced registered nurse practitioner or physician assistant) and a medical assistant dyad that interact continuously throughout the day. Other team members are usually responsible for providing self-management support (e.g., nurse or clinical pharmacist, or health educator) or arranging other resources (e.g., social worker). Regardless of team composition, care must be taken to keep the team size relatively small (fewer than five to seven members) because team functioning breaks down as teams grow. Other clinic staff members, including billing staff, receptionists, computer technicians, and laboratory personnel, complement the primary care teams. Each of these staff members can play important roles in engendering strong trusting relationships between patients and their care team.¹³

P-3.1. Metric: Primary care team

- a. Description of the teams formed, to include the following: team membership and functional roles within team, process around formation of team and inter-team interactions
- b. Data Source: Report detailing care teams
- c. Rationale/Evidence: “Primary care physicians are expected to provide acute, chronic, and preventive care to their patients while building meaningful relationships with those patients, and managing multiple diagnoses according to a host of evidence-based guidelines. A research study estimates that it would take 7.4 hours per working day to provide all recommended preventive care to a panel of 2,500 patients plus an additional 10.6 hours to adequately manage this panel’s chronic conditions.¹⁴ It is clear that primary care physicians in the 15-minute visit can no longer do what their patients expect and deserve.”

P-4. Milestone: Develop staffing plan to expand primary care team roles; Expand and redefine the roles and responsibilities of primary care team members.¹⁵

P-4.1. Metric: Expanded primary care team member roles to align with PCMH principles;

13 Safety Net Medical Home Initiative. Coleman K, Reid R, Continuous and Team-Based Healing Relationships Implementation Guide: Improving Patient Care Through Teams. 1st ed. Burton T, ed. Seattle, WA: The MacColl Center for Health Care Innovation at the Group Health Institute and Qualis Health; December 2010.

<http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Team-Based-Care.pdf>

14 Yarnell, K.S., K.I. Pollak, T. Ostbye, K.M. Krause, J.L. Michener. “Primary Care: is there enough time for prevention?” *American Journal of Public Health* 2003; 93:635-41; and Ostbye, T., K.S Yarnal, K.M. Krause, K.I. Pollak, M. Gradison, J.L. Michener. “Is there time for management of patients with chronic diseases in primary care?” *Annals of Family Medicine* 2005; 3:209-14.

15 Safety Net Medical Home Initiative. Coleman K. Redefining Staff Roles – Where to Start. Seattle, WA: The MacColl Center for Health Care Innovation at Group Health Research Institute and Qualis Health; February 2012.

<http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Supplement-Team-Based-Care.pdf>

- a. Data Source: Revised job descriptions
 - b. Rationale/Evidence: “Primary care physicians are expected to provide acute, chronic, and preventive care to their patients while building meaningful relationships with those patients, and managing multiple diagnoses according to a host of evidence-based guidelines. A research study estimates that it would take 7.4 hours per working day to provide all recommended preventive care to a panel of 2,500 patients plus an additional 10.6 hours to adequately manage this panel’s chronic conditions.¹⁶ It is clear that primary care physicians in the 15-minute visit can no longer do what their patients expect and deserve.”
- P-4.2. Metric: Schedule of training and educational opportunities for providers and staff on expanded roles
- a. Data Source: Documentation of established orientation and internal trainings for expanded roles and responsibilities beyond the basic education programs completed prior to hire.
 - b. Rationale/Evidence: Additionally, “basic medical assistant (MA) education programs do not adequately prepare individuals for the roles that MAs are increasingly asked to perform in community clinics. While most MAs are adequately trained in basic clinical skills such as taking and recording vital signs, most MA programs offer little preparation in areas such as patient care coordination or the use of the health information technology in patient management.”¹⁷
- P-5. Milestone: Determine the appropriate panel size¹⁸ for primary care provider teams, potentially based on staff capacity, demographics, and diseases. Empanelment should be based on the following principles: Assign all patients to a provider panel and confirm assignments with providers and patients; review and update panel assignments on a regular basis; Assess practice supply and demand, and balance patient load accordingly; Use panel data and registries to proactively contact and track patients by disease status, risk status, self-management status, community and family need. 19.
- P-5.1. Metric: Determine Panel size²⁰

16 Yarnell, K.S., K.I. Pollak, T. Ostbye, K.M. Krause, J.L. Michener. “Primary Care: is there enough time for prevention?” American Journal of Public Health 2003; 93:635-41; and Ostbye, T., K.S Yarnal, K.M. Krause, K.I. Pollak, M. Gradison, J.L. Michener. “Is there time for management of patients with chronic diseases in primary care?” Annals of Family Medicine 2005; 3:209-14.

17 S. Chapman, M. Chan, T. Bates, “Medical Assistants in Community Clinics: Perspectives on Innovation in Role Development” Research Brief, Center for the Health Professions at UCSF, June 2010.

18 Measure panel size by the number of patients assigned to a provider care team, by provider FTE. For part-time providers or residents who are assigned a dedicated panel, list the true panel size with percentage FTE. Panel size analysis could support panel management decisions as clinics approach population management.

19 <http://www.safetynetmedicalhome.org/change-concepts/empanelment>

20 See Determining Perfect Panel Size excel tool found at <http://www.safetynetmedicalhome.org/change-concepts/empanelment>

- a. Data Source: Panel size determination tool, patient registry, EHR, or needs assessment tool to assess appropriate panel size based on patient needs (as determined by the clinic) for proactive panel management
- b. Rationale/Evidence: Panel size analysis could support panel management decisions as clinics approach population management.²¹ “At the heart of the Patient Centered Medical Home model is the relationship between a patient and a provider and his/her practice team. All the activities of an effective patient centered medical home should strengthen and reinforce the primacy of that relationship, and its accountability for the patient’s care. The positive impacts of seeing the same provider on patient experience, clinical care, and outcomes have been unequivocally demonstrated by research and practice.”²²

P-6. Milestone: Establish criteria for medical home assignment

P-6.1. Metric: Medical home assignment criteria

- a. Data Source: Submission of medical home assignment criteria, such as patients with specified chronic conditions;²³ patients who have had multiple visits to a clinic; high-risk patients; patients needing care management; high users of health care services;²⁴ and patients with particular socio-economic, linguistic, and physical needs²⁵
- b. Performing Provider policies and procedures or other similar documents
- c. Rationale/Evidence: With limited resources, it may behoove some organizations to focus their work on medical homes within a subset of patients. Also, some of these higher risk patients are the highest users of health care resources and dollars. Focusing on these cohorts should result in reduced health care costs. At Carolinas Medical Center in Charlotte, NC, interventions targeting high-risk patients who utilized the hospital’s medical home resulted in an 80% decrease in hospitalizations and ED visits for the intervention group.²⁶

P-7. Milestone: Track the assignment of patients to the designated care team

P-7.1. Metric: Tracking medical home patients

21 Safety Net Medical Home Initiative. Coleman CF, Phillips KE, eds. Empanelment Implementation Guide: Establishing Patient-Provider Relationships. 1st ed. Seattle, WA: The MacColl Institute for Healthcare Innovation at the Group Health Research Institute and Qualis Health, March 2010.

22 Safety Net Medical Home Initiative. Coleman CF, Phillips KE, eds. Empanelment Implementation Guide: Establishing Patient-Provider Relationships. 1st ed. Seattle, WA: The MacColl Institute for Healthcare Innovation at the Group Health Research Institute and Qualis Health, March 2010; Saulz JW, Lochner J. Interpersonal continuity of care and care outcomes: a critical review. *Ann Fam Med*. 2005;3(2):159-66; and Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair, CE, McKendry R. Continuity of Care: a Multidisciplinary Review. *BMJ*, 2003;327(7425):1219-21.

23 Such as: Diabetes, hypertension, chronic heart failure, obesity, asthma, post-secondary stroke, community-acquired pneumonia (CAP), HIV/AIDS, chronic pain, and depression.

24 Such as patients who have presented in the ED, been admitted to the hospital, or visited specialty clinics multiple times.

25 Such as seniors and persons with disabilities, homeless people, and immigrants.

26 Wade, KE, Furney, SL, Hall, MN (2009) Impact of Community –Based Patient-Centered Medical Homes on Appropriate Health Care Utilization at Carolinas Medical Center. *NC Med J*, 70(4), 341-345.

- a. Data Source: Submission of tracking report. Can be tracked through the practice management system, EHR, or other documentation as designated by Performing Provider
 - b. Rationale/Evidence: Review panel status (open/closed) and panel fill rates on a monthly basis for equity to be able to adjust to changing environment (e.g., patient preference, extended provider leave).
- P-8. Milestone: Develop or utilize evidence based training materials for medical homes based upon the model change concepts.²⁷
- P-8.1. Metric: Documentation of staff training materials.
 - a. Data Source: Training materials.
 - b. Rationale/Evidence: PCMH model change concepts are widely supported as the means to achieve meaningful and sustainable PCMH practice transformation.
- P-9. Milestone: Train medical home personnel on PCMH change concepts.
- P-9.1. Metric: Percentage of medical home personnel trained
 - a. Numerator: Number of personnel trained on PCMH change concepts
 - b. Denominator: Total number of personnel
 - c. Data Source: Training records and HR documents
 - d. Rationale/Evidence: PCMH model change concepts are widely supported as the means to achieve meaningful and sustainable PCMH practice transformation.
- P-10. Milestone: Expand and document interaction types between patient and healthcare team beyond one-to-one visits to include group visits, telephone visits, and other interaction types
- P-10.1. Metric: Documentation of interaction types and which patients would most benefit from particular interaction types.
 - a. Submission of interaction tracking report. Can be tracked through the practice management system, EHR, or other documentation as designated by Performing Provider.
 - P-10.2. Metric: Percent of hospitalized patients who have clinical, telephonic or face-to-face follow-up interaction with the care team within 2 days of discharge during the measurement month at sites with implemented complex care management.
 - a. Numerator: Number of patients receiving follow-up care within 2 days of discharge.
 - b. Denominator: Number of medical home patients discharged from inpatient services.
 - c. Data Source: Practice management system, EHR, or other documentation as designated by Performing Provider.
 - P-10.3. Metric: Percent of patients who have been seen in the Emergency Room with a documented chronic illness problem, who have clinical telephonic or face-to-

²⁷ <http://www.qhmedicalhome.org/pcmh-qualis-health/change-concepts>

face follow-up interaction with the care team within 2 days of ER visit during the measurement month at sites with implemented complex care management.

- a. Numerator: Number of patients receiving follow-up care within 2 days of ER visit.
- b. Denominator: Number of medical home patients with documented ER visit.
- c. Data Source: Practice management system, EHR, or other documentation as designated by Performing Provider.

P-11. Milestone: Identify current utilization rates of preventive services and implement a system to improve rates among targeted population (must select at least one metric):

P-11.1. Metric: Implement a patient registry that captures preventive services utilization.

- a. Documentation supporting implementation on the patient registry that would assist the provider in determining utilization rates. Supporting documentation should include the rate calculation: Numerator: Number of patients overdue for preventive services. Denominator: Total number of patients in the registry
- b. Data Source: Patient registry or EHR
- c. Rationale/Evidence: Relationship-centered aspects of PCMH are more highly correlated with preventive services delivery in community primary care practices than are information technology capabilities.²⁸

P-11.2. Metric: Implement a recall system that allow staff to report which patients are overdue for which preventive services and track when and how patients were notified on their needed services.

- a. Data Source: Documentation of recall report
- b. Rationale/Evidence: The goal of this milestone is to make evidence-based care routine. This is accomplished through both planned interactions initiated by the practice, and through point-of-care reminders which help ensure that every interaction is informed by the clinical needs and wishes of the patient. This means that the availability of up-to-date patient information is key, as well as the care team's ability to review patient data before the visit and communicate via team huddles or other formats to work efficiently as a unit and maximize the value of each interaction.

P-11.3. Metric: Develop prevention services education management and outreach program

- a. Data Source: Program documentation, including policies and procedures and outreach plan
 - b. Rationale/Evidence: Educating patients about the benefits and availability of preventive services is critical to patient-centered care and patient wellness. Additionally, having processes in place that define targeted populations and outreach activities will promote wellness as a culture within the patient panel practice at large.
- 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: Description 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-12. Milestone: Based on criteria, improve the number of eligible patients²⁹ that are assigned to the medical homes.

I-12.1. Metric: Percentage of eligible patients assigned to medical homes, where “eligible” is defined by the Performing Provider

- a. Numerator: Number of eligible patients assigned to a medical home
- b. Denominator: Total number of eligible patients
- c. Data Source: Practice management system, EHR, or other documentation as designated by Performing Provider
- d. Rationale/Evidence: Murray M, Davies M, Boushon B, Panel Size: How Many Patients Can One Doctor Manage? *Fam Pract Manag.* 2007 Apr;14(4):44-51

I-12.2. (QPI) Metric: Number of patients assigned to medical homes

- a. Number of patients assigned to a medical home
- b. Data Source: Practice management system, EHR, or other documentation as designated by Performing Provider
- c. Rationale/Evidence: Murray M, Davies M, Boushon B, Panel Size: How Many Patients Can One Doctor Manage? *Fam Pract Manag.* 2007 Apr;14(4):44-51

I-12.3. Metric: Number of medical home visits

- a. Number of encounters for patients assigned to a medical home
- b. Data Source: Practice management system, EHR, or other documentation as designated by Performing Provider
- c. Rationale/Evidence: Murray M, Davies M, Boushon B, Panel Size: How Many Patients Can One Doctor Manage? *Fam Pract Manag.* 2007 Apr;14(4):44-51

²⁹ Many patients seen at safety net hospitals seek only episodic care and would not avail themselves of a medical home. Eligibility for medical home is determined for each plan, according to unique confluence of patient populations and delivery system structure, using criteria such as 1-2 primary care visits within 12-24 months, frequent utilization of emergency services, and/or identified medical needs such as chronic conditions.

- I-13. Milestone: New patients assigned to medical homes receive their first appointment in a timely manner
- I-13.1. Metric: Improve number of new patients assigned to medical homes that are contacted for their first patient visit within 60-120 days
 - a. Number of new patients contacted within specified days
 - b. Data Source: Practice management or scheduling systems, registry, EHR, or other documentation as designated by Performing Provider
 - c. Rationale/Evidence: It is important to get new patients into the medical home in a timely manner.
 - I-13.2. Metric: Improve percent of new patients assigned to medical homes that are contacted for their first patient visit within 60-120 days
 - a. Numerator: Number of new patients contacted within specified days
 - b. Denominator: Total number of new patients
 - c. Data Source: Practice management or scheduling systems, registry, EHR, or other documentation as designated by Performing Provider
 - d. Rationale/Evidence: It is important to get new patients into the medical home in a timely manner.
- I-14. Milestone: Patient access to medical home
- I-14.1. Metric: Third Next-Available Appointment
 - a. The length of time in calendar days between the day an existing patient makes a request for an appointment with a provider/care team and the third available appointment with that provider/care team.
 - b. Data Source: Practice management or scheduling systems
 - c. Rationale/Evidence: This measure is an industry standard of patients' access to care. Under principles of PCMH open access, this should be same day.³⁰
- I-15. Milestone: Increase the number or percent of medical home patients that are able to identify their usual source of care as being managed in medical homes
- I-15.1. Metric: Usual source of care - percent of medical home patients
 - a. Numerator: Number of medical home patients that are able to identify their medical home as their usual source of care
 - b. Denominator: Total number of medical home patients
 - c. Data Source: Patient survey
 - d. Rationale/Evidence: The medical home should be seen by the patient as the patient's "home base" or usual source of care, and this measures the success of the medical home in providing ongoing, organized care for the patient and educating the patient about medical home services.

30 Safety Net Medical Home Initiative. Moore LG, Powell J. Enhanced Access Implementation Guide: Providing the Care Patients Need, When They Need It. 1st ed. Burton T, ed. Seattle, WA: Qualis Health and the MacColl Center for Health Care Innovation at the Group Health Research Institute; December 2010.

<http://www.safetynetmedicalhome.org/sites/default/files/Implementation-Guide-Enhanced-Access.pdf>

- I-16. Milestone: Percent of enrolled patients' scheduled primary care visits that are with their medical home care team
- I-16.1. Metric: Percent of primary care visits at medical home
 - a. Numerator: Number of enrolled patients' primary care visits with medical home primary care provider/team
 - b. Denominator: Total number of enrolled patients' primary care visits within the Performing Provider
 - c. Data Source: Practice management system, EHR, or other documentation as designated by Performing Provider
 - d. Rationale/Evidence: Patients know the professionals on their care team and establish trusting, ongoing relationships to reinforce continuity of care. Medical home model should enhance continuity.
- I-17. Milestone: Medical home provides population health management by identifying and reaching out to patients who need to be brought in for preventive and ongoing care
- I-17.1. Metric: Reminders for patient preventive services
 - a. Numerator: For select specific preventive service (e.g., pneumococcal vaccine for diabetics), the number of patients in the registry needing the preventive service and who have been contacted to come in for service
 - b. Denominator: Total number of patients in the registry needing the preventive service
 - c. Data Source: Registry, or other documentation as designated by Performing Provider
 - d. Rationale/Evidence: Panel manager (or staff on care team) identifies patients who have process or outcome care gaps and contacts them to come in for services. This approach has been used with good effect in state and federal health disparity collaborative. The care team assesses the patient's overall health and co-develops a health care plan with the patient, including health goals, ongoing management, and future visits.
 - I-17.2. Metric: Number of patients receiving preventive services as indicated by standards of care (e.g., annual wellness exam, vision screening, mammograms, etc.)
 - a. For select specific preventive service, the number of patients in the registry that are up to date on the preventive service.
 - b. Data Source: Registry, or other documentation as designated by Performing Provider
 - c. Rationale/Evidence: Panel manager (or staff on care team) identifies patients who have process or outcome care gaps and contacts them to come in for services. This approach has been used with good effect in state and federal health disparities collaboratives. The care team assesses the patient's overall health and co-develops a health care plan with the patient, including health goals, ongoing management, and future visits.

- I-18. Milestone: Obtain medical home recognition by a nationally recognized agency³¹(e.g., NCQA, URAC, AAAHC, etc.). The level of medical home recognition will depend on the practice baseline and accrediting agency.
- I-18.1. Metric: Medical home recognition/accreditation
- a. Number of sites or clinics receiving recognition/accreditation
 - b.
 - c. Data Source: Documentation of recognition/accreditation from nationally recognized agency (e.g., NCQA)
 - d. Rationale/Evidence: It is important to validate the medical home service being provided by seeking and receiving recognition/accreditation.³² Some safety net sites that have attained NCQA accreditation “reported that they have become far more sophisticated as a result of the application effort and have invested in quality improvement efforts that might otherwise have gone unrealized”.³³
- I-19. Milestone: Develop or expand principles of medical home and patient centered care
- I-19.1. Metric: Documentation of increased number of unique patients that receive education around clinic’s adoption of patient centered principles and are empanelled into the medical home. Demonstrate improvement over prior reporting period.
- a. Total number of unique patients that receive education about patient centered clinic services and are assigned to the medical home.
 - b. Data Source: Registry, EHR, claims or other Performing Provider source
 - c. Rationale/Evidence: Patient education around medical home principles and the clinic’s commitment to this model is integral to successful transformation.

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]

31 http://www.medicalhomeinfo.org/national/recognition_programs.aspx

32 <http://www.safetynetmedicalhome.org/practice-transformation/recognition>

33 <http://content.healthaffairs.org/content/21/5/284.full.pdf+html>

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.

2.2 Expand Chronic Care Management Models³⁴

Project Goal:

The goal of this project is to develop and implement chronic disease management interventions that are geared toward improving effective management of chronic conditions and ultimately improving patient clinical indicators, health outcomes and quality, and reducing unnecessary acute and emergency care utilization. Chronic disease management initiatives use population-based approaches to create practical, supportive, evidence-based interactions between patients and providers to improve the management of chronic conditions and identify symptoms earlier, with the goal of preventing complications and managing utilization of acute and emergency care. Program elements may include the ability to identify one or more chronic health conditions or co-occurring chronic health conditions that merit intervention across a patient population, based on an assessment of patients' risk of developing complications, comorbidities or utilizing acute or emergency services. These chronic health conditions may include diabetes, congestive heart failure, chronic obstructive pulmonary disease, among others, all of which are prone to co-occurring health conditions and risks.

Project Options:

2.2.1 Redesign the outpatient delivery system to coordinate care for patients with chronic diseases

Required core project components:

- a) Design and implement care teams that are tailored to the patient's health care needs, including non-physician health professionals, such as pharmacists doing medication management; case managers providing care outside of the clinic setting via phone, email, and home visits; nutritionists offering culturally and linguistically appropriate education; and health coaches helping patients to navigate the health care system
- b) Ensure that patients can access their care teams in person or by phone or email
- c) Increase patient engagement, such as through patient education, group visits, self-management support, improved patient-provider communication techniques, and coordination with community resources
- d) Implement projects to empower patients to make lifestyle changes to stay healthy and self-manage their chronic conditions
- e) 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.

2.2.2 Apply evidence-based care management model to patients identified as having high-risk health care needs

Required core project components:

³⁴ Some chronic diseases addressed by chronic care management models in RHP plans may include diabetes, hypertension, heart failure, asthma, post-secondary stroke, community-acquired pneumonia (CAP), HIV/AIDS, and chronic pain.

- f) 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.

2.2.3 Redesign rehabilitation delivery models for persons with disabilities

Required core project components:

- a) 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.

2.2.4 Develop a continuum of care in the community for persons with serious and persistent mental illness and co-occurring disorders

Required core project components:

- a) 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.

2.2.5 Develop care management functions that integrate the primary and behavioral health needs of individuals

Required core project components:

- a) 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.

Rationale:

Promoting effective change in provider groups to support evidence-based clinical and quality improvement across a wide variety of health care settings. There are many definitions of "chronic condition", some more expansive than others. We characterize it as any condition that requires ongoing adjustments by the affected person and interactions with the health care system. The most recent data show that more than 145 million people, or almost half of all Americans, live with a chronic condition. That number is projected to increase by more than one percent per year by 2030, resulting in an estimated chronically ill population of 171 million. Almost half of all people with chronic illness have multiple conditions. As a result, many managed care and integrated delivery systems have taken a great interest in correcting the many deficiencies in current management of diseases such as diabetes, heart disease, depression, asthma and others. Those deficiencies include:

- Rushed practitioners not following established practice guidelines
- Lack of care coordination
- Lack of active follow-up to ensure the best outcomes
- Patients inadequately trained to manage their illnesses

Overcoming these deficiencies will require nothing less than a transformation of health care, from a system that is essentially reactive - responding mainly when a person is sick - to one that is proactive and focused on keeping a person as healthy as possible. To speed the transition, Improving Chronic Illness Care created the Chronic Care Model, which summarizes the basic elements for improving care in health systems at the community, organization, practice and patient levels. Evidence on the effectiveness of the Chronic Care Model has recently been summarized.³⁵

Process Milestones:

- P-1. Milestone: Expand the Chronic Care Model to primary care clinics
- P-1.1. Metric: Increase number of primary care clinics using the Chronic Care model
- a. : Number of primary care clinics using the Chronic Care model
 - b. Data Source: Documentation of practice management
 - c. Rationale/Evidence: The Chronic Care Model, developed by Ed Wagner and colleagues at the MacColl Institute, has helped hundreds of providers improve care for people with chronic conditions.³⁶ Randomized trials of system change interventions include Diabetes Cochrane Collaborative Review and JAMA Re-review, which looked at about 40 studies, mostly randomized trials, with interventions classified as decision support, delivery system design, information systems, or self-management support; 19 of 20 studies included a self-management component that improved care, and all five studies with interventions in all four domains had positive impacts on patients.³⁷ Also, an example of a meta-analysis of interventions to improve chronic illness looked at 112 studies, most of which were randomized clinical trials (27 asthma, 21 chronic heart failure, 33 depression, 31 diabetes); interventions that contained one or more Chronic Care Model elements improved clinical outcomes (RR .75-.82) and processes of care (RR 1.30-1.61).³⁸
- P-2. Milestone: Train staff in the Chronic Care Model, including the essential components of a delivery system that supports high-quality clinical and chronic disease care
- P-2.1. Metric: Increase percent of staff trained

35 <http://content.healthaffairs.org/content/28/1/75.full>

36 Source: IHI website. Please see <http://www.ihi.org/IHI/Topics/ChronicConditions/AllConditions/Changes/> for more information.

37 Renders et al, Diabetes Care, 2001; 24:1821 and Bodenheimer, Wagner, Grumbach, JAMA 2002; 288:1910.

38 Tsai AC, Morton SC, Mangione CM, Keeler EB. Am J Manag Care. 2005 Aug;11(8):478-88.

- a. Numerator: Number of relevant staff trained in the Chronic Care Model (“relevant” as defined per the Performing Provider)
- b. Denominator: Total number of relevant staff
- c. Data Source: HR, training program materials
- d. Rationale/Evidence: The Chronic Care Model, developed by Ed Wagner and colleagues at the MacColl Institute, has helped hundreds of providers improve care for people with chronic conditions.³⁹ Randomized trials of system change interventions include Diabetes Cochrane Collaborative Review and JAMA Re-review, which looked at about 40 studies, mostly randomized trials, with interventions classified as decision support, delivery system design, information systems, or self-management support; 19 of 20 studies included a self-management component that improved care, and all five studies with interventions in all four domains had positive impacts on patients.⁴⁰ Also, an example of a meta-analysis of interventions to improve chronic illness looked at 112 studies, most of which were randomized clinical trials (27 asthma, 21 chronic heart failure, 33 depression, 31 diabetes); interventions that contained one or more chronic Care Model elements improved clinical outcomes (RR .75-.82) and processes of care (RR 1.30-1.61).⁴¹ Also, it has been shown that “planned care for all” can be more effective than “disease-silo” care. For example, the Cherokee Nation adopted a systems approach to diabetes care in 2002, which included many of the concepts in the Improving Patient Care (IPC) change package, such as patient and population management by registered nurse diabetes care managers; evidence-based guidelines; planned visits; care by a multidisciplinary team; diabetes self-management support and education; use of registries for population management; and data-driven improvement, resulting in improved diabetes care and intermediate outcomes.⁴²

P-3. Milestone: Develop a comprehensive care management program

- P-3.1. Metric: Documentation of Care management program. Best practices such as the Wagner Chronic Care Model and the Institute of Chronic Illness Care’s Assessment Model may be utilized in program development.⁴³

39 Source: IHI website. Please see <http://www.ihi.org/IHI/Topics/ChronicConditions/AllConditions/Changes/> for more information.

40 Renders et al, *Diabetes Care*, 2001; 24:1821 and Bodenheimer, Wagner, Grumbach, *JAMA* 2002; 288:1910.

41 Tsai AC, Morton SC, Mangione CM, Keeler EB. *Am J Manag Care*. 2005 Aug. 11(8):478-88.

42 Please see the IHI website for more information:

<http://www.ihi.org/IHI/Topics/OfficePractices/PlannedCare/ImprovementStories/InnovationsinPlannedCareataCherokeeNationClinic.htm>

43 Information on the Wagner Chronic Care Model available at

http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2

- a. Data Source: Program materials
 - b. Rationale/Evidence: Review chronic care management best practices (e.g., Wagner Chronic Care model) and conduct an assessment of the hospital/health system to guide quality improvement efforts and evaluate changes in chronic illness care (e.g., the Institute of Chronic Illness Care’s Assessment of Chronic Illness Care—ACIC⁴⁴).
- P-4. Milestone: Formalize multi-disciplinary teams, pursuant to the chronic care model defined by the Wagner Chronic Care Model or similar
- P-4.1. Metric: Increase the number of multi-disciplinary teams (e.g., teams may include physicians, mid-level practitioners, dietitians, licensed clinical social workers, psychiatrists, and other providers) or number of clinic sites with formalized teams
 - a. Description and number of teams or sites with formalized teams
 - b. Data Source: TBD by Performing Provider
 - c. Rationale/Evidence: In meta-analysis to assess the impact on glycemic control of 11 distinct strategies for quality improvement in adults with type 2 diabetes, team changes and case management showed the most robust improvements.⁴⁵ Team changes included adding a team member or “shared care,” use of multidisciplinary teams in the primary ongoing management of patients, or expansion/revision of professional roles.
- P-5. Milestone: Implement a risk-reduction program for patients with diabetes mellitus to target patients identified as at-risk (e.g., an inpatient or peri-operative glycemic control program; if implementing more than one program, may include as two separate milestones). The inpatient glycemic control (example) would be appropriate for hospitals, while the broad based risk-reduction program for DM could be modified for the outpatient setting.
- P-5.1. Metric: Develop and implement an evidence based risk reduction program
 - a. Description of evidence based plan and report detailing current activities including number of patients enrolled in risk-reduction program
 - b. Data Source: Plan and description of operationalization
- P-6. Milestone: Implement redesign of rehabilitation delivery model that is tailored to care setting. These models may include elements like patient-centered daily interdisciplinary rounds in acute rehabilitation, self-directed task-specific motor practice opportunities in acute rehabilitation setting, therapeutic practice for greater than three hours per day, 5-6 days per week to drive recovery, patient-centered interdisciplinary documentation, peer-delivered wellness programs, and/or home- and community-focused rehabilitation.
- P-6.1. Metric: Redesigned Rehabilitation delivery model

⁴⁴ Developed as a practical tool to help teams improve care for chronic illness, the content of the ACIC was derived for specific evidence-based interventions for the six components of the Chronic Care Model. Like the chronic care model, the ACIC addresses the basic elements for improving chronic illness care at the community, organizational, practitioner and patient level.

⁴⁵ Shojania KG, Rani SR, McDonald KM, Grimshaw JM, et al. Effects of Quality Improvement Strategies for Type 2 Diabetes on Glycemic Control, A Meta-Regression Analysis, JAMA, 296(4), 2006.

- a. Documentation of program elements,
 - b. Data Source: Program materials
- P-7. Milestone: Develop disease-specific or multiple chronic condition (MCC) Medical Home (e.g., stroke, diabetes, spina bifida, cystic fibrosis, technology-dependent children, extreme prematurity, intracranial bleed)
- P-7.1. Metric: Develop a pilot project to establish a primary care entity for people who have the condition or MCC (for example, for stroke: Establish group clinics for individuals with stroke/Transient Ischemic Attack (TIA));
 - a. Description of a pilot, including the following information: Number of individuals with history of this condition or MCC enrolled in primary care clinic and description of status on key health indicators.
 - b. Data Source: Patient medical records at the pilot clinic.
 - c. Rationale/Evidence: Clinical basis for selection of specific disease or MCC for medical home management (for example, for stroke secondary stroke prevention, maintaining or improving cognitive function, management of chronic disease, learn self-management strategies; all these strategies will reduce inpatient cost.) A pilot will provide focus for an initial smaller targeted population to start implementing the disease-specific or MCC medical home in a more targeted way.
- P-8. Milestone: Pilot pharmacy-driven anticoagulation management project.
- P-8.1. Metric: Develop and implement pilot for patients on warfarin or other anticoagulants
 - a. Description of pilot, including following information: Number of patients on warfarin or other anticoagulants who were monitored for at least one month without a face-to-face visit and description of status on key health indicators
 - b. Data source: EHR, Medical records.
Rationale/Evidence: Goals: Understand problems of “usual care” and variance in management of anticoagulation; understand how implementation of guidelines, re-engineering care providers and use of technology can effectively implement performance improvement; Understand barriers when implementing performance improvement for anticoagulation. Evidence: In patient control of warfarin by pharmacy driven protocols for many diagnoses improved outcomes (time to effective anticoagulation); multiple hospital admissions are due to complications of outpatient anticoagulation with warfarin; Mechanism: Assemble team of Physicians, Pharmacists, QI Nurse, Administrators, and Information Technology specialist coordinated by pharmacy.
- P-9. Milestone: Develop program to identify and manage chronic care patients needing further clinical intervention
- P-9.1. Metric: Increase the number of patients identified as needing screening test, preventative tests, or other clinical services

- a. Description of the project aimed at identifying and managing chronic care patients, which should include the following information:
Numerator: Number of patients identified and subsequently receiving needed tests or other clinical services
Denominator: Number of patients identified as needing screening test, preventative tests, or other clinical services
 - b. Data source: EHR, patient registry
- P-10. Milestone: Expand and document interaction types between patient and health care team beyond one-to-one visits to include group visits, telephone visits, and other interaction types
- P-10.1. Metric: Description of expanded interaction types to include the following, number of group visits and/or telephone visits and/or other interaction types and criteria for determining appropriate visit type
 - a. Data source: Visit analysis, clinical protocols, EHR, billing records
- P-11. Milestone: Develop and implement program to assist patient to better self-manage their chronic conditions
- P-11.1. Metric: Program implementation aiming at increasing the number of patients enrolled in a self-management
 - a. Description of a program that would include the following information: Evidence based curriculum, targeted conditions (or MCC), outreach and marketing, implementation plan, program goals and program activities and number of patients enrolled in a self-management program for chronic conditions
 - b. Data source: Program materials, curriculum, program plan, EHR, patient registry, class enrollment and attendance records
- P-12. Milestone: Develop and implement plan for standing orders (i.e., lab orders for chronic conditions)
- P-12.1. Metric: Documentation of plan for standing orders
 - a. Data source: Computerized system to manage standing orders.
 - b. Rationale/Evidence: Forms that require handwritten information have higher risk of error, due to faulty memory, careless or mistaken transcription from other documents, and misinterpretation of handwriting. To minimize the risk of such errors, use pre-printed forms for common orders, medication flowsheets, and the medication administration record (MAR).⁴⁶
- P-13. Milestone: Develop and implement program for diabetes care managers to support primary care clinics
- P-13.1. Metric: Diabetes care manager support program for primary care clinics

46 <http://www.ihl.org/knowledge/Pages/Changes/UsePreTypedMedicationRecordsOrdersandFlowsheets.aspx>

- a. Documentation of implementation plan to include description of implementation and care manager activities to date.
 - b. Data source: Evidence of diabetes management care coordination clinic plan
- P-14. 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-14.1. 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-14.2. 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-15. 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-15.1. Metric: Description and the 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-16. 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-16.1. 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-16.2. 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-17. Milestone: Apply the Chronic Care Model to targeted chronic diseases, which are prevalent locally

I-17.1. (QPI) Metric: Patients receive care under the Chronic Care Model for a chronic disease or for MCC

- a. Number of patients served under model for targeted condition(s).
- b. Data Source: Registry
- c. Rationale/Evidence: an example of a meta-analysis of interventions to improve chronic illness looked at 112 studies, most of which were randomized clinical trials (27 asthma, 21 chronic heart failure, 33 depression, 31 diabetes); interventions that contained one or more chronic Care Model elements improved clinical outcomes (RR .75-.82) and processes of care (RR 1.30-1.61).⁴⁷

47 Tsai AC, Morton SC, Mangione CM, Keeler EB. Am J Manag Care. 2005 Aug. 11(8):478-88.

- I-18. Milestone: Improve the percentage of patients with self-management goals⁴⁸
- I-18.1. Metric: Patients with self-management goals
- a. Numerator: The number of patients with the specified chronic condition/MCC in the registry with at least one recorded self-management goal
 - b. Denominator: Total number of patients with the specified chronic condition/MCC in the registry
 - c. Data Source: Registry
 - d. Rationale/Evidence: “Patients with chronic conditions make day-to-day decisions about—self-manage—their illnesses. This reality introduces a new chronic disease paradigm: the patient-professional partnership, involving collaborative care and self-management education. Self-management education complements traditional patient education in supporting patients to live the best possible quality of life with their chronic condition. Whereas traditional patient education offers information and technical skills, self-management education teaches problem-solving skills. A central concept in self-management is self-efficacy—confidence to carry out a behavior necessary to reach a desired goal. Self-efficacy is enhanced when patients succeed in solving patient-identified problems. Evidence from controlled clinical trials suggests that (1) programs teaching self-management skills are more effective than information-only patient education in improving clinical outcomes; (2) in some circumstances, self-management education improves outcomes and can reduce costs for arthritis and probably for adult asthma patients; and (3) in initial studies, a self-management education program bringing together patients with a variety of chronic conditions may improve outcomes and reduce costs. Self-management education for chronic illness may soon become an integral part of high-quality primary care.”⁴⁹

48 Self-management goals help patients with coping mechanisms and quality of life related to chronic disease. These goals are developed by the patient, with the help of his or her care team. The patient’s ownership of these goals puts the patient at the center of his or her care, and increases the likelihood of achieving goals because they will be specific to the patient’s lifestyle and what he/she believes is possible.

49 Bodenheimer, T., Lorig, K., Holman, H., Grumbach, K., “Patient Self-management of Chronic Disease in Primary Care,” JAMA (May 15, 2008).

- I-19. Milestone: Implement disease-specific or MCC Medical Home. (Examples of medication management and other interventions for stroke follow; however, chosen metrics should be for the specific condition and demonstrate how patients have improved under nationally-recognized improvement measures specific to the disease.)
- I-19.1. Metric: Use of appropriate medication for specific disease (Example for stroke: Antiplatelet medication for secondary stroke prevention)
 - a. Numerator: Number of individuals with history/completed stroke and/or Transient Ischemic Attack (TIA) who are on antiplatelet medication and/or have a documented contraindication
 - b. Denominator: Number of individuals with history/completed stroke and/or TIA
 - I-19.2. Metric: Monitor clinically appropriate indicator of disease improvement (Example for stroke: Blood pressure control among individuals with history of/a completed stroke and/or TIA)
 - a. Numerator: Clinical indicator within recommended limits for target condition (provider to clearly define inclusion criteria for numerator)
 - b. Denominator: Number of individuals with target condition (provider to clearly define inclusion in denominator)
 - I-19.3. Metric: Patient engages in disease-appropriate preventive intervention (Example for stroke: Follow recommended exercise regimen)
 - a. Numerator: Number of individuals engaged in prevention intervention (provider to clearly define inclusion criteria for numerator)
 - b. Denominator: Number of individuals with target condition (provider to clearly define inclusion in denominator)
- I-20. Milestone: Redesign Rehabilitation Delivery Model
- I-20.1. Metric: Maintain or Improve (case-mix adjusted) 3-month Functional Independence Measure (FIM) Follow-up scores
 - a. Numerator: 3-month FIM follow up scores
 - b. Denominator: Baseline FIM follow up scores
- I-21. Milestone: Improvements in access to care of patients receiving chronic care management services . .
- I-21.1. Metric: Increase percentage of target population reached.
 - a. Numerator: Number of individuals of target population reached by the chronic care management 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-21.2. 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. Change in average [clinical outcome] (TBD by provider) of patients participating in chronic care management program (provider to clearly define inclusion and calculation).
 - b.
 - c. Data Source: EHR

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.

2.3 Redesign Primary Care

Project Goal:

Increase efficiency and redesign primary care clinics programs to be oriented around the patient so that primary care access and the patient experience can be improved.

Project Options:

2.3.1 Redesign primary care in order to achieve improvements in efficiency, access, continuity of care, and patient experience

Required core project components:

- a) Implement the patient-centered scheduling model in primary care clinics
- b) Implement patient visit redesign
- 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.

Rationale:

Primary care in the United States faces serious challenges. Many physician practices struggle to ensure that their patients have prompt access to care, consistently high-quality chronic and preventative services, and adequate coordination of care. This struggle impacts patients who may experience barriers in accessing primary care services secondary to transportation, the lack of an assigned provider, 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 improved health access, improved health outcome and reduced costs of services.

Process Milestones:

- P-1. Milestone: Establish baseline data for each: patient appointment ‘no-show’ rates, days to third-next available appointment, and primary care visit cycle times 50
- P-1.1. Metric: Baseline patient ‘no-show’ rates
- a. Numerator: Number of patients that did not show for a scheduled appointment (for any reason)
 - b. Denominator: Number of patients scheduled
 - c. Data Source: Practice management or scheduling systems
 - d. Rationale/Evidence: Establishes a benchmark for measuring success of innovation.
- P-1.2. Metric: Baseline days to third next available appointment for each clinic and/or department

- a. Numerator: The length of time in calendar days between the day a patient makes a request for an appointment with a provider/care team, and the third available appointment with that provider/care team
 - b. Data Source: Practice management or scheduling systems
 - c. Rationale/Evidence: Days to third-next available appointment is an industry standard of patients' access to care. The "third next available" appointment is used rather than the "next available" appointment since it is a more sensitive reflection of true appointment availability. For example, an appointment may be open at the time of a request because of a cancellation or other unexpected event. Using the "third next available" appointment eliminates these chance occurrences from the measure of availability.⁵¹
- P-1.3. Metric: Baseline average patient cycle time
- a. The time from when the patient enters the clinic or clinical area to when he/she exits in minutes.
 - b. Data Source: Practice management or scheduling systems
 - c. Rationale/Evidence: A lower cycle time indicates a more streamlined process with fewer handoffs and delays.
- P-2. Milestone: Implement the patient-centered scheduling model in primary care clinics
- P-2.1. Metric: Completion of all three phases of the redesign project: (1) Record, document, and examine random patient calls so that staff are able to experience the process of trying to make an appointment from the patient's perspective, (2) Implement open access scheduling in primary care so patients can make same-day or next-day appointments when indicated, and (3) Call patients in advance to confirm their appointments, pre-register patients, update insurance and demographic information, finding out what prescriptions need to be refilled – and if it makes sense, reschedule the appointment if there is a better time for the patient

51 <http://www.ihl.org/knowledge/Pages/Measures/ThirdNextAvailableAppointment.aspx>

- a. Number of primary care clinics that have fully implemented the model and description of redesign processes
 - b. Data Source: Program materials or other Performing Provider sources
 - c. Rationale/Evidence: Patient Centered Scheduling (PCS) is the proven methodology for improving the ability of patients to see their doctor when they want to—even the same day. PCS is designed to improve patient access, increase continuity of care, decrease the number of patient no-shows and decrease days to third-next-available appointment. Prior to implementation, “secret shopper” calls take place (random patient calls are recorded and documented) and examined so that staff are able to experience the process of trying to make an appointment from the patient’s perspective. Patient visits are also mapped from beginning to end to determine how time in the clinic is spent, and to identify any bottlenecks in the visit process. Once these are conducted, the focus turns to reducing no-show rates and time to third next available appointments. One key tactic to reduce no-show rates and wasted time is to do as much pre-work as possible, such as calling patients in advance to confirm their appointments, pre-registering patients, updating insurance and demographic information, finding out what prescriptions need to be refilled—and if it makes sense, rescheduling the appointment if there’s a better time for the patient. Doing patient registration and appointment confirmation ahead of time not only minimizes wasted time, but also gives staff the time to prepare and plan for any unforeseen changes, such as cancellations or changes to appointments. Providers piloting the patient-centered scheduling model have seen significant reductions in no-show rates and days to third-next-available appointments, which will be critical progress in order to truly offer patients a patient-centered medical home.
- P-3. Milestone: Implement open access scheduling in primary care clinics
- P-3.1. Metric: Open access scheduling
 - a. Provider's report with the description of the activities that were necessary for the implementation of open access scheduling, challenges, and impact on the population served. Provider is to include the information on the number of primary care clinics that have fully implemented open access scheduling
 - b. Data Source: Scheduling materials or other Performing Provider sources
 - c. Rationale/Evidence: In clinics with open access scheduling, time to the third next available appointment is one day. Open access scheduling enables patients to see their doctor when they want to—even the same day, which can improve patient access, increase continuity of care, decrease the number of patient no-shows, and decrease days to third-next-available appointment.
- P-4. Milestone: Implement patient visit redesign in primary care clinics
- P-4.1. Metric: Completion of all four phases of the redesign project: (1) Establish method to collect and report cycle time at least monthly; (2) Compare cycle

time to other potential measures of efficiency; (3) Map patient visits from beginning to end to determine how time in the clinic is spent and to identify any bottlenecks in the visit process; and (4) Conduct a series of tests on the visit model, debrief thoroughly, and refine the model

- a. Provider's report with the description of the activities that were necessary for the implementation of patient visit redesign in primary care clinics, challenges, and impact on the population served. Provider is to include the information on the number of primary care visits delivered under the redesigned model
- b. Data Source: Documentation from Performing Provider
- c. Rationale/Evidence: to increase efficiency and productivity so that more patients can be seen. Since 1998, the Patient Visit Redesign (PVR) model has been the standard in work process design, drastically improving patient visit times in health care organizations throughout the United States.

P-5. Milestone: Train staff on methods for redesigning clinics to improve efficiency

P-5.1. Metric: Number of staff trained (-

- a. Number of relevant primary care clinic staff trained on clinic redesign principles
- b. Data Source: HR, training program materials;
- c. Rationale/ evidence: Trained staff for clinic redesign can improve clinic efficiency and reduce patient appointment no-shows.

P-5.2. Metric: Percent improvement in staff knowledge on methods of redesigning clinics to improve efficiency. (Calculate pre and post training score on a test of the material included in the training)

- a. Change in score for percentage of questions answered correctly (pre and post)
- b. Data Source: Knowledge assessment tool and survey results
- c. Rationale: Establishes baseline of knowledge pre and post training intervention. Also provides measure of training impact and/or need for curriculum/instructor modifications.

P-6. Milestone: Implement practice management system

P-6.1. Metric: Documentation of practice management system, such as vendor contract

- a. Data Source: Documentation on PMS systems, including contractual agreements.
- b. Rationale/Evidence: A practice management system is a vital technology tool for establishing the capacity to manage the health care of patient groups or populations, including access to primary care

P-7. Milestone: Establish bilingual patient portal that allows patients to view their health records on their home computer or cell phone, make appointments on line, or contact their physician on-line with a question.

P-7.1. Metric: Increase the percentage of patients registered to the portal system.

- a. Numerator: Number of registered patients on portal.
 - b. Denominator: Total number of patients
 - c. Data Source: Documentation of establishment and utilization of systems.
 - d. Rationale: Enhances the patient health care experience by providing self-management health care tools and resources.
- P-7.2. Metric: Average number of encounters with the patient portal
- a. Numerator: Total number of encounters with the patient portal.
 - b. Denominator: Total number of patients registered to the portal.
 - c. Data Source: Portal census reporting and patient population records.
 - d. Rationale: Provides data that can drive outreach marketing needs as well as input into potential re-design needs of the portal.
- P-8. Milestone: Develop a marketing system to encourage patient utilization of the patient portal.
- P-8.1. Metric: Documentation of patient portal marketing and education strategy
- a. Data Source: Marketing and outreach documentation records.
 - b. Rationale: Patient awareness and education needs.
- P-9. Milestone: Develop/implement a system for protocol driven automatic patient reminders (must select at least one metric):
- P-9.1. Metric: Document system and processes to implement reminder system
- a. Data Source: Protocol documentation.
 - b. Rationale: The literature suggests that automatic patient reminders can be a successful methodology to increase appointment adherence. Documentation of system design is a critical element for innovation diffusion, spread and sustainability.
- P-9.2. Metric: Documentation of automated process for reminder system
- a. Data Source: Automated call log documentation.
 - b. Rationale: The literature suggests that automatic patient reminders can be a successful methodology to increase appointment adherence. Documentation of system design is a critical element for innovation diffusion, spread and sustainability.
- 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 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: Description and 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-11. Milestone: Improve patient access to primary care as measured by reducing third next available appointment times in primary care clinics to fewer than 2 calendar days or improving upon baseline rate by 30%.⁵²
- I-11.1. Metric: Third Next-Available Appointment
 - a. The length of time in calendar days between the day a patient makes a request for an appointment with a provider/care team, and the third available appointment with that provider/care team.
 - 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.
- I-12. Milestone: Reduce patient appointment no-show rates to a percent defined by the provider
- I-12.1. Metric: No-show rate
 - a. Number of patients that did not show for a scheduled appointment (for any reason)
 - b. Denominator: Number of patients scheduled
 - c. Data Source: Use practice management system to calculate daily for each provider in clinic
 - d. Rationale/Evidence: A high no-show rate represents unused or underused capacity or an inability to satisfy the patient's request for time and/or day of the appointment.
- I-13. Milestone: Identify and provide follow-up contact to patients who have missed appointments, are overdue for care, or are not meeting care management goals
- I-13.1. Metric: Follow-up contact rate (the percentage of patients with appointments booked prior to the actual day of clinic who did not show up for their scheduled visit and received a follow-up contact)
 - a. Numerator: Number of patients who missed an appointment and received a follow-up contact Denominator: Number of patients who missed an appointment.
 - b. Data Source: Practice management system
 - c. Rationale/Evidence: Missed appointments are known to interfere with appropriate care of acute and chronic health conditions and to misspend medical and administrative resources. They represent a major burden on health care systems and costs by reducing the effectiveness of outpatient health care delivery.

- I-14. Milestone: Improve the patient experience of the primary care visit by reducing the time a patient waits while in the primary care office – without reducing the time the patient spends with his/her provider, as measured by reducing average visit cycle time⁵³ for primary care clinics to 30 minutes or 1.5 times the actual time spent with clinician – without reducing the time a patient spends with his/her provider
- I-14.1. Metric: Visit cycle time⁵⁴
- a. The time from when the patient enters the clinic or clinical area to when he/she exits in minutes.
 - b. Data Source: Practice management or scheduling systems or another Performing Provider data source
 - c. Rationale/Evidence: A lower cycle time indicates a more streamlined process with fewer handoffs and delays.
- I-15. Milestone: Improve patient satisfaction with quality of visits.
- I-15.1. Metric: Quality of Team Care
- a. Patient satisfaction score as measured by the CG-CAHPS surveys or other evidence based satisfaction tool.
 - b. Data Source: Survey results
 - c. Rationale: The purpose is to capture the patients' perspective on the quality of care from the providers of primary care. This information can be used to assess and improve the patient-centeredness of care
- I-16. Milestone: Patient self-enrollment in on-line patient portal for access to their health record and bi-directional communication
- I-16.1. Metric: Percent of primary care patients enrolled in on-line program
- a. Numerator: Total number of patients enrolled in program.
 - b. Denominator: Total number of patients.
 - c. Data Source: Enrollment log documentation.
 - d. Rationale: Enhances the patient health care experience by providing self-management health care tools and resources.

53 Cycle time is measured from the time a patient enters to the time a patient exits the clinic. The time being reduced within the cycle is the wait times a patient experiences, while time spent with a provider stays the same or in many cases, increases. 5 Junod Perron et al. BMC Family Practice 2010, 11:79 <http://www.biomedcentral.com/1471-2296/11/79>

54 <http://www.ihl.org/knowledge/Pages/Measures/OfficeVisitCycleTime.aspx>

- I-17. Measure: Increase capacity to redesign primary care. .
- I-17.1. Metric: Increased number of re-designed primary care visits.
- a. Total number of visits provided under redesigned model 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. (QPI) Metric: Documentation of increased number of unique patients receiving services under redesigned model. 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.

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.

2.6 Implement Evidence-based Health Promotion Programs

Project Goal:

Implement innovative evidence based health promotion strategies such as use of community health workers, innovations in social media and messaging for targeted populations.

Project Options:

2.6.1 Engage in population-based campaigns or programs to promote healthy lifestyles using evidence-based methodologies including social media and text messaging in an identified population.

Required core components:

- a) 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.

2.6.2 Establish self-management programs and wellness using evidence-based designs.

Required core components:

- a) 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.

2.6.3 Engage community health workers in an evidence-based program to increase health literacy of a targeted population.

Required core components:

- a) 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.

Rationale:

The current prevention and treatment system is an unconnected, silo-based approach, which reduces the effectiveness and increases the cost of health care.¹ As the US health care system strives to deliver better health, improved care and lower costs, the potential exists for innovative evidenced based health promotion strategies to further these goals.

Delivery Mechanisms: Community health workers can increase access to care and facilitate appropriate use of health resources by providing outreach and cultural linkages between communities and delivery systems; reduce costs by providing health education, screening, detection, and basic emergency care; and improve quality by contributing to patient-provider communication, continuity of care, and consumer protection. Information sharing, program support, program evaluation, and continuing education are needed to expand the use of community health workers and better integrate them into the health care delivery system.

Self-Management education complements traditional patient education in supporting patients to live the best possible quality of life with their chronic condition. Whereas traditional patient education offers information and technical skills, self-management education teaches problem-solving skills. A central concept in self-management is self-efficacy—confidence to carry out a behavior necessary to reach a desired goal. Self-efficacy is enhanced when patients succeed in solving patient-identified problems. Evidence from controlled clinical trials suggests that⁵⁵ (1) programs teaching self-management skills are more effective than information-only patient education in improving clinical outcomes; (2) in some circumstances, self-management education improves outcomes and can reduce costs for arthritis and probably for adult asthma patients⁵⁶; and (3) in initial studies, a self-management education program bringing together patients with a variety of chronic conditions may improve outcomes and reduce costs.⁵⁷

Process Milestones:

Define evidence-based practices as the conscientious and judicious use of current best evidence in conjunction with clinical expertise and patient values to guide health care decisions

- P-1. Milestone: Conduct an assessment of health promotion programs that involve community health workers at local and regional level.
 - P-1.1. Metric: Document regional assessment
 - a. Data Source: Performing Provider assessment and summary of findings
 - b. Rationale/Evidence: The importance of this milestone is to identify, support and compliment already existing resources in the community for health promotion programs.

- P-2. Development of evidence-based projects for targeted population based on distilling the needs assessment and determining priority of interventions for the community
 - P-2.1. Metric: Document innovational strategy and plan.
 - a. Data Source: Performing Provider evidence of innovational plan
 - b. Rationale/Evidence: Documentation of innovational strategy and plan.

- P-3. Milestone: Implement, document and test an evidence-based innovative project for targeted population
 - P-3.1. Metric: Document implementation strategy and testing outcomes.

55 1Thorpe, K, The Affordable Care Act lays the groundwork for a national diabetes prevention and treatment strategy. Health Aff January 2012 vol. 31 no. 1 61-66

56 2A Witmer, S D Seifer, L Finocchio, J Leslie, and E H O'Neil. Community health workers: integral members of the health care work force. American Journal of Public Health August 1995: Vol. 85, No. 8_Pt_1, pp. 1055-1058. doi: 10.2105/AJPH.85.8_Pt_1.1055

57 Bodenheimer T, Lorig K, Holman H, Grumbach K. Patient Self-management of Chronic Disease in Primary Care. JAMA. 2002; 288(19):2469-2475.

- a. Data Source: Performing Provider contract or other documentation of implementation TBD by Performing Provider.
 - b. Rationale/Evidence: Documentation of implementation strategy and testing outcomes.

- P-4. Milestone: Execution of a learning and diffusion strategy for testing, spread and sustainability of best practices and lessons learned.
 - P-4.1. Metric: Document learning and diffusion strategic plan
 - a. Data Source: Performing Provider contract or other documentation of implementation TBD by Performing Provider.
 - b. Rationale/Evidence: Documentation of learning and diffusion strategic plan and actions.

- P-5. Milestone: Execution of evaluation process for project innovation.
 - P-5.1. Metric: Document evaluative process, tools and analytics.
 - a. Data Source: Performing Provider contract or other documentation of implementation TBD by Performing Provider
 - b. Rationale/Evidence: Documentation of evaluation process, tools and analytics.

- 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: Description of and 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-6. Milestone: Percent of patients in defined population receiving innovative intervention consistent with evidence-based model.

I-6.1. Metric: Increase access to innovative intervention for the targeted population

- a. Numerator: Total number of patients in defined population who received innovative intervention.
- b. Denominator: Total number of patients in defined population.
- c. Data Source: Patient records
- d. Rationale/Evidence: To test innovative intervention model variables (better health, improved care and lower costs).

- I-6.2. (QPI) Metric: Increase in number of individuals participating in innovative intervention consistent with evidence-based model.
- a. Total number of patients in defined population who received innovative intervention.
 - b. Data Source: Patient records
 - c. Rationale/Evidence: To test innovative intervention model variables (better health, improved care and lower costs).

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.

2.7 Implement Evidence-based Disease Prevention Programs

Project Goal:

Implement innovative evidence-based strategies in disease prevention areas including the following: diabetes, obesity, tobacco use, prenatal care, birth spacing, and health screenings.

Project Options:

2.7.1 Implement innovative evidence-based strategies to increase appropriate use of technology and testing for targeted populations (e.g., mammography screens, colonoscopies, prenatal alcohol use, etc.)

Required core components:

a) 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.

2.7.2 Implement innovative evidence-based strategies to reduce tobacco use.

2.7.3 Implement innovative evidence-based strategies to increase early enrollment in prenatal care.

Required core components:

a) 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.

2.7.4 Implement innovative evidence-based strategies to reduce low birth weight and preterm birth.

Required core components:

a) 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.

2.7.5 Implement innovative evidence-based strategies to reduce and prevent obesity in children and adolescents.

Required core components:

a) 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.

Rationale:

Disease management emphasizes prevention of disease-related exacerbations and complications using evidence-based guidelines and patient empowerment tools. It can help manage and improve the health status of a defined patient population over the entire course of a disease.¹

By concentrating on the causes of chronic disease, the community moves from a focus on sickness and disease to one based on wellness and prevention. The National Prevention Council strategy for Disease Prevention focuses on four areas: building healthy and safe community environments, expanding quality preventive services in clinical and community settings, helping people make healthy choices, and eliminating health disparities. To achieve these aims, the strategy identifies seven evidence-based recommendations that are likely to reduce the leading causes of preventable death and major illness, including tobacco-free living, drug- and excessive alcohol-use prevention, healthy eating, active living, injury and violence-free living, reproductive and sexual health, and mental and emotional well-being.²

Delivery Mechanisms: (note this list is not inclusive of all delivery mechanisms)

- Establish and use patient registry systems to enhance the provision of patient follow-up, screenings for related risk factors and to track patient improvement.
- Establish and implement clinical practice guidelines.
- Adopt the Chronic Care Model
- Develop a mapping process linking patients treated in the emergency rooms with RFPs to improve the continuum of care and standardized procedures and outcome measures.
- Promote RHP health system supports such as reminders of care, development of clinical performance measures, and the use of case management services to increase patient's adherence to health care guidelines.
- Establish evidence-based disease and disability prevention programs for targeted populations to reduce their risk of disease, injury, and disability.

Process Milestones:

- P-1. Milestone: Development of innovative evidence-based project for targeted population.
- P-1.1. Metric: Document innovational strategy and plan.
- a. Data Source: Performing Provider evidence of innovational plan
- b. Rationale/Evidence: To identify, develop and test new models of healthcare delivery and disease management lays the ground work for widespread adoption of innovative care that can lead to a system that delivers better health, better care at reduced costs.³
- P-2. Milestone: Implement evidence-based innovational project for targeted population
- P-2.1. Metric: Document implementation strategy and testing outcomes.
- a. Data Source: Performing Provider contract or other documentation of implementation TBD by Performing Provider.
- b. Rationale/Evidence: To identify, develop and test new models of healthcare delivery and disease management lays the ground work for widespread adoption of innovative care that can lead to a system that delivers better health, better care at reduced costs.³
- P-3. Milestone: Execution of learning and diffusion strategy for testing, spread and sustainability.
- P-3.1. Metric: Document learning and diffusion strategic plan

- a. Data Source: Performing Provider contract or other documentation of implementation TBD by Performing Provider.
 - b. Rationale/Evidence: Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Trying to change the pace at which innovation diffuses through a system is a priority of health care professionals, such changes easily have major impacts on cost, quality and patient satisfaction. A key factor in closing the gap between best practice and common practice is the ability of health care providers and their organizations to rapidly spread innovations and new ideas.
- P-4. Milestone: Execution of evaluation process for project innovation.
- P-4.1. Metric: Document evaluative process, tools and analytics.
 - a. Data Source: Performing Provider contract or other documentation of implementation TBD by Performing Provider
 - b. Rationale/Evidence: Evaluation if a systematic way to improve and account for public health actions by involving procedures that are useful, feasible, ethical, and accurate.⁵
- P-5. 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-5.1. 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-5.2. 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-6. 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-6.1. Metric: Description of and the 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-7. 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-7.1. 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-7.2. 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-5. Milestone: Percent of patients in defined population receiving innovative intervention consistent with evidence-based model.
- I-5.1. Metric: Target population reached by innovative intervention
 - 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: To test innovative intervention model variables (better health improved care and lower costs).
 - I-5.2. (QPI) Metric: Increase in number of population participating in the innovative intervention
 - a. Number of individuals of target population reached by the innovative project.
 - b. Data Source: Documentation of target population reached, as designated in the project plan.
 - c. Rationale/Evidence: To test innovative intervention model variables (better health improved care and lower costs).
 - I-5.3. Metric: Increased number of encounters as defined by intervention (e.g., screenings, education, outreach, etc.)
 - a. Total number of visits for reporting period
 - b. Data Source: Registry, EHR, claims or other Performing Provider sourceRationale/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.

2.9 Establish/Expand a Patient Care Navigation Program

Project Goal:

The goal of this project is to utilize community health workers, case managers, or other types of health care professionals as patient navigators to provide enhanced social support and culturally competent care to vulnerable and/or high-risk patients. Patient navigators will help and support these patients to navigate through the continuum of health care services. Patient Navigators will ensure that patients receive coordinated, timely, and site-appropriate health care services. Navigators may assist in connecting patients to primary care physicians and/or medical home sites, as well as diverting non-urgent care from the Emergency Department to site-appropriate locations. RHPs implementing this project will identify health care workers, case managers/workers or other types of health professionals needed to engage with patients in a culturally and linguistically appropriate manner that will be essential to guiding the patients through integrated health care delivery systems.

A study on Patient Navigation funded by the National Cancer Institute was done in TX and a manual for patient navigation programs directed towards Latino audiences was released following its completion.⁵⁸

Project Options:

2.9.1 Provide navigation services to targeted patients who are at high risk of disconnect from institutionalized health care (for example, patients with multiple chronic conditions, cognitive impairments and disabilities, Limited English Proficient patients, recent immigrants, the uninsured, those with low health literacy, frequent visitors to the ED, and others)

Required core project components:

- a) Identify frequent ED users and use navigators as part of a preventable ED reduction program. Train health care navigators in cultural competency.
- b) Deploy innovative health care personnel, such as case managers/workers, community health workers and other types of health professionals as patient navigators.
- c) Connect patients to primary and preventive care.
- d) Increase access to care management and/or chronic care management, including education in chronic disease self-management.
- e) 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.

Rationale:

Patient navigators help patients and their families navigate the fragmented maze of doctors’ offices, clinics, hospitals, out-patient centers, payment systems, support organizations and other components of the healthcare system. Services provided by patient navigators vary by program and the needs of the patient, but often include:⁵⁹

58 <http://www.redesenaccion.org/sites/www.redesenaccion.org/files/PNmanualfinal.pdf>

59 http://www.altfutures.com/draproject/pdfs/Report_07_02_Patient_Navigator_Program_Overview.pdf

- Facilitating communication among patients, family members, survivors and healthcare providers.
- Coordinating care among providers.
- Arranging financial support and assisting with paperwork.
- Arranging transportation and child care.
- Ensuring that appropriate medical records are available at medical appointments.
- Facilitating follow-up appointments.
- Community outreach and building partnership with local agencies and groups.
- Ensuring access to clinical trials.

There is no one common definition of patient navigators and the profile of a patient navigator vary widely by program. Many use trained community health workers who may be full-time employees or volunteers. Community health workers have close ties to the local community and serve as important links between underserved communities and the healthcare system. They also possess the linguistic and cultural skills needed to connect with patients from underserved communities. Community health workers are also known as community health advisors, lay health advocates and promotoras de salud. Healthcare navigators include trained social workers, nurses and nurse practitioners as well as trained lay persons/volunteers. Some navigation programs also use a team based approach that combines community health workers with one or more professionals with experience in healthcare or social work. While there is no set education required for a patient navigator to be successful, a successful navigator should be:

- Compassionate, sensitive, culturally attuned to the people and community being served and able to communicate effectively.
- Knowledgeable about the environment and healthcare system.
- Connected with critical decision makers inside the system, especially financial decision makers.

Process Milestones:

- P-1. Milestone: Conduct a needs assessment to identify the patient population(s) to be targeted with the Patient Navigator program.
 - P-1.1. Metric: Provide report identifying the following:
 - Targeted patient population characteristics (e.g., patients with no PCP or medical home, frequent ED utilization, homelessness, insurance status, low health literacy).
 - Gaps in services and service needs.
 - How program will identify, triage and manage target population (i.e. Policies and procedures, referral and navigation protocols/algorithms, service maps or flowcharts).
 - Ideal number of patients targeted for enrollment in the patient navigation program
 - Number of Patient Navigators needed to be hired
 - Available site, state, county and clinical data including flow patients, cases in a given year by race and ethnicity, number of cases lost to follow-up that required medical treatment, percentage of monolingual patients

- a. Data Source: Program documentation, EHR, claims, needs assessment survey
 - b. Rationale/Evidence: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions.⁶⁰
- P-2. Milestone: Establish/expand a health care navigation program to provide support to patient populations who are most at risk of receiving disconnected and fragmented care⁶¹ including program to train the navigators, develop procedures and establish continuing navigator education.
- P-2.1. Metric: Number of people trained as patient navigators, number of navigation procedures, or number of continuing education sessions for patient navigators.
 - a. Workforce development plan for patient navigator recruitment, training and education
Rationale: A navigator’s education and skill level are main determinants of the cost of patient navigation. Education, a typical gauge for salary, can range from a peer educator recruited from the community and trained in a clinical setting to an oncology research nurse with a graduate degree.
 - P-2.2. Metric: Develop outreach plan to enroll patients in navigation program
 - a. Data Source: Patient navigation program materials and database, EHR
 - b. Rationale/Evidence: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions.⁶²
 - P-2.3. Metric: Average frequency of contact with care navigators for high risk patients.
 - a. Numerator: Number of care navigation encounters for high risk patients
 - b. Denominator: Number of high risk patients enrolled in patient navigation program.
 - c. Data Source: Patient navigation program materials and database, EHR
 - d. Rationale/Evidence: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions
- P-4. Milestone: Increase patient engagement, such as through patient education, self-management support, improved patient-provider communication techniques, and/or coordination with community resources

60 As an example, see “Limited English Proficiency Patient Family Advocate,” available at AHRQ’s Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=2726>

61 Could be facility-oriented, illness/condition-oriented, and/or focused on patient populations who are at most risk of disconnected care (e.g., “Limited English Proficiency Patient Family Advocate” available here <http://www.innovations.ahrq.gov/content.aspx?id=2726>, urgent care, ED)

62 As an example, see “Limited English Proficiency Patient Family Advocate,” available at AHRQ’s Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=2726>

- P-4.1. Metric: Description of and the number of classes and/or initiations offered, or number or percent of patients enrolled in the program
- a. Provider's report on the efforts to increase patient engagement, challenges and size of the population reached by these efforts. (could include the Number of patients enrolled in patient engagement programs as a percent of all patients eligible to participate in engagement programs, as determined by provider.
 - b. .
 - c. Data Source: May vary, such as class participant lists
 - d. Rationale/Evidence: Increased patient engagement in such activities can empower patients with the knowledge, information, and confidence to better self-manage their conditions, helping the patients to stay healthy
- P-5. Milestone: Provide reports on the types of navigation services provided to patients using the ED as high users or for episodic care. The navigation program is accountable for making PCP or medical home appointments and ensuring continuity of care. Especially for disenfranchised or medically complex patients, navigation is about guiding people through and across the HC system, from provider to provider, ensuring they can get to and make multiple appointments, get prescriptions filled, access to community services for people with special needs (such as getting cancer patients access to support groups), etc. the patient navigator represents the liaison between primary, secondary, tertiary and quaternary health care.
- P-5.1. Metric: Collect and report on all the types of patient navigator services provided.
- a. Data Source: Report detailing the types of services provided, frequency for each service and algorithm describing eligibility for each type of navigation service (e.g, assignment to medical home, teaching on appropriate use of services, follow-up care coordination, assistance with eligibility for social services, system navigation for complex care needs, etc.)
 - b. Rationale/Evidence: Patient Navigators are intended to help patients and their caregivers interact with various departments and processes within the health care system. Developing a report of the most prevalent types of services provided will allow the performing providers to tailor the services provided based upon patient needs. Reports on these types of activities could include frequency of primary care referrals, coordination with specialist care, diagnostic services, social services, pharmacy services, patient educations services and peer support networks.
- 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: Participate in 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: Description of and 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-6. Milestone: Increase empanelment in primary care settings for patients without a medical home who use the ED, urgent care, and/or hospital services.
- I-6.1. Metric: Increase medical home empanelment of patients referred from navigator program.
- a. Numerator: Number of new patients referred for services from Patient Navigator Program that are seen in primary care setting and empanelled to the medical home.
 - b. Denominator: Number of new patients referred for services from Patient Navigator Program.
 - c. Data Source: Performing Provider administrative data on patient encounters and scheduling records from patient navigator program.
 - d. Rationale: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions.⁶³ Tying inpatient and outpatient care can help integrate inpatient and outpatient services and promote accountability for the coordination, cost and quality of care.
- I-6.2. Metric: Percent of patients without a primary care provider (PCP) who received education about a primary care provider in the ED
- a. Numerator: Number ED patients without a PCP documented in their medical record that receive (documented) education or resources to identify a PCP from a patient navigator.
 - b. Denominator: ED patients without a PCP documented in their medical record.
 - c. Data Source: Performing Provider administrative data on patient encounters and scheduling records from patient navigator program.
 - d. Rationale: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions.⁶⁴ Tying inpatient and outpatient care can help integrate inpatient and outpatient services and promote accountability for the coordination, cost and quality of care.

63 As an example, see "Limited English Proficiency Patient Family Advocate," available at AHRQ's Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=2726>

64 As an example, see "Limited English Proficiency Patient Family Advocate," available at AHRQ's Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=2726>

- I-6.3. Metric: Percent of patients without a primary care provider who were referred to a primary care provider in the ED
- a. Numerator: Number ED patients without a PCP documented in their medical record that receive (documented) referral to a PCP.
 - b. Denominator: ED patients without a PCP documented in their medical record.
 - c. Data Source: Performing Provider administrative data on patient encounters and scheduling records from patient navigator program.
 - d. Rationale: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions.⁶⁵ Tying inpatient and outpatient care can help integrate inpatient and outpatient services and promote accountability for the coordination, cost and quality of care.
- I-6.4. Metric: Percent of patients without a primary care provider who are given a scheduled primary care provider appointment
- a. Numerator: Number of patients without a PCP documented in their medical record that receive an appointment with a PCP as a function of the care navigation program.
 - b. Denominator: Number of patients without a PCP documented in their medical record using the care navigation program.
 - c. Data Source: Performing Provider administrative data on patient encounters and scheduling records from patient navigator program.
 - d. Rationale: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions.⁶⁶ Tying inpatient and outpatient care can help integrate inpatient and outpatient services and promote accountability for the coordination, cost and quality of care.

⁶⁵ As an example, see "Limited English Proficiency Patient Family Advocate," available at AHRQ's Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=2726>

⁶⁶ As an example, see "Limited English Proficiency Patient Family Advocate," available at AHRQ's Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=2726>

- I-6.5. Metric: Number of patients with a primary care provider who are given a scheduled primary care provider appointment
- a. Number of patients that receive an appointment with a PCP as a function of the care navigation program.
 - b. Data Source: Performing Provider administrative data on patient encounters and scheduling records from patient navigator program.
 - c. Rationale: Patient care navigation has been established as a best practice to improve the care of populations at high risk of being disconnected from health care institutions.⁶⁷ Tying inpatient and outpatient care can help integrate inpatient and outpatient services and promote accountability for the coordination, cost and quality of care.
- I-6.6. Metric: Individual engagement measure derived from the individual engagement domain of the C-CAT
- a. Numerator: Individual engagement: an organization should help its workforce engage all individuals, including those from vulnerable populations, through interpersonal communication that effectively elicits health needs, beliefs, and expectations; builds trust; and conveys information that is understandable and empowering. Measure is scored on 18 items from the patient survey of the C-CAT and 9 items from the staff survey of the C-CAT. Minimum of 100 patient responses and 50 staff responses.
 - b. Denominator: There are two components to the target population: staff (clinical and nonclinical) and patients. Sites using this measure must obtain at least 50 staff responses and at least 100 patient responses. Exclusion: Staff respondents who do not have direct contact with patients are excluded from questions that specifically address patient contact.
 - c. Data source: C-CAT
 - d. Rationale: 0-100 measure of individual engagement related to patient-centered communication, derived from items on the staff and patient surveys of the Communication Climate Assessment Toolkit.

⁶⁷ As an example, see "Limited English Proficiency Patient Family Advocate," available at AHRQ's Innovations Exchange, <http://www.innovations.ahrq.gov/content.aspx?id=2726>

- I-7. Milestone: Reduce average number of ED visits and/or avoidable hospitalizations for patients enrolled in the navigator program
- I-7.1. Metric: ED visits and/or avoidable hospitalizations
 - a. Numerator: Number of ED visits and/or avoidable hospitalizations during the reporting period for patients enrolled in the navigator program
 - b. Denominator: Total number of patients enrolled in the navigator program
 - c. Data Source: EHR, navigation program database, ED records, inpatient records
 - d. Rationale/Evidence: Avoidable hospitalizations and excessive use of ED are seen as key measures of patients' disconnect from the health care systems.⁶⁸ As this is an innovative program, it is a good opportunity to measure whether the program can have a direct impact on reducing ED visits/avoidable hospitalizations.
- I-8. Milestone: Reduction in ED use by identified ED frequent users receiving navigation services.
- I-8.1. Metric: ED visits pre- and post-navigation services by individuals identified as ED frequent users.
 - a. Difference in total number of ED visits pre- and post-navigation services.
 - b. Data Source: Claims and EHR/registry
 - d.
- I-9. Milestone: Improved adherence to recommended care regimens for patients in Navigator program).
- I-9.1. Metric: Improved compliance with recommended care regimens.
 - a. Numerator: Number of Navigator program participants in compliance with [recommended care regimen] (TBD by provider) (provider should clearly describe criteria for inclusion in numerator).
 - b. Denominator: number of patients enrolled in Navigator program
 - c. Data Source: EHR, claims

⁶⁸ For example, see the care transitions work of Eric Coleman, MD, at <http://www.caretransitions.org>

- I-10. Milestone: Improvements in access to care of patients receiving patient navigation services
- I-10.1. Metric: Increase percentage of target population reached.
 - a. Numerator: Number of individuals of target population reached by the Patient Navigator 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-10.2. (QPI) Metric: Documentation of increased number of unique patients served by Navigator program. Demonstrate improvement over prior reporting period.
 - a. Total number of unique patients provided with Navigation services or enrolled in Navigator program 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-

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.

2.10 Use of Palliative Care Programs

Project Goal:⁶⁹

Provide palliative care services to improve patient outcomes and quality of life. Palliative medicine represents a different model of care, focusing not on cure at any cost but on relief and prevention of suffering. Here the priority is supporting the best possible quality of life for the patient and family, regardless of prognosis. Ideally, the principles of palliative care can be applied as far upstream as diagnosis, in tandem with cure-directed treatment, although it's still associated in most people's minds with end-of-life care. There is an economic incentive for hospitals to support palliative care -- research shows significant reductions in pharmacy, laboratory, and intensive care costs -- though there's understandable reluctance to tout such benefits. After all, accusations of "death panels" effectively shut out government funding for palliative care as national debates about health care reform took shape.

Palliative care has emerged in the past decade. It takes an interdisciplinary approach – doctors, nurses, social workers and often chaplains – and blends it with curative care for seriously ill people. While palliative care is for people who are very sick, they don't have to have a six-month life expectancy. Some palliative care programs operate in hospitals; others treat people living at home. Growing numbers of community-based hospices also have palliative care services now. Pediatric palliative care is not available everywhere, although it's becoming more common at the major children's hospitals. In addition, hospices nationwide, which traditionally were often unwilling to treat dying children, have also become more open to pediatric care. The new health reform law allows dying children on Medicaid or the state Children's Health Insurance Program to get hospice or palliative care without halting other treatment⁷⁰.

Health care reform has the potential to improve palliative care by implementing care coordination (in hospitals and community) evidence-based programs that are already proven to be working. Within palliative care, patients receive dignified and culturally appropriate end-of-life care, which is provided for patients with terminal illnesses in a manner that prioritizes pain control, social and spiritual care, and patient/family preferences

Project Options:

2.10.1 Implement a Palliative Care Program to address patients with end-of-life decisions and care needs

Required core project components:

- a) Develop a business case for palliative care and conduct planning activities necessary as a precursor to implementing a palliative care program
- b) Transition palliative care patients from acute hospital care into home care, hospice or a skilled nursing facility
- c) Implement a patient/family experience survey regarding the quality of care, pain and symptom management, and degree of patient/family centeredness in care and improve scores over time

69 The Center to Advance Palliative Care (CAPC) www.capc.org/reportcard

70 <http://www.kaiserhealthnews.org/>

71 Cost savings associated with US hospital palliative care consultation programs.

Morrison RS, Penrod JD, Cassel JB, Caust-Ellenbogen M, Litke A, Spragens L, Meier DE; Palliative Care Leadership Centers' Outcomes Group. Arch Intern Med. 2008 Sep 8; 168(16):1783-90.

- 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.

Rationale:

While end-of-life care was once associated almost exclusively with terminal cancer, today people receive end-of-life care for a number of other conditions, such as congestive heart failure, other circulatory conditions, COPD, and dementia⁷². Further, some experts have suggested that palliative and hospice care could be more widely embraced for many dying patients. However, these experts say that overly rigid quality standards and poorly aligned reimbursement incentives discourage appropriate end-of-life care and foster incentives to provide inappropriate restorative care and technologically intensive treatments. These experts note that hospitals, nursing homes, and home health agencies need stronger incentives to provide better access to palliative care and care coordination either directly, themselves, or by contract with outside suppliers of hospice services⁷³. It seems clear that improving care coordination near the end of life can improve care for patients with chronic conditions, however, in addition to the elderly with multiple chronic conditions and terminal illnesses, palliative care should also allow children who are enrolled in either Medicaid or CHIP to receive hospice services without foregoing curative treatment related to a terminal illness.

Process Milestones:

- P-1. Milestone: Develop a hospital-specific business case for palliative care and conduct planning activities necessary as a precursor to implementing a palliative care program
- P-1.1. Metric: Business case
- a. Submission of business case
 - b. Data Source: Business case write-up; documentation of planning activities
 - c. Rationale/Evidence: Studies have established that palliative care reduces the cost of care.⁷⁴ It is widely accepted in the field that planning activities are necessary to establish successful palliative care programs.⁷⁵
- P-2. Milestone: Educate primary care specialties (e.g. family medicine, Internal Medicine, Pediatrics, Geriatrics and other IM subspecialties) in providing palliative care including non-cancer training.

72 MedPAC, 2008

73 Zerzan, Stearns, & Hanson, 2000; Hanley, 2004

74 For example, see a study by Sean Morrison, et al., <http://www.med-ic.org/pdf/PC1.pdf>

75 For example, see the website for CDPC (Center to Advance Palliative Care,)

<http://www.capc.org/building-a-hospital-based-palliative-care-program/designing>

- P-2.1. Metric: Primary care specialties training and education in palliative care
Documentation: Provide training and education curriculum
 - a. Data source: Database that tracks type and number of training and education sessions by health professional category (family medicine, Internal Medicine, Pediatrics, Geriatrics and other IM subspecialties). Provider to include the goal for the number of people trained during this initiative.
 - b. Rationale/Evidence: All primary care specialties are involved with chronic diseases and the associated chronic symptoms and management of these symptoms but may not have specific expertise in palliative care programs and planning. As the goal of this palliative program is to provide resources to patients and families to improve patient experiences, the education programs will also consider the use of palliative care medicine through pulmonary, cardiovascular, infectious diseases, oncology and renal subspecialties.

- P-3. Milestone: Implement palliative care education and training programs for providers (physicians, RNs, PAs, NPs, etc.) that incorporates management of non-cancer patients.
 - P-3.1. Metric: Palliative care training and education for other providers
 - a. Documentation: Provide training and education curriculum
 - b. Data source: Database that tracks type and number of training and education sessions by health professional category (physicians, RNs, PAs, NPs, etc). Provider to include the goal for the number of people trained during this initiative
 - c. Rationale/Evidence: All primary care specialties are involved with chronic diseases and the associated chronic symptoms and management of these symptoms but may not have specific expertise in palliative care programs and planning. As the goal of this palliative program is to provide resources to patients and families to improve patient experiences, the education programs will also consider the use of palliative care medicine for health care personnel (including ancillary staff).

- P-4. Milestone: Develop an EHR/system (e.g. a rounding tool or a registry or software) that analyzes the palliative care system data to determine if the program is effective
 - P-4.1. Metric: EHR system implementation with capacity for palliative care registry and metric analysis.

- a. Documentation: Implementation of an EHR system in the palliative care program.
 - b. Data Source: Vendor agreement, documentation of EHR capacity and use
 - c. Rationale/Evidence: Measure all the metrics (e.g. percentage clinic visits documented in the EHR, the amount of lab values accurately placed in the patient chart, or even the number of e-prescriptions sent over an established timeframe) to document the palliative care program effectiveness. A study of 2021 hospitals showed that the quality of care provided improved among all types of hospitals that implemented a form of EHR⁷⁶
- P-5. Milestone: Implement/expand a palliative care program
- P-5.1. Metric: Implement comprehensive palliative care program
 - a. Documentation: Charter for Palliative care program ; Operational Plan; ; palliative care team and hiring agreements;
 - b. Data Source: Palliative care program
 - c. Rationale/Evidence: There is widespread evidence that palliative care can improve the quality of care while reducing cost.⁷⁷
- P-6. Milestone:
- P-7. Milestone: Determine how many consults are submitted per number of patients admitted with chronic conditions or MCC (e.g. COPD exacerbation, heart failure exacerbation, fluid overload in an ESRD patient, etc) that are candidates for palliative care services.
- P-7.1. Metric: Palliative care consults for patients with chronic conditions.
 - a. Numerator: Number of palliative care consults for patients with PCC/MCC
 - b. Denominator: Total number of patients admitted with chronic conditions or MCC
 - c. Data Source: EHR, palliative care database
 - d. Rationale/evidence: Assess how effective is this consult service in large numbers of patients and families and how does it improve their health care experience. Not all patients with a chronic condition are candidates for palliative care. While the goal is to see the numbers go up (b/c they're likely very small at baseline), it should not include all pts with any chronic disease get a palliative care consult.
- P-8. Milestone: Document the conditions for which palliative care is consulted.
- P-8.1. Metric: Breadth of conditions for which palliative care is utilized.

76 <http://www.healthcareitnews.com/news/study-highlights-lurking-question-measuring-ehr-effectiveness>

77 See <http://www.capc.org>

- a. Provider's report on the scope of chronic conditions for which the palliative care patients are consulted
 - b. Data source: EHR, palliative care database
 - c. Rational/evidence: While typically palliative care is utilized mostly for patients with advanced cancer, it is quite underutilized for other chronic conditions (e.g. COPD exacerbation, heart failure exacerbation, fluid overload in an ESRD patient, etc.)
- 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: Description of and 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-9. Milestone: Palliative care patients transitioned from acute hospital care into hospice, home care, or a skilled nursing facility (SNF) with and without hospice services.
- I-9.1. Metric: Transitions rate
- a. Numerator: Number of palliative care discharges to home care, hospice, or SNF
 - b. Denominator: Total number of palliative care discharges
 - c. Data Source: EHR, data warehouse, palliative care database
 - d. Rationale/Evidence: The goal of palliative care is to minimize transfers to ICUs, stays in the hospital, and discharge home with no services; while maximizing patient transitions to home care, hospice and SNF when asked for by the patient/caregiver because those services often make the most sense given the patient's condition.
 Per The Center to Advance Palliative Care (CAPC)⁷⁸ palliative care is appropriate for patients across the continuum of care and is not restricted to "end of life care".
- I-10. Milestone: Among patients who died in the hospital, increase the proportion of those who received a palliative care consult
- I-10.1. Metric: Percent of total in-hospital deaths who had a palliative care consult
- a. Numerator: Number of patients who died in the hospital and received at least one palliative care consult
 - b. Denominator: Number of patients who died in the hospital
 - c. Data Source: EHR, data warehouse palliative care database
 - d. Rationale/Evidence: Ideally, most patients who died in the hospital would have received a palliative care consultation so that the patient and the family have the choice of how the patient spends his/her end of life.

- I-11. Milestone: Establish the comfort of dying for patients with terminal illness within their end-of-life stage of care
- I-11.1. Metric: Pain screening (NQF-1634) Percentage of hospice or palliative care patients who were screened for pain during the hospice admission evaluation / palliative care initial encounter.
- a. Numerator: Patients who are screened for the presence or absence of pain (and if present, rating of its severity) using a standardized quantitative tool during the admission evaluation for hospice / initial encounter for palliative care.
 - b. Denominator: Patients enrolled in hospice for 7 or more days OR patients receiving hospital-based palliative care for 1 or more days.
 - c. Rationale/Evidence: The Hospice and Palliative Care - Pain Screening measure addresses pain for patients with high severity of illness and risk of death, including seriously and incurably ill patients enrolled in hospice or hospital-based palliative care. Research on care of patients with serious incurable illness and those nearing the end of life shows they experience high rates of pain (40-70% prevalence) and other physical, emotional, and spiritual causes of distress. (1, 2) The National Priorities Partnership has identified palliative and end-of-life care as one of its national priorities. A goal of this priority is to ensure that all patients with life-limiting illness have access to effective treatment for symptoms such as pain and shortness of breath. (3) The affected populations are large; in 2009, 1.56 million people with life-limiting illness received hospice care. (4) In 2008, 58.5% of US hospitals with 50 or more beds had some form of palliative care service, and national trends show steady expansion of these services. (5) Patients and family caregivers rate pain management as a high priority when living with serious and life-limiting illnesses. (6) The consequences of inadequate screening, assessment and treatment for pain include physical suffering, functional limitation, and development of apathy and depression. (7)⁷⁹
 - d. Exclusion: Patients with length of stay 7 days in hospice or 1 day in palliative care.
- I-11.2. Metric: Pain assessment (NQF-1637) - Percentage of hospice or palliative care patients who screened positive for pain and who received a clinical assessment of pain within 24 hours of screening.
- a. Numerator: Patients who received a comprehensive clinical assessment to determine the severity, etiology and impact of their pain within 24 hours of screening positive for pain.
 - b. Denominator: Patients enrolled in hospice OR receiving palliative care who report pain when pain screening is done on the admission evaluation / initial encounter.

- c. Rationale/Evidence: Pain is under-recognized by clinicians and undertreated, resulting in excess suffering from patients with serious illness. Pain screening and assessments are necessary in order to improve the patient centered outcome of pain, and its effects on global outcomes of function and quality of life.⁸⁰
 - d. Exclusion: Patients with length of stay 1 day in palliative care or 7 days in hospice, patients who were not screened for pain. Patients who screen negative for pain are excluded from the denominator.
- I-11.3. Metric: Dyspnea screening (NQF-1639) - Percentage of hospice or palliative care patients who were screened for dyspnea during the hospice admission evaluation / palliative care initial encounter.
- a. Numerator: Patients who are screened for the presence or absence of dyspnea and its severity during the hospice admission evaluation / initial encounter for palliative care.
 - b. Denominator: Patients enrolled in hospice for 7 or more days OR patients receiving hospital-based palliative care for 1 or more days.
 - c. Rationale/Evidence: Dyspnea is prevalent and undertreated for many populations of seriously ill patients, including those patients nearing the end of life. Screening for dyspnea is necessary to determine its presence and severity, and forms the basis for treatment decision-making. Unlike pain, structured clinical assessment of the symptom is less well-defined; yet similar to pain, effective treatment is available to alleviate symptom distress.⁸¹
 - d. Exclusion: Patients with length of stay 7 days in hospice or 1 day in palliative care.
- I-11.4. Metric: Dyspnea treatment (NQF-1638) - Percentage of patients who screened positive for dyspnea who received treatment within 24 hours of screening.
- a. Numerator: Patients who screened positive for dyspnea who received treatment within 24 hours of screening.
 - b. Denominator: Patients enrolled in hospice for 7 or more days OR patients receiving palliative care who report dyspnea when dyspnea screening is done on the admission evaluation / initial encounter.
 - c. Rationale/Evidence: Effective treatment for dyspnea is available, but not consistently administered. Evidence-based treatments include pharmacologic interventions such as opioids and inhaled bronchodilators, and non-pharmacologic interventions including oxygen for hypoxic patients, pulmonary rehabilitation and exercise in COPD, and drainage of pleural effusion.⁸²
 - d. Exclusion: Palliative care patients with length of stay 1 day or hospice patients with length of stay 7 days, patients who were not screened for dyspnea, and/or patients with a negative screening.

80 <http://www.nahc.org/regulatory/HospiceRegs/1637.PDF>

81 <http://www.nahc.org/regulatory/HospiceRegs/1639.PDF>

82 <http://www.nahc.org/regulatory/HospiceRegs/1638-3.PDF>

- I-11.5. Metric: Treatment Preferences (NQF – 1641) - Percentage of patients with chart documentation of preferences for life sustaining treatments.
 - a. Numerator: Patients whose medical record includes documentation of life sustaining preferences
 - b. Denominator: Seriously ill patients enrolled in hospice OR receiving specialty palliative care in an acute hospital setting.
 - c. Rationale/Evidence: Patients with comprehensive medical records especially EHR fair better than those with less such care coordination
 - d. Exclusion: Patients with length of stay 1 day in palliative care or 7 days in hospice
- I-12. Milestone: Implement a patient/family experience survey regarding the quality of care, pain and symptom management, and degree of patient/family centeredness in care and improve scores over time
 - I-12.1. Metric: Survey developed and implemented; scores increased over time
 - a. Result of survey scores
 - b. Data Source: Patient/family experience survey
 - c. Rationale/Evidence: Palliative care has been proven to result in increased patient and family satisfaction.⁸³
- I-13. Milestone: Administer the CARE survey (NQF-1632) - The CARE survey is mortality follow back survey that is administered to the bereaved family members of adult persons (age 18 and older) who died of a chronic progressive illness receiving services for at least 48 hours from a home health agency, nursing homes, hospice, or acute care hospital.
 - I-13.1. Metric: CARE- Consumer Assessment and Reports of End of Life
 - a. Numerator: Respondent reports of concerns with the quality of care, their self-efficacy in basic tasks of caregiving, or unmet needs that indicate an opportunity to improved end of life care provided by either a nursing home, hospital, hospice, or home health agency.
 - b. Denominator: Non-traumatic deaths and deaths from chronic progressive illnesses based on ICD 9/10 codes are included. A list will be provided as technical appendix to the proposed survey. Note the survey is for only persons that died with the following services or location of care: nursing home, hospital, hospice, or home health agency
 - c. Exclusion: deaths due to accidents, trauma, during surgery, lethal injection, acute overwhelming infections, and from complications of pregnancy.

83 See a Kaiser study linking palliative care and patient satisfaction, at <http://www.kaisersantarosa.org/palliativecarestudy>

- d. Rationale/Evidence: The survey measures perceptions of the quality of care in terms of unmet needs, family reports of concerns with quality of care, and overall rating of the quality of care. The time frame is the last 2 days of life up to last week of life spent in a hospice, home health agency, hospital, or nursing home. The survey is based on structured literature review,(1) cognitive testing,(2) pre-test,(2) and national survey of the quality of end of life care.(3) The conceptual model is patient-focused, family-centered care(1) that posits that high quality care at the end of life is obtained when health care institutions:⁸⁴
- provide the desired level of symptom palliation and emotional support;
 - treat the patient with respect;
 - promote shared decision making;
 - attend to the needs of caregivers for information and skills in providing care for the patient;
 - provide emotional support to the family before and after the patient's death; and
 - coordinates care across settings of care and health care providers.
- I-14. Milestone: Improvements in palliative care services
- I-14.1. Metric: Target population reached through palliative care program
- a. Numerator: Number of individuals of target population reached by the palliative care 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-14.3. (QPI) Metric: Improved access to palliative care services
- a. Total number of palliative care consultations provided.
 - 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.

84 1. Teno JM, Casey VA, Welch L, Edgman-Levitan S. Patient-Focused, Family-Centered End-of-Life Medical Care: Views of the Guidelines and Bereaved Family Members. *J Pain Symptom Manage-Special Section on Measuring Quality of Care at Life's End*. 2001 Sep 2001; 22(3):738-751. 2. Teno JM, Clarridge B, Casey V, Edgman-Levitan S, Fowler J. Validation of Toolkit After-Death Bereaved Family Member Interview. *J Pain Symptom Manage*. 2001 Sep 2001; 22(3):752-758. 3. Teno JM, Clarridge BR, Casey V, et al. Family perspectives on end-of-life care at the last place of care. *JAMA*. 2004 Jan 7 2004; 291(1):88-93. 4. Rhodes RL, Mitchell SL, Miller SC, Connor SR, Teno JM. Bereaved family members' evaluation of hospice care: what factors influence overall satisfaction with services? *J Pain Symptom Manage*. 2008 Apr 2008; 35(4):365-371. 5. Mitchell SL, Kiely DK, Miller SC, Connor SR, Spence C, Teno JM. Hospice care for patients with dementia. *J Pain Symptom Manage*. 2007 Jul 2007; 34(1):7-16. 6. Rhodes RL, Teno JM, Connor SR. African American bereaved family members' perceptions of the quality of hospice care: lessened disparities, but opportunities to improve remain. *J Pain Symptom Manage*. 2007 Nov 2007; 34(5):472-479. 7. Connor SR, Teno J, Spence C, Smith N. Family Evaluation of Hospice Care: Results from Voluntary Submission of Data Via Website. *J Pain Symptom Manage*. 2005 Jul 2005; 30(1):9-17.

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 - 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.

2.11 Conduct Medication Management

Project Goal:

The goal of conducting Medication Management is to provide information that facilitates the appropriate use of medications in order to control illness and promote health⁸⁵. Medication management is the monitoring of medications a patient takes to confirm that the patient is complying with a medication regimen, while also ensuring the patient is avoiding potentially dangerous drug interactions and other complications. This is especially important for patients taking large numbers of medications to address chronic illnesses and multiple diseases. Taking numerous medications is known as polypharmacy and it is particularly common among older adults, as they are more likely to need medications to manage an array of chronic conditions.

There are a number of aspects to medication management, all of which are focused on making sure that medications are used appropriately. Keeping track of all of the medications currently in use by a patient is an important part of medication management. This can include creating printed lists describing medications, their dosages, and how they are being used. These lists can be kept in patient charts and provided to patients to help them track the drugs they use and understand why various medications are being prescribed.

Monitoring medication administration is also key. Medications usually need to be taken in specific doses at set intervals. Missing doses or timing doses incorrectly can cause complications. Medication management can include everything from using devices that issue reminders to patients to take their medications to filling pill cases for patients and marking the lid of each compartment to indicate when the contents need to be taken⁸⁶.

The specific purpose of this project area is to provide the platform to conduct Medication Management so that patients receive the right medications at the right time across the Performing Provider in order to reduce medication errors and adverse effects from medication use.

Project Options:

2.11.1 Implement interventions that put in place the teams, technology, and processes to avoid medication errors

Required core project components:

- a) Develop criteria and identify targeted patient populations; e.g. chronic disease patient populations that are at high risk for developing complications, co-morbidities, and/or utilizing acute and emergency care services.
- b) Develop tools to provide education and support to those patients at highest risk of an adverse drug event or medication error.
- c) Conduct root cause analysis of potential medication errors or adverse drug events and develop/implement processes to address those causes

85 The Patient-Centered Medical Home: Integrating Comprehensive Medication Management to Optimize Patient Outcomes. 2nd ed, 2012.

86 <http://www.wisegeek.com/>

- 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.

2.11.2 Evidence-based interventions that put in place the teams, technology and processes to avoid medication errors. This project option could include one or more of the following components:

- a) Implement a medication management program that serves the patient across the continuum of care targeting one or more chronic disease patient populations
- b) Implement Computerized Physician Order Entry (CPOE)
- c) Implement pharmacist-led chronic disease medication management services in collaboration with primary care and other health care providers.

Rationale:

More than 3.5 billion prescriptions are written annually in the United States⁸⁷, and four out of five patients who visit a physician leave with at least one prescription⁸⁸. Medications are involved in 80 percent of all treatments and impact every aspect of a patient’s life. The two most commonly identified drug therapy problems in patients receiving comprehensive medication management services are: (1) the patient requires additional drug therapy for prevention, synergistic, or palliative care; and (2) the drug dosages need to be titrated to achieve therapeutic levels that reach the intended therapy goals⁸⁹. According to the World Health Organization, adherence to therapy for chronic diseases in developed countries averages 50 percent, and the major consequences of poor adherence to therapies are poor health outcomes and increased health care costs⁹⁰. Drug therapy problems occur every day and add substantial costs to the health care system. Drug-related morbidity and mortality costs exceed \$200 billion annually in the U.S., exceeding the amount spent on the medications themselves⁹¹. The Institute of Medicine noted that while only 10 percent of total health care costs are spent on medications, their ability to control disease and impact overall cost, morbidity, and productivity—when appropriately used—is enormous⁹².

Process Milestones:

- P-1. Milestone: Implement/expand a medication management program and/or system
 - P-1.1. Metric: Program elements

87 Sommers JP. Prescription drug expenditures in the 10 largest states for persons under age 65, 2005-2008. Agency for Healthcare Research and Quality. Available at: http://meps.ahrq.gov/mepsweb/data_files/publications/st196/stat196.pdf.

88 The chain pharmacy industry profile. National Association of Chain Drug Stores. 2001.

89 Cipolle R, Strand L, Morley P. Pharmaceutical care practice: The clinician’s guide. McGraw-Hill; 2004.

90 World Health Organization. Adherence to long-term therapies: Evidence for action. 2003. Available at: <http://whqlibdoc.who.int/publications/2003/9241545992.pdf>.

91 Johnson J, Bootman JL. Drug-related morbidity and mortality. Arch Intern Med. 1995; 155(18):1949-1956; Johnson JA, Bootman JL. Drug-related morbidity and mortality. Am J Health Syst Pharm. 1997; 54(5):554-558; Ernst, FR, Grizzle AJ. Drug-related morbidity and mortality: Updating the cost-of-illness model. J Am Pharm Assoc. 2001; 41(2):192-199.

92 Centers for Medicare & Medicaid Services. National Health Expenditures. January 2008.

- a. Documentation of program, including people, processes and technologies
 - b. Data Source: Written medication management plan including workflow for providers.
 - c. Rationale/Evidence: A delivery system with a written medication management plan that is consistently followed by all providers can reduce medication errors and increase patient compliance with their medication regimens.
- P-2. Milestone: Develop criteria and identify targeted patient populations
- P-2.1. Metric: Establish evidence based criteria for medication management planning in target population based on assessment of population needs
 - a. Documentation of medication management program criteria
 - b. Data Source: Written criterion for target population and program participation.
 - c. Rationale/Evidence: Establishment of guidelines for identifying target population and criteria for program participation in the medication management program will allow for a more systematic adoption and integration into clinical processes.
 - P-2.2. Metric: Adherence to medication management counseling
 - a. Numerator: Number of patients in targeted patient population that consistently receive medication management counseling.
 - b. Denominator: Number of patients in targeted patient population
 - c. Data Source: Paper or electronic health record citing medication management counseling provided; medication reconciliation documented in paper or electronic health record
 - d. Rationale/Evidence: Patients in targeted population who consistently receive medication management counseling and medication reconciliation are more likely to consistently adhere to their medication regimen and maintain better control of their medical condition.
- P-3. Milestone: Develop and utilize medication management tools to provide education to patients with cognitive impairment, low health literacy and/or limited English proficiency⁹³
- P-3.1. Metric: Identify and utilize evidence based health literacy assessment to guide clinical recommendations and patient education.

- a. Documentation of assessment tool and use in clinical processes.
 - b. Data Source: Evidence based assessment tools used, policies and procedures around how findings are integrated into patient care.
 - c. Rationale/Evidence: Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. As an example of evidence based tools, AHRQ-funded researchers have developed two tools (REALM-SF and SAHLSA-50 for Spanish-speaking patients) to measure—individuals' reading comprehension in a medical context which is an aspect of health literacy. These tools can be used for research, clinical, or program planning purposes.⁹⁴
- P-3.2. Metric: Increase the number of patients with cognitive impairment, low health literacy and/or limited English proficiency who receives appropriate medication management tools.
- a. Number of patients with cognitive impairment, low health literacy and/or limited English proficiency who receive appropriate medication management tools.
 - b. Data source: Electronic or Paper Medical Record
 - c. Rationale: Patients with cognitive impairment, low health literacy and/or limited English proficiency have worst health outcomes. Low health literacy correlates with improper use of medication. Many tools have been developed to help mitigate these factors.
- P-4. Milestone: Implement an evidence based program based on best practices for medication reconciliation to improve medication management and continuity between acute care and ambulatory setting.
- P-4.1. Metric: Written plan to provide medication reconciliation as part of the transition from acute care to ambulatory care
- a. Documentation of program policies and procedures that ensure medication reconciliation upon admission and discharge at each care setting for all patients.
 - b. Data Source: Medication Management Plan
 - c. Rationale/Evidence: Patients who receive medication reconciliation as part of the transition from acute to ambulatory care are more likely to have and adhere to an appropriate medication regimen.
- P-5. Milestone: Implement a medication refill process
- P-5.1. Metric: A written medication refill process including workflow for all providers involved in the medication refills (may be designated for a given medication (e.g., Plavix) or conditions/diagnosis (e.g., transient ischemic attack)).

94 <http://www.ahrq.gov/populations/sahlsatool.htm>

- a. Documentation of workflow processes
 - b. Data Source: Procedures and materials.
 - c. Rationale/Evidence: A delivery system with a standard medication refill process that is consistently adhered to will be more likely to provide the right medications at the right time for their patients.
- P-6. Milestone: Develop health information technology claims-based algorithms to identify patients in need of medication reconciliation, management or education. Such algorithms typically search historical claims for the physician billing for the most recent claims with an evaluation and management (E&M) code or pharmacy claim, or the largest share of E&M visits for the patient⁹⁵. Claims-based approaches are expeditious because the insurer avoids the costs of collecting information from patients and physicians.
- P-6.1. Metric: Documented HIT claims-based algorithms to identify patients in need of medication reconciliation, management or education.
- a. Data source: Electronic Health Record
 - b. Rationale/Evidence: Health information technology has been shown to improve quality of care by increasing adherence to guidelines, supporting disease surveillance and monitoring, and decreasing medication errors through decision support and data aggregation capabilities.⁹⁶
- P-7. Milestone: Implement Computerized Provider Order Entry (CPOE) to allow providers to enter medical orders directly via computer, replacing the more traditional paper, verbal, telephone, and fax methods.
- P-7.1. Metric: Implement CPOE
- a. Data source: documentation of implementation, EMR functionality reports
 - b. Rationale: Ambulatory CPOE (ACPOE), which refers to CPOE in outpatient settings, allows providers to place electronic orders for medications.
- 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.

95 Rosenblatt, Roger A., et al., "The Generalist Role of Specialty Physicians: Is There a Hidden System of Primary Care?" Journal of the American Medical Association, Vol. 279, No. 17 (May 6, 1998).

96 Chaundry et al., 2007

- 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: Description and 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 Measures:

- I-8. Milestone: Identify patients with chronic disease who receive medication management in their discharge instructions appropriate for their chronic disease.
- I-8.1. Metric: Percent of patients with chronic disease who receive appropriate disease specific medication management
 - a. Numerator: Number of patients with a chronic medical condition who receive medication management instruction at discharge
 - b. Denominator: total number of patients with the respective chronic medical condition
 - c. Data source: Chronic disease registry and hospital EHR
 - d. Rationale/evidence: Targeted patients who consistently receive medication management are more likely to adhere to their medication regime and receive the right medication at the right time.
- I-9. Milestone: Manage medications for targeted patients
- I-9.1. (QPI) Metric: Increase the number of patients (meeting criteria for chronic condition) contacted or receiving medication management
 - a. Number of patients that consistently receive medication management counseling at the point of care
 - b.)
 - c. Data Source: Paper or electronic health record
 - d. Rationale/Evidence: Targeted patients who consistently receive medication management are more likely to adhere to their medication regime and receive the right medication at the right time.
- I-10. Milestone: Increase patient understanding of their medication reconciliation measures pre-med management and post-med management. Use validated medication understanding and self-efficacy tools to measure the impact of the medication reconciliation.
- I-10.1. Metric: Average change in pre and post intervention scores of patient knowledge.
 - a. Numerator: Sum of change scores for all patients receiving a pre and post intervention assessment.
 - b. Denominator: Number of patients that received both a pre and post intervention assessment.
 - c. Data Source: EHR, Program records.
 - d. Rationale/Evidence⁹⁷: Patient misunderstanding of prescription medication instructions has been identified as both a patient safety and a health literacy concern. Patients often misunderstand the proper dosage of the medication as well as misunderstand the warnings associated with the medication. Medication errors and injuries often result from patients' unintentional misuse of or non-adherence to prescription medication. Among other factors, health literacy and self-efficacy have been repeatedly recognized as predictors in one's ability to understand medication instructions and ultimately to adhere to medication regimens.

- I-11. Milestone: Increase the number of patients receiving medication management from acute care to the ambulatory setting
 - I-11.1. Metric: Percent of discharged patients who received medication reconciliation as part of the transition from acute to ambulatory care
 - a. Numerator: Number of discharged patients who received medication reconciliation
 - b. Denominator: Number of discharged patients
 - c. Data: electronic health records; discharge data;
 - d. Rationale/Evidence: Patients who receive medication reconciliation as part of the transition from acute to ambulatory care are more likely to have and adhere to an appropriate medication regimen.
- I-12. Milestone: Implement electronic prescription writing at the point of care
 - I-12.1. Metric: Increase the number of new and refill prescriptions written and generated electronically
 - a. Number of new and refill prescriptions written and generated electronically
 - b. Data Source: Paper or electronic health record
 - c. Rationale/Evidence: If consistently and completely used, electronic prescribing has the potential to reduce medication errors and increase patient compliance with their medication regimen.
- I-13. Milestone: Implement electronic medication reconciliation at the point of care
 - I-13.1. Metric: Increase the number of patients that receive electronic medication reconciliation at the point of care
 - a. Number of patients in panel size/population size that receive electronic medication reconciliation at the point of care
 - b.
 - c. Data Source: Paper or electronic health record
 - d. Rationale/Evidence: Implementing electronic medication reconciliation can help ensure that providers consistently deliver accurate medication reconciliation at the point of care.
- I-14. Milestone: Provide reconciliation of medications at discharge
 - I-14.1. Metric: Increase percent of identified patients that have medications reconciled as a standard part of the discharge process. part of the discharge process.
 - a. Numerator: Number of targeted patients with medications reconciled (targeted TBD by Performing Provider) when discharged from a hospitalization.
 - b. Denominator: Total number of targeted patients hospitalized during a specific time period.
 - c. Data Source: Discharge paperwork from paper or electronic health record.
 - d. Rationale/Evidence: Consistently providing medication reconciliation at the time of discharge from a hospitalization enhances the likelihood of patients adhering to an appropriate medication regimen and allows for the reduction of medication errors that may result from the lack of medication reconciliation when a patient transitions from one care setting to another.

- I-15. Milestone: Increase number or percent of patients that receive consultation by clinical pharmacists , prior to discharge in the in-patient setting and upon refilling a new prescription in the outpatient setting.
- I-15.1. Metric: Percent of patients receiving consultation by clinical pharmacists
- a. Numerator: Number of targeted patients covered by clinical pharmacists (targeted TBD by Performing Provider)
 - b. Denominator: Total number of targeted patients
 - c. Data Source: Paper or Electronic health record indicating patient is assigned to a clinical pharmacist. Appointment records for clinical pharmacy.
 - d. Rationale: Clinical pharmacists are more likely to obtain detailed and accurate patient’s medical history and keep better record of patient’s medications than doctors
- I-17. Milestone: Increase the number of patient visits for which a medication is prescribed that have medication reconciliation and prescription generation performed electronically
- I-17.1. Metric: Percent of patient visits at which a medication was prescribed that had medication reconciliation and prescription generation performed electronically
- a. Numerator: Number of patient visits for which a medication is prescribed have medication reconciliation and prescription generation performed electronically
 - b. Denominator: Total number of eligible patient visits (eligible as defined by the Performing Provider)
 - c. Data source: Electronic health record
 - d. Rationale: Patients are most at risk during transitions in care across settings, services, providers, or levels of care; Development, reconciliation & communication of an accurate medication list throughout the continuum of care is essential in the reduction of transition-related adverse drug events
- I-18. Milestone: CPOE utilization measure
- I-18.1. Metric: Increase the number of computerized provider order entries
- a. Number of entry orders Data source: electronic health record, computerized provider order entry (CPOE) platform
 - b. Rationale: Computerized provider order entry (CPOE) holds promise to improve the safety and efficiency of medication and test ordering processes by reducing order entry errors. Order entry errors can occur, for example, when providers order medications that adversely interact with medications the patient is already taking or when duplicate tests or procedures are ordered due to incomplete information in a patient’s medical record. CPOE, if implemented and used correctly, can automatically check for many such potential errors, helping to avoid potentially hazardous drugs or unnecessary tests and procedures. In contrast, verbal and written order entry processes, without systematic integration of patients’ medical information, may result in order entry errors that pose a serious threat to patient safety and reduce health care efficiency.

- I-19. Milestone: NQF endorsed measures
- I-19.1. Metric: Proportion of Days Covered (PDC): 5 Rates by Therapeutic Category
- a. The percentage of patients 18 years and older who met the proportion of days covered (PDC) threshold of 80% during the measurement year. A performance rate is calculated separately for the following medication categories: Beta-Blockers (BB), Angiotensin-Converting Enzyme Inhibitor/Angiotensin-Receptor Blocker (ACEI/ARB), Calcium-Channel Blockers (CCB), Diabetes Medication, Statins.
 - b. Data Source: pill counts, patient reports, or pharmacy claims data
 - c. Rationale/Evidence: The proportion of days covered (PDC) is a newer method than the MPR but has been studied extensively in recent years. The PDC tends to be operationally defined more consistently than is the MPR. The PDC calculation is based on the fill dates and days' supply for each fill of a prescription; however, it differs from the MPR in that the PDC is not a simple summation of the days' supply.⁹⁸
- I-19.2. Metric: Adherence to Chronic Medications: Medication Possession Ratio (MPR) for chronic medications for individuals over 18 years of age [NQF0542]
- 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. For each beneficiary, several MPRs may be calculated, one for each drug class for which the beneficiary has at least one fill. Time window: Anytime during the measurement period (12 consecutive months)
 - b. Denominator: Part D beneficiaries with at least one claim for any active ingredient within a drug class. Time window: Anytime during the measurement period (12 consecutive months). MPR Denominator:
 - 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. Exclusions:
 - Patients who died during the measurement period.
 - Patients who are actively enrolled in multiple plans concurrently as of the end of the measurement period.
 - Patients who have a zero or missing value for days' supply on any Part D claim for any active ingredient in a drug class listed.
 - Patients with two or more prescriptions within the same class on the same date of service.

- I-19.3. Metric: Medication Reconciliation Post-Discharge (MRP)
- a. Percentage of discharges from January 1 to December 1 of the measurement year for patients 65 years of age and older for whom medications were reconciled on or within 30 days of discharge.
 - b. Numerator: Medication reconciliation conducted by a prescribing practitioner, clinical pharmacist or registered nurse, as documented through administrative or medical record review on or within 30 days of discharge. Medication reconciliation is defined as a type of review in which the discharge medications are reconciled with the most recent medication list in the outpatient medical record, on or within 30 days after discharge.
 - c. Denominator: All discharges from an in-patient setting for health plan members who are 66 years and older as of December 31 of the measurement year.
 - d. Exclusion: Exclude both the initial discharge and the readmission/direct transfer discharge if the readmission/direct transfer discharge occurs after December 1 of the measurement year. If the discharge is followed by a readmission or direct transfer to an acute or non-acute facility within the 30-day follow-up period, count the only the readmission discharge or the discharge from the facility to which the member was transferred.
 - e. .

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.

2.12 Implement/Expand Care Transitions Programs

Project Goal:

The goal of this project is to implement improvements in care transitions and coordination of care from inpatient to outpatient, post-acute care, and home care settings in order to prevent increased health care costs and hospital readmissions. Care transitions refer to the movement of patients from one health care provider or setting to another. For people with serious and complex illnesses, transitions in setting of care—for example from hospital to home or nursing home, or from facility to home- and community-based services—have been shown to be prone to errors.⁹⁹ Safe, effective, and efficient care transitions and reduced risk of potentially preventable readmissions require cooperation among providers of medical services, social services, and support services in the community and in long-term care facilities. High-risk patients often have multiple chronic diseases. The implementation of effective care transitions requires practitioners to learn and develop effective ways to successfully manage one disease in order to effectively manage the complexity of multiple diseases.¹⁰⁰ The discontinuity of care during transitions typically results in patients with serious conditions, such as heart failure, chronic obstructive pulmonary disease, and pneumonia, falling through the cracks, which may lead to otherwise preventable hospital readmission.¹⁰¹ The goal is to ensure that the hospital discharges are accomplished appropriately and that care transitions occur effectively and safely.

Project Options:

2.12.1 Develop, implement, and evaluate standardized clinical protocols and evidence-based care delivery model to improve care transitions

Required core project components:

- a) Review best practices from a range of models (e.g. RED, BOOST, STAAR, INTERACT, Coleman, Naylor, GRACE, BRIDGE, etc.).
- b) Conduct an analysis of the key drivers of 30-day hospital readmissions using a chart review tool (e.g. the Institute for Healthcare Improvement's (IHI) State Action on Avoidable Re-hospitalizations (STAAR) tool) and patient interviews.
- c) Integrate information systems so that continuity of care for patients is enabled
- d) Develop a system to identify patients being discharged potentially at risk of needing acute care services within 30-60 days
- e) Implement discharge planning program and post discharge support program
- f) Develop a cross-continuum team comprised of clinical and administrative representatives from acute care, skilled nursing, ambulatory care, health centers, and home care providers.

99 Coleman EA. "Falling Through the Cracks: Challenges and Opportunities for Improving Transitional Care for Persons with Continuous Complex Care Needs." *Journal of the American Geriatrics Society* (2003) 51:549-555

100 Rittenhouse D, Shortell S, et al. "Improving Chronic Illness Care: Findings from a National Study of Care Management Processes in Large Physician Practices." *Medical Care Research and Review Journal* (2010) 67(3): 301-320

101 Coleman, E., Parry, C., et. al. "The Care Transitions Intervention: a patient centered approach to ensuring effective transfers between sites of geriatric care." *Home Health Care Serv Q* (2003) 22 (3): 1-17

- g) 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.

2.12.2 Implement one or more pilot intervention(s) in care transitions targeting one or more patient care units or a defined patient population. Examples of interventions include, but are not limited to, implementation of:

- Discharge checklists
- “Hand off” communication plans with receiving providers
- Wellness initiatives targeting high-risk patients
- Patient and family education initiatives including patient self-management skills and “teach-back”
- Post-discharge medication planning
- Early follow-up such as homecare visits, primary care outreach, and/or patient call-backs.

Core project components:

- a) 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.

Note: Providers selecting one of these project options should ensure that overlaps do not exist with the EHR Incentive Program or other available demonstration funding.

Rationale¹⁰²:

When a patient’s transition is less than optimal, the repercussions can be far-reaching — hospital readmission, an adverse medical event, and even mortality. Without sufficient information and an understanding of their diagnoses, medication, and self-care needs, patients cannot fully participate in their care during and after hospital stays. Additionally, poorly designed discharge processes create unnecessary stress for medical staff causing failed communications, rework, and frustrations. A comprehensive and reliable discharge plan, along with post-discharge support, can reduce readmission rates, improve health outcomes, and ensure quality transitions. Patient transition is a multidimensional concept and may include transfer from the hospital to home, or nursing home, or from facility to home- and community-based services, etc.

Process Milestones:

- P-1. Milestone: Develop or implement best practices or evidence-based protocols (such as Partnership for Patients) for effectively communicating with patients and families during and post-discharge to improve adherence to discharge and follow-up care instructions

102 <http://www.ihl.org/offerings/Training/ReduceReadmissions/July2011ReducingReadmissions/Pages/default.aspx>

- P-1.1. Metric: Care transitions protocols
 - a. Submission of protocols
 - b. Data Source: Submission of protocols, Care transitions program materials
 - c. Rationale/Evidence: Protocols for discharge planning and post discharge follow-up will allow for wider and more affective system adoption of new practices.

- P-2. Milestone: Implement standardized care transition processes
 - P-2.1. Metric: Care transitions policies and procedures
 - a. Submission of policies and procedures,
 - b. Data Source: Policies and procedures of care transitions program materials
 - c. Rationale/Evidence: In order to allow for system adoption of care transition processes, it is critical to develop policies and procedures identifying responsible parties, activities, timelines and anticipated outcomes related to a successful discharge and follow-up care.

- P-3. Milestone: Establish a process for hospital-based case managers to follow up with identified patients hospitalized related to the top chronic conditions to provide standardized discharge instructions and patient education, which address activity, diet, medications, follow-up care, weight, and worsening symptoms; and, where appropriate, additional patient education and/or coaching as identified during discharge
 - P-3.1. Metric: Care transitions protocols
 - a. Submission of protocols,
 - b. Data Source: Care transitions program materials
 - c. Rationale/Evidence: Patient education around discharge and transitional care will ensure that patients, family members and other care givers are empowered and better able to self-manage follow-up care.

- P-4. Milestone: Conduct an assessment and establish linkages with community-based organizations to create a support network for targeted patients post-discharge
 - P-4.1. Metric: Care transitions assessment and description of partnerships
 - a. Submission of care transitions assessment and resource planning documents
 - b. Data Source: Care transitions assessment and resource planning documents
 - c. Rationale/Evidence: It is important to try to coordinate care with facilities outside a provider's own delivery system so that patients going in and out of the delivery system can receive optimal care, wherever possible. The Community Based Care Transitions Program is an example of this innovative work.¹⁰³

103 http://www.innovations.cms.gov/resources/CCTP_HowtoApply.html

- P-5. Milestone: Using a validated risk assessment tool, create a patient identification system.
P-5.1. Metric: Patient stratification system
- a. Data Source: Submission of risk assessment tool and patient stratification report and description of provider utilization of report findings.
 - b. Rationale/Evidence: This process is designed to identify patients requiring care management and to accommodate a quicker allocation of resources to those patients with high-risk health care needs
- P-6. Milestone: Train/designate more ED case managers
P-6.1. Metric: Number of trained and/or designated ED case managers over baseline
- a. Number of ED case managers trained
 - b. Data Source: HR, job descriptions, training curriculum
 - c. Rationale/Evidence: Employing ED case managers will allow for better access for those patients using ED services for post-discharge care.
- P-7. Milestone: Develop a staffing and implementation plan to accomplish the goals/objectives of the care transitions program
P-7.1. Metric: Documentation of the staffing plan.
- a. Data Source: Staffing and implementation plan.
 - b. Rationale/Evidence: This describes the number and types of staff needed and the specific roles of each participant
- P-8. Milestone: Improve discharge summary timeliness.
P-8.1. Metric: Improve percent discharge summary completion within 48 hours of discharge.
- a. Numerator: Number of patients for which discharge summary is complete within 48 hours of discharge.
 - b. Denominator: Number of patients discharged
 - c. Data Source: Automated report from Health Information Services or other
 - d. Rationale/Evidence: This process ensures that all providers are informed around inpatient treatment as well as post acute care plans.
- P-9. Milestone: Implement a case management related registry
P-9.1. Metric: Documentation of registry implementation
- a. Data source: Registry reports demonstrating case management functionality.
 - b. Rationale/Evidence: Implementation of proactive and seamless case management services will improve patient outcomes around patient discharge and ensure better coordinated care transitions.
- 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 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: Description and 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.

P-13 Milestone: Identify the top chronic conditions (e.g., heart attack, heart failure and pneumonia) and other patient characteristics (e.g., medical home assignment and demographics such as age) or socioeconomic factors (e.g., homelessness) that are common causes of avoidable readmissions

P-13.1 Metric: Identification and report of those conditions, socioeconomic factors, or other patient characteristics resulting in highest rates of re-admissions.

- a. List by frequency of most prevalent chronic conditions, patient factor or other socioeconomic factors in patient panel resulting in highest re-admission rates.
- b. Data Source: Registry or EHR report/analysis
- c. Rationale/Evidence: Assessing the most prevalent conditions and factors that lead to re-admissions will allow the provider to address the needs of the patient population more effectively.

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: Improve access to standardized care according to the approved clinical protocols and care transitions policies
- I-11.1. Metric: Percentage of patients in target population receiving standardized, evidence-based interventions per approved clinical protocols and guidelines
 - a. Numerator: Number of patients that receive all recommended education, care and services as dictated by approved and evidence based care guidelines.
 - b. Denominator: Number of patients discharged or eligible for care transition services
 - c. Data Source: Registry or EHR report/analysis
 - I-11.2. (QPI) Metric: Number of patients in target population receiving standardized, evidence-based care according to the approved clinical protocols and care transitions policies
 - a. Number of patients that receive all recommended education, care and services as dictated by approved and evidence based care guidelines.
 - b. Data Source: Registry or EHR report/analysis
 - I-11.3. Metric: Number of encounters provided according to standardized, evidence-based care transition protocols and guidelines
 - a. Number of care transition encounters provided in which patient receives all recommended education, care and services as dictated by approved and evidence based guidelines.
 - b. Data Source: Registry or EHR report/analysis
- I-13. Milestone: Increase the number or percent of patients in the case management related registry
- I-13.1. Metric: Increase in the number of patients in the case management related registry; patients may be targeted from ED and inpatient areas
 - a. Number of unique patients in the registry.
 - b.
 - c. Data Source: EHR, claims, registry or other program documents

- I-14. Milestone: Implement standard care transition processes in specified patient populations.
- I-14.1. Metric: Measure adherence to care transition processes.
- a. Numerator: Number of patients in defined population receiving care according to standard protocol.
 - b. Denominator: Number of population patients discharged.
 - c. Data Source: Hospital administrative data and the patient medical record.
- I-15. Milestone: National care transition quality indicators
- a.
 - I-15.2. Metric: (NQF 0648): Percentage of patients, regardless of age, discharged from an inpatient facility to home or any other site of care for whom a transition record was transmitted to the facility or primary physician or other health care professional designated for follow-up care within 24 hours of discharge
 - a. Numerator: Patients for whom a transition record was transmitted to the facility or primary physician or other health care professional designated for follow-up care within 24 hours of discharge
Time Window: Each time a patient is discharged from an inpatient facility
 - b. Denominator: All patients, regardless of age, discharged from an inpatient facility (e.g., hospital inpatient or observation, skilled nursing facility, or rehabilitation facility) to home/self care or any other site of care
Time Window: Each time a patient is discharged from an inpatient facility
 - c. Data Source: EHR
 - d. Rationale/Evidence: By requiring the completion and prompt transmission of a detailed “transition record” for discharged patients, this measure is promoting a significant enhancement to the customary use of the “discharge summary,” the traditional means of information transfer for which existing standards require completion within 30 days. Numerous studies have documented the prevalence of communication gaps and discontinuities in care for patients after discharge, and the significant effect of these lapses on hospital readmissions and other indicators of the quality of transitional care. Current information and communication technology can facilitate the routine completion and transmission of a transition record within 24 hours of discharge, which could greatly reduce communication gaps and may have a positive downstream effect on patient outcomes.
 - I-15.3. Metric: (NQF 0649): Percentage of patients, regardless of age, discharged from an emergency department (ED) to ambulatory care or home health care, or their caregiver(s), who received a transition record at the time of ED discharge including, at a minimum, all of the specified elements
 - a. Numerator: Patients or their caregiver(s) who received a transition record at the time of emergency department (ED) discharge including, at a minimum, all of the following elements:
 - Major procedures and tests performed during ED visit, AND
 - Principal diagnosis at discharge OR chief complaint, AND

- Patient instructions, AND
 - Plan for follow-up care (OR statement that none required), including primary physician, other health care professional, or site designated for follow-up care, AND
 - List of new medications and changes to continued medications that patient should take after ED discharge, with quantity prescribed and/or dispensed (OR intended duration) and instructions for each.
- b. Denominator: All patients, regardless of age, discharged from an emergency department (ED) to ambulatory care (home/self care) or home health care.
- c. Data Source: EHR
- d. Rationale/evidence: Providing a detailed transition record at the time of ED discharge enhances the patient's preparation to self-manage post-discharge care and comply with the post-discharge treatment plan. Additionally, randomized trials have shown that many hospital readmissions can be prevented by patient education, pre-discharge assessment, and domiciliary aftercare. One recent study found that patients participating in a hospital program providing detailed, personalized instructions at discharge, including a review of medication routines and assistance with arranging follow-up appointments, had 30% fewer subsequent emergency visits and hospital readmissions than patients who received usual care at discharge.

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.

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.

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

CATEGORY 2 BEHAVIORAL HEALTH INFRASTRUCTURE PROJECTS

GOAL: Integrate behavioral health with physical health and other evidence-based services and supports.

The goals of the projects under this heading are to create service delivery models, which engage / integrate behavioral, physical and other community-based services and supports to provide services to individuals with a broad range of behavioral health conditions in the most appropriate community-based settings and to empower the individual to better manage their health / wellness.

According to a recent study released by the Robert Wood Johnson Foundation, only 33% of patients with BH conditions (24% of the adult population) receive adequate treatment.¹⁰⁴ Patients with BH issues experience higher risk of mortality and poor health outcomes, largely due to a lack of preventive health services and poorly controlled co-morbid medical disease. Risk increases with the severity of the behavioral health diagnoses. In Texas for example, persons with severe mental illness live over 29 years less, on average, than the general population.¹⁰⁵ Behavioral health conditions, also account for increased health care expenditures such as higher rates of potentially preventable inpatient admissions. Texas Medicaid data on potentially preventable inpatient readmissions demonstrates that behavioral health conditions are a significant driver of inpatient costs. Mental health and substance abuse conditions comprise 8 percent of initial inpatient readmissions to general acute and specialty inpatient hospitals but represent 24 percent of potentially preventable admissions.¹⁰⁶

Complex medical and social issues including multiple chronic health conditions, low income, housing insecurity, social isolation, and lack of natural supports systems severely impact health and social functioning for persons with more severe behavioral health diagnoses such as schizophrenia, bipolar disorder and major depressive disorder. Substance use disorders, alone or in combination with mental health conditions, have significant physical consequences, leading to disability and increased acute and long term service expenditures.

Gaps in the service delivery system have far reaching costs and consequences. For example, the Texas state psychiatric hospital system is in crisis -- nearing or already over capacity, in large part due to gaps in the continuum of services and supports for individuals with more complex chronic mental health conditions. These individuals require a stable, supportive housing, integrated with community-based clinical and psychosocial services to prevent continual cycling through the street, to emergency room, jail and inpatient hospital.¹⁰⁷

104 Druss BG, Reisinger Walker E., "Mental Disorders and Medical Co-Morbidity." Robert Wood Johnson Foundation, The Synthesis Project: Issue 21 (2011).

105 Parks, J, Svendsen, D, et. al. "Morbidity and Mortality in People with Serious Mental Illness", National Association of State Mental Health Program Directors, 2006.

106 Potentially Preventable Readmissions in the Texas Medicaid Population, Fiscal Year 2010, Texas Health and Human Services Commission (2012)

107 Continuity of Care Task Force Final Report, DSHS, (2010)

Providing adequate health care to people with behavioral health conditions requires a comprehensive, person-centered approach within an integrated, “no wrong door” access, and delivery system. The system should include early and accurate assessment. It should facilitate access to acute and long term services as well as short term, community-based alternatives for stabilizing individuals in a behavioral health crisis; discharge planning to transition the individual back to the community from the inpatient setting; and post-discharge support services.

Evidence-based and evidence-informed strategies exist which can facilitate person-centered care for people with behavioral health conditions.

These approaches include:

- organizational realignment and process improvements to better integrate behavioral and physical health care and ensure that there is “no wrong door” to accessing needed treatment;
- self-management and wellness programs which empower individuals to better manage their chronic physical and behavioral health conditions; and
- specialized services and supports directed at high need / high cost populations which integrate clinical and other interventions to address the complex needs of persons with more severe illnesses and social challenges.

Integration: Organizational Realignment and Process Improvement

Health care systems which successfully integrate behavioral health and primary care services demonstrate improved care, cost savings, increased provider and consumer satisfaction.¹⁰⁸ This is especially important for medically indigent populations, which have co-occurring chronic health and mental health conditions. Treatments for individuals who present with mental health and/or substance abuse concerns are integrated with physical health via person-centered approaches.

The Four Quadrant Clinical Integration Model provides a promising, person-centered conceptual framework for organizational realignment.

Each quadrant considers the behavioral health and physical health risk and complexity of the population and suggests the major system elements that would be utilized to meet the needs of the individuals within that subset of the population. The Four Quadrant model is not intended to be prescriptive about what happens in each quadrant, but to serve as a conceptual framework for collaborative planning in each local system. Ideally it would be used as a part of collaborative planning for each new HRSA BH site, with the CHC and the local provider(s) of public BH services using the framework to decide who will do what and how coordination for each person served will be assured.

The use of the Four Quadrant Model to consider subsets of the population, the major system elements and clinical roles would result in the following broad approaches:

¹⁰⁸ Integrating Publicly Funded Physical and Behavioral Health Services: A Description of Selected Initiatives, Health Management Associates (2007).

- Quadrant I: Low BH-low physical health complexity/risk, served in primary care with BH staff on site; very low/low individuals served by the PCP, with the BH staff serving those with slightly elevated health or BH risk.
- Quadrant II: High BH-low physical health complexity/risk, served in a specialty BH system that coordinates with the PCP.
- Quadrant III: Low BH-high physical health complexity/risk, served in the primary care/medical specialty system with BH staff on site in primary or medical specialty care, coordinating with all medical care providers including disease managers.
- Quadrant IV: High BH-high physical health complexity/risk, served in both the specialty BH and primary care/medical specialty systems; in addition to the BH case manager, there may be a disease manager, in which case the two managers work at a high level of coordination with one another and other members of the team.

Other integration models include the IMPACT Model¹⁰⁹ and Wagner’s Chronic Care Model.

Process improvements, such as adoption of evidence-based clinical practice guidelines for detection and treatment of depression and other conditions and for assessment of suicide risk can improve outcomes in both primary and specialty behavioral clinical settings. For example, one effective evidence-based strategy that has been shown to improve outcomes for depression, the most prevalent BH disorder, is the DIAMOND/IMPACT model of care. Key elements of such care models are screening for high prevalence mental health conditions, co-location of BH clinicians into primary care settings, collaborative meetings held by primary care and BH team members to discuss cases, training of primary care and BH staff on effective screening and collaborative care, the presence of tracking systems and registries to support effective monitoring of patients, the “Stepped Care” approach for appropriate level of treatment, care management for the highest risk patients with mental health and substance abuse disorders, and relapse prevention, among others.¹¹⁰ Other examples of evidence-base practices include Screening, Brief Intervention and Referral to Treatment (SBIRT) for substance use disorders. SBIRT employs a brief assessment, performed by physical health providers in settings such as hospital emergency rooms and clinics to determine the presence of substance use issues, intervene and refer the individual to appropriate treatment. Independent evaluation of Texas SBIRT study determined that it resulted in significant inpatient / emergency department savings and increased appropriate use of services in the state’s largest public hospital district.¹¹¹

Self-Management and Wellness Programs

Successfully engaging the individual consumer in disease self-management and wellness activities related to chronic physical and behavioral health conditions empowers person-centered recovery and improved health outcomes. The Chronic Disease Self-Management Program developed at Stanford University to help people manage physical conditions such as diabetes and chronic pain, and Wellness

109 Excerpted from the IMPACT website at the University of Washington at <http://impact-uw.org/about/key.html>.

110 Katon W., MD. “The Diamond Model.” (based on Katon’s Collaborative Care Model for depression) and Unutzer J., MD. “IMPACT Study.” (as well as numerous other controlled trials). Institute for Clinical Systems Improvement and Minnesota Family Health Services. Presentation to the Institute for HealthCare Improvement Annual Forum, Dec. 2010.

111 Insight Project Research Group (2009). SBIRT outcomes in Houston: Final report on InSight, a hospital district-based program for patients at risk for alcohol or drug use problems. *Alcoholism: Clinical and Experimental Research*, 33(8): 1-8.

Recovery Action Planning (WRAP) which is directed toward managing severe mental illness¹¹², are two prominent examples of evidenced-based, self-management models. Giving the individual consumer control over health resources is another complementary promising practice.

Health navigation and individual health planning are related practices. The Texas and Minnesota Demonstrations to Maintain Independence and Employment (DMIE) studies which focused on medically indigent adults with behavioral health disorders, used health care navigation to achieve positive results in health care utilization and wellness measures.¹¹³ In Texas DMIE, health navigation and support from case managers trained in Motivational Interviewing resulted in increased access to and use of appropriate health services, including: more use of preventative care; more outpatient, more mental health and dental visits; greater adherence and persistence in taking prescribed medications for chronic conditions such as hypertension, respiratory conditions, diabetes, high cholesterol; more medical stability for chronic conditions and greater satisfaction with healthcare.¹¹⁴

Self-directed resource use models empower the individual to purchase goods and services to promote wellness and recovery. There is an evidence base for these models. For example, adults with severe mental illness and co-occurring physical disabilities in the Arkansas Cash and Counseling program were less likely to fall, have respiratory infections, develop bed sores, or spend a night in hospital or a nursing home if they had access to individual budgets than if they did not¹¹⁵. Similarly, an evaluation of the New Jersey Cash and Counseling program found that it was equally successful for participants with SMI as those with other types of disabilities¹¹⁶.

In the Texas Self-Directed Care study (SDC), individuals with severe mental illness are empowered to manage a flexible fund to purchase goods and services with assistance from an advisor. Consumers have broad latitude for making substitutions of traditional services and supports within a typical maximum budget of \$4,000 / year. Experience during the first year of the SDC indicates that individuals in the intervention group are making significant gains in recovery, wellness and employment relative to the control group.

Specialized Services and Supports for High Need Sub-Populations

The Texas Continuity of Care Task Force¹¹⁷ analyzed needs and recommendations for improving services to severely mentally ill individuals who move repeatedly through multiple systems, such as criminal justice, general acute inpatient and mental health. Among the recommendations was the development of:

112 Copeland, M.E. "Wellness recovery action plan: a system for monitoring, reducing and eliminating uncomfortable or dangerous physical symptoms and emotional feelings." *Occupational Therapy in Mental Health*. 17, 127–150 (2002).

113 Ozaki, R., Schneider, J., Hall, J., Moore, J., Linkins, K., Brya, J., Oelschlaeger, A., Bohman, T., Christensen, K., Wallisch, L., Stoner, D., Reed, B., Ostermeyer, B. (2011). Personal navigation, life coaching, and case management: Approaches for enhancing health and employment support services. *Journal of Vocational Rehabilitation*, (34)2, 83-95.

114 Bohman, T., Wallisch, L., Christensen, K., Stoner, D., Pittman, A., Reed, B., Ostermeyer, B. (2011). Working Well – The Texas Demonstration to Maintain Independence and Employment: 18-month outcomes. *Journal of Vocational Rehabilitation*, (34)2, 97-106.

115 Shen, C., Smyer, M.A., Mahoney, K.J., Loughlin, D.M. et al., (2008). Does Mental Illness Affect Consumer Direction of Community-Based Care? Lessons From the Arkansas Cash and Counseling Program. *The Gerontologist*, 48(1), 93-104.

116 Shen, C., Smyer, M., Mahoney, K.J., Simon-Rusinowitz, L. et al., (2008). Consumer-Directed Care for Beneficiaries With Mental Illness: Lessons From New Jersey's Cash and Counseling Program. *Psychiatric Services*, 59, 1299-1306.

117 See Continuity of Care Task Force Report at: <http://www.dshs.state.tx.us/mhsc/continuityofcare/>

- supported housing,
- assisted living,
- smaller, community-based living options, and
- services, such as cognitive rehabilitative modalities, to address the individual's limitations in organizing, planning and completing activities.

Services could be provided in a variety of settings, including individual homes, apartments, adult foster homes, assisted living facilities, and small group (three- to four-bed) community-supported residential settings. Examples of services could include cognitive and psychosocial rehabilitation; supported employment; transition assistance to establish a residence; peer support; specialized therapies; medical services, transportation medications and personal assistance.

2.13 Provide an intervention for a targeted behavioral health population to prevent unnecessary use of services in a specified setting (i.e., the criminal justice system, ER, urgent care etc.).

Project Goal:

Provide specialized services to complex behavioral health populations such as people with severe mental illnesses and/or a combination of behavioral health and physical health issues. These populations often have multiple concomitant issues such as substance use, traumatic injuries, homelessness, cognitive challenges, and lack of daily living skills and lack of natural supports. The State's mental health system provides rehabilitative services and pharmacotherapy to people with certain severe psychiatric diagnoses and functional limitations, but can serve only a fraction of the medically indigent population. It does not serve other high risk behavioral health populations and does not provide the range of services needed to deal with complex psychiatric and physical needs. These complex populations become frequent users of local public health systems.

The goal of this project is to avert outcomes such as potentially avoidable inpatient admission and readmissions in settings including general acute and specialty (psychiatric) hospitals; to avert disruptive and deleterious events such as criminal justice system involvement; to promote wellness and adherence to medication and other treatments; and to promote recovery in the community. This can be done by providing community based interventions for individuals to prevent them from cycling through multiple systems, such as the criminal justice system; the general acute and specialty psychiatric inpatient system; and the mental health system. Examples of interventions could include integrated medical and non-medical supports such as transition services to help individuals establish a stable living environment, peer support, specialized therapies, medical services, personal assistance, and short or long term residential options.

Residential options linked to a range of support services can effectively improve health outcomes for vulnerable individuals, such as the long-term homeless with severe mental illness. One such model in Colorado demonstrated a drastic 80 percent decrease in overnight hospital stays and a 76 percent decrease in nights in jail (Wortzel, 2007). Research indicates that among residents of permanent supportive housing:

- Rates of arrest and days incarcerated are reduced by 50%;
- Emergency room visits decrease by 57%;
- Emergency detoxification services decrease by 85%; and
- Nursing home utilization decreased by 50%.¹¹⁸

Project Options:

2.13.1 Design, implement, and evaluate research-supported and evidence-based interventions tailored towards individuals in the target population.

Required core components:

- a) Assess size, characteristics and needs of target population(s) (e.g., people with severe mental illness and other factors leading to extended or

¹¹⁸ Lewis, D., Corporation for Supportive Housing, Permanent Supportive Housing Program & Financial Model for Austin/Travis County, TX, 2010. Retrieved from <http://www.caction.org/homeless/documents/AustinModelPresentation.pdf>

- repeated psychiatric inpatient stays. Factors could include chronic physical health conditions; chronic or intermittent homelessness, cognitive issues resulting from severe mental illness and/or forensic involvement.
- b)** Review literature / experience with populations similar to target population to determine community-based interventions that are effective in averting negative outcomes such as repeated or extended inpatient psychiatric hospitalization, decreased mental and physical functional status, nursing facility admission, forensic encounters and in promoting correspondingly positive health and social outcomes / quality of life.
 - c)** Develop project evaluation plan using qualitative and quantitative metrics to determine outcomes.
 - d)** Design models which include an appropriate range of community-based services and residential supports.
 - e)** Assess the impact of interventions based on standardized quantitative measures and qualitative analysis relevant to the target population. Examples of data sources include: standardized assessments of functional, mental and health status (such as the ANSA and SF 36); medical, prescription drug and claims/encounter records; participant surveys; provider surveys. Identify “lessons learned,” opportunities to scale all or part of the intervention(s) to a broader patient populations, and identify key challenges associated with expansion of the intervention(s), including special considerations for safety-net populations.

Note: Community-based interventions should be comprehensive and multispecialty. They should incorporate two or more components, such as those listed below depending on the needs of the target populations being served. These interventions should have significant flexibility to add more components if they are appropriate to meet the needs of the target population. Community-based components may include (but are not limited to):

- Residential Assistance (Foster/Companion Care, Supervised Living, Residential Support Services)
- Assisted living;
- Cognitive Adaptation Training (CAT) – an evidence-based service that uses tools and motivational techniques to establish and refine daily living skills;
- Psychosocial Rehabilitation;
- Supported employment;
- Minor home modifications;
- Home delivered meals;
- Transition assistance – assistance to establish a basic household, including security deposits, essential furnishings, moving expenses, bed and bath linens;
- Adaptive aids (e.g., medication-adherence equipment, communication equipment, etc.);
- Transportation to appointments and community-based activities;
- Specialized behavioral therapies:

- Cognitive Behavioral Therapy – An empirically supported treatment that focuses on maladaptive patterns of thinking and the beliefs that underlie such thinking; and
- Dialectical Behavior Therapy – A manualized treatment program (derived from cognitive behavioral therapy) that provides support in managing chronic crisis and stress to keep individuals in outpatient treatment settings;
- Prescription medications;
- Peer support – A service that models successful health and mental health behaviors. It is provided by certified peer specialists who are in recovery from mental illness and/or substance use disorders and are supervised by mental health professionals;
- Respite care (short term);
- Substance abuse services (specialized for individuals who have experienced prolonged or repeated institutionalization);
- Visiting Nursing and / or community health worker services;
- Employment supports
- Nutritional counseling
- Occupational therapy; Speech and language therapy; and Physical therapy.

Components must be articulated into a system which uses a CQI design such as the CMS Quality Framework for HCBS services. (Anita Yuskas, 2010) and/or be informed by guidance such as the SAMHSA evidence-based toolkit for permanent supported housing (<http://store.samhsa.gov/product/Permanent-Supportive-Housing-Evidence-Based-Practices-EBP-KIT/SMA10-4510>) or other evidence-based system

Process Milestones:

- P-1. Milestone: Conduct needs assessment of complex behavioral health populations who are frequent users of community public health resources.
- P-1.1. Metric: Numbers of individuals, demographics, location, diagnoses, housing status, natural supports, functional and cognitive issues, medical utilization, ED utilization
- a. Needs assessment that includes analysis of the populations with complex behavioral health needs
- b. Data Source: Project documentation; Inpatient, discharge and ED records; State psychiatric facility records; survey of stakeholders (inpatient providers, mental health providers, social services and forensics); literature review
- P-2. Milestone: Design community-based specialized interventions for target populations. Interventions may include (but are not limited to) Residential Assistance (Foster/Companion Care, Supervised Living, Residential Support Services)
- Assisted living;
 - Cognitive Adaptation Training (CAT) – an evidence-based service that uses tools and motivational techniques to establish and refine daily living skills;
 - Psychosocial Rehabilitation;

- Supported employment;
 - Minor home modifications;
 - Home delivered meals;
 - Transition assistance – assistance to establish a basic household, including security deposits, essential furnishings, moving expenses, bed and bath linens;
 - Adaptive aids (e.g., medication-adherence equipment, communication equipment, etc.);
 - Transportation to appointments and community-based activities;
 - Specialized behavioral therapies:
 - Cognitive Behavioral Therapy – An empirically supported treatment that focuses on maladaptive patterns of thinking and the beliefs that underlie such thinking; and
 - Dialectical Behavior Therapy – A manualized treatment program (derived from cognitive behavioral therapy) that provides support in managing chronic crisis and stress to keep individuals in outpatient treatment settings;
 - Prescription medications;
 - Peer support – A service that models successful health and mental health behaviors. It is provided by certified peer specialists who are in recovery from mental illness and/or substance use disorders and are supervised by mental health professionals;
 - Respite care (short term);
 - Substance abuse services (specialized for individuals who have experienced prolonged or repeated institutionalization);
 - Visiting Nursing and / or community health worker services;
 - Employment supports
 - Nutritional counseling
 - Occupational therapy; Speech and language therapy; and Physical therapy.
- P-2.1. Metric: Project plans which are based on evidence / experience and which address the project goals
- a. Project documentation

P-4. Milestone: Evaluate and continuously improve interventions

P-4.1. Metric: Project planning and implementation documentation demonstrates 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 (e.g., how the project continuously uses data such as weekly run charts or monthly dashboards to drive improvement)

P-5. 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-5.1. 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-5.2. 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-6. 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-6.1. Metric: Description and 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-7. 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-7.1. 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-7.2. 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-1. Milestone: Criminal Justice Admissions/Readmissions
 - I-1.1. Metric: Percentage of preventable admissions and readmissions into Criminal Justice System;
 - a. Numerator: The number of individuals receiving specialized interventions that had a potentially preventable admission/readmission to a criminal justice setting (e.g. jail, prison, etc.) within the measurement period.
 - b. Denominator: The number of individuals receiving specialized interventions.
 - c. Data Source: a. Claims/ encounter and clinical record data; anchor hospital and other hospitals, criminal justice system records, local MH authority and state MH (CARE) data system records
- I-2. Milestone: Nursing Facility Admissions/Readmissions
 - I-2.1. Metric: Percentage of preventable admissions and readmissions to nursing facilities;
 - a. Numerator: The number of individuals receiving specialized interventions who had a potentially preventable admission/readmission within the measurement period.
 - b. Denominator: The number of individuals receiving specialized interventions.
 - c. Data Source: Nursing facility admission data from Medicaid / DADS
- I-3. Milestone: Adherence to Antipsychotics for Individuals with Schizophrenia
 - I-3.1. Metric: The percentage of individuals with schizophrenia receiving the specialized interventions who are prescribed an antipsychotic medication that had a Proportion of Days Covered (PDC) for antipsychotic medications greater than or equal to 0.8 during the measurement period (12 consecutive months)
 - a. Numerator: The number of individuals with schizophrenia who filled at least two prescriptions for an antipsychotic and had a PDC for antipsychotic medication that is greater than or equal to 0.8.
 - b. Denominator: The number of individuals at the end of the measurement period with schizophrenia with at least two claims for an antipsychotic during the measurement period.
 - c. Data Source: Claims and Encounter Data

- I-4. Milestone: Anti-depressant medication management over six months for Major Depressive Disorder and anti-depressant medication during acute phase over 12 weeks (NQF# 0105)
- I-4.1. Metric: The percentage of individuals with Major Depressive Disorder receiving the specialized interventions 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:
 - i. Effective Acute Phase Treatment: The number of individuals with Major Depressive Disorder receiving specialized interventions 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).
 - ii. Effective Continuation Phase Treatment: The number of individuals with Major Depressive Disorder receiving specialized interventions 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 with Major Depressive Disorder receiving specialized interventions who are diagnosed with a New Episode of major depression and treated with antidepressant medication.
 - c. Data Source: Claims and Encounter Data
- I-5. Milestone: Functional Status
- I-5.1. Metric: The percentage of individuals receiving specialized interventions who demonstrate improved functional status on standardized instruments (e.g. ANSA, CANS, etc.)
- a. Numerator: The number of individuals receiving specialized interventions who demonstrate improvement from baseline to annual functional assessment.
 - b. Denominator: The number of individuals receiving specialized interventions.
 - c. Data Source: Standardized functional assessment instruments (e.g. ANSA, CANS, etc.)
 - d. Rationale/Evidence: See project goal.
- I-6. Milestone: Enroll and serve individuals with targeted complex needs (e.g., a diagnosis of severe mental illness with concomitant circumstances such as chronic physical health conditions, chronic or intermittent homelessness, cognitive issues resulting from severe mental illness, forensic involvement, resulting in extended or repeated stays at inpatient psychiatric facilities.)
- I-6.1 (QPI) Metric: Number of targeted individuals enrolled/served in the project.
- c. Data source: Project documentation

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.

2.14 Implement person-centered wellness self-management strategies and self directed financing models that empower consumers to take charge of their own health care.

Project Goal:

Create wellness, self-management programs that employ research supported interventions singly or in combination to help individuals manage their chronic physical and behavioral health conditions. Examples of research-supported individual wellness self management strategies include Wellness Recovery Action Planning (WRAP), the Chronic Disease Self Management Program; Motivational Interviewing; client-managed wellness accounts; and health navigation / individual health planning models to empower the individual to achieve their health goals. These interventions should be closely coordinated with the patient's medical home.

Successfully engaging the individual consumer in disease self management and wellness activities related to chronic physical and behavioral health conditions empowers person-centered recovery and improved health outcomes. The Chronic Disease Self Management Program, developed at Stanford University to help people manage physical conditions such as diabetes and chronic pain, and Wellness Recovery Action Planning (WRAP) which is directed toward managing severe mental illness¹¹⁹, are two prominent examples of evidenced-based, self-management models. Giving the individual consumer control over health resources is another complementary promising practice.

Health navigation and individual health planning are related practices. The Texas and Minnesota Demonstrations to Maintain Independence and Employment (DMIE), which focused on medically indigent adults with behavioral health disorders, used health care navigation to achieve positive results in health care utilization and wellness measures.¹²⁰ In Texas DMIE, health navigation and support from case managers trained in Motivational Interviewing resulted in increased access to and use of appropriate health services, including: more use of preventative care; more outpatient, more mental health and dental visits; greater adherence and persistence in taking prescribed medications for chronic conditions such as hypertension, respiratory conditions, diabetes, high cholesterol; more medical stability for chronic conditions and greater satisfaction with healthcare.¹²¹

Self directed resource use models empower the individual to purchase goods and services to promote wellness and recovery. There is an evidence base for these models. For example, adults with severe mental illness and co-occurring physical disabilities in the Arkansas Cash and Counseling program were less likely to fall, have respiratory infections, develop bed sores, or spend a night in hospital or a nursing home if they had access to individual budgets than if they did not¹²². Similarly, an evaluation of the New

119 Copeland, M.E. "Wellness recovery action plan: a system for monitoring, reducing and eliminating uncomfortable or dangerous physical symptoms and emotional feelings." *Occupational Therapy in Mental Health*, 17, 127–150 (2002).

120 Ozaki, R., Schneider, J., Hall, J., Moore, J., Linkins, K., Brya, J., Oelschlaeger, A., Bohman, T., Christensen, K., Wallisch, L., Stoner, D., Reed, B., Ostermeyer, B. (2011). Personal navigation, life coaching, and case management: Approaches for enhancing health and employment support services. *Journal of Vocational Rehabilitation*, (34)2, 83-95.

121 Bohman, T., Wallisch, L., Christensen, K., Stoner, D., Pittman, A., Reed, B., Ostermeyer, B. (2011). Working Well – The Texas Demonstration to Maintain Independence and Employment: 18-month outcomes. *Journal of Vocational Rehabilitation*, (34)2, 97-106.

122 Shen, C., Smyer, M.A., Mahoney, K.J., Loughlin, D.M. et al., (2008). Does Mental Illness Affect Consumer Direction of Community-Based Care? Lessons From the Arkansas Cash and Counseling Program. *The Gerontologist*, 48(1), 93-104.

Jersey Cash and Counseling program found that it was equally successful for participants with SMI as those with other types of disabilities¹²³.

In the Texas Self-Directed Care study (SDC), individuals with severe mental illness are empowered to manage a flexible fund to purchase goods and services with assistance from an advisor. Consumers have broad latitude for making substitutions of traditional services and supports within a typical maximum budget of \$4,000 / year. Experience during the first year of the SDC indicates that individuals in the intervention group are making significant gains in recovery, wellness and employment relative to the control group.

Project Options:

2.14.1 Establish interventions to promote person-centered wellness self-management strategies and train staff / contractors to empower consumers to take charge of their own health care.

Required core project components:

- a) Develop screening process for project inclusion
- b) Identify population for intervention using claims and encounter data, clinical records, or referrals from providers.
- c) Recruit eligible individuals based on administrative and diagnostic data
- d) Establish interventions and train staff / contractors
- e) Hire staff (including the following minimum qualifications):
 - Wellness and Health Navigation: Bachelors level professional with experience in mental health and/or wellness initiatives or a peer specialist who has successfully completed the DSHS certification program for peer specialists
 - WRAP Facilitator: an individual trained and credentialed as a WRAP facilitator using the WARP model developed by Mary Ellen Copeland (See: <http://www.mentalhealthrecovery.com/wrap/>).
- f) Train staff in motivational interviewing and person-centered planning
- g) Assess project outcomes. 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.

2.14.2 Implement self-directing financing models including wellness accounts. Note: If selected, this must be implemented as part of a person-centered wellness project as described in 2.14.1.

Required core project components:

- a) Establish wellness account funding mechanisms.
- b) Establish policies and procedures for program operations.
- c) Establish accountability systems to track outcomes and expenditures.

123 Shen, C., Smyer, M., Mahoney, K.J., Simon-Rusinowitz, L. et al., (2008). Consumer-Directed Care for Beneficiaries With Mental Illness: Lessons From New Jersey's Cash and Counseling Program. *Psychiatric Services*, 59, 1299-1306.

- d) Implement interventions.
- e) Assess project outcomes. 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.

Process Milestones:

- P-1. Milestone: Develop screening criteria and a process for selecting eligible participants
 - P-1.1. Metric: Screening criteria and process are documented
 - a. Data Source: Project documentation

- P-2. Milestone: Identify population for intervention
 - P-2.1. Metric: Number of individuals meeting program entry criteria
 - a. Description of the population to be served by the intervention, including the estimate of the number
 - b. Data Source: Project records

- P-3. Milestone: Hire staff
 - P-3.1. Metric: Number of staff hired
 - a. Number of staff hired and description of staff hired
 - b. Data Source: Project personnel records

- P-4. Milestone: Train staff in required knowledge, skills and abilities
 - P-4.1. Metric: Number of staff trained
 - a. Number of staff trained and the description of training
 - b. Data Source: Data Source: Project training records; Training curricula

- P-5. Milestone: Establish wellness account funding mechanisms
 - P-5.1. Metric: Accounts are established with entity that will pay for wellness items
Flexible wellness funds may cover the following categories of purchases:
 - Devices that promote wellness goals (e.g., digital scale, BP monitor, mobile device and / or app for physical activity, etc.)
 - Transportation to wellness activities (e.g., support groups, gym, etc.)
 - Subscriptions or memberships to promote wellness (e.g., YMCA, fitness magazine)
 - Behavioral Interventions not currently covered by STAR+PLUS (e.g., relaxation, visualization, etc.)
 - Individual wellness education
 - Family-based Wellness Training and Interventions
 - Nutritional or Medical Food
 - Other items approved by the Project Manager
 - a. Description of areas to be covered by wellness fund
 - b. Data Source: Project documents i.e., contracts, agreements

- P-6. Milestone: Establish policies and procedures for program operations
- P-6.1. Metric: Written documents are produced
 - a. Policies and procedures submitted by the provider
 - b. Data Source: Project documentation
- P-7. Milestone: Establish accountability systems to track outcomes and expenditures.
- P-7.1. Metric: Forms and databases are created to support program operations and evaluation
 - a. Description of the systems for tracking outcomes and expenditures
 - b. Data Source: Project documentation
- P-9. Milestone: Develop assessment materials and procedures that allow identification, tracking, and monitoring on self-defined individual wellness goals.
- P-9.1. Metric: Forms and databases are created to support program operations and evaluation
 - a. Description of the assessment procedures and documents/databases used
 - b. Data Source: Project documentation
- P-10. Milestone: Evaluate and continuously improve wellness self-management programs
- P-10.1. 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-11. 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-11.1. 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-11.2. 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-12. 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-12.1. Metric: Description of new ideas and the 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-13. 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-13.1. 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-13.2. 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: Participants who are successfully self managing

I-11.1. Metric: Percentage of participants successfully managing their health

- a. Numerator: Number of participants achieving self-defined individual wellness goals
- b. Denominator: Number of people participating in the person centered self-management project.
- c. Data Source: Project data; individual wellness plans; claims and encounter data; medical records.

- I-12. Milestone: Receipt of Recommended Preventative Services
- I-12.1. Metric: The percentage of individuals who participate in the person centered self-management project and who also receive services as recommended by the US Preventative Services Task Force.
- a. Numerator: The number of individuals who participate in the person centered self-management project receiving services as recommended by the US Preventative Services Task Force
 - b. Denominator: The number of individuals who participate in the person centered self-management project.
 - c. Data Source: Project data; individual wellness plans; claims and encounter data; medical records.
- I-13. Milestone: Emergency Department Use
- I-13.1. Metric: Percentage of inappropriate use of Emergency Department Care by individuals in the person centered self-management project.
- a. Numerator: total number of individuals participating in the person centered self-management project who utilize Emergency Department for services that could be delivered in the ambulatory setting.
 - b. Denominator: total number of individuals participating in the person centered self-management project
 - c. Data Source: Project data; claims and encounter data; medical records.
- I-14. Milestone: Prescription Medication Adherence/Compliance
- I-14.1. Metric: Percent adherence and compliance with prescribed medications for conditions such as depression, schizophrenia, bipolar disorder and chronic physical health conditions such as diabetes
- a. Numerator: total number of individuals participating in the person centered self-management project that are adherent / compliant to their prescribed medication regime.
 - b. Denominator: total number of individuals participating in the person centered self-management project.
 - c. Data Source: Project data; claims and encounter data; medical records.
- I-15. Milestone: Consumer satisfaction with Care and Health Status
- I-15.1. Metric: Percentage of individuals that report satisfaction with care and health status
- a. Numerator: The number of individuals in the person centered self-management project reporting satisfaction with services.
 - b. Denominator: The number of individuals in the person centered self-management project.
 - c. Data Source: Survey data from CAHPS, MHSIP or other validated instrument.
- I-16. Milestone: Establish person-centered wellness self-management program to provide support to individuals with chronic physical and / or behavioral health conditions. Examples of strategies could include but are not limited to the use of wellness navigators to assist individuals with behavioral health conditions and co-morbid chronic physical diagnoses, establishing a flexible wellness account system to be used for individuals to

purchase wellness related items, provide healthcare navigation to assist high risk behavioral health consumers in accessing health and behavioral health services, or providing WRAP or other evidence-based training to people assisting individuals with severe mental illness.

I-16.1 (QPI) Metric: Number of targeted individuals participating in the wellness self-management programs

c. Data Source: Project documentation

I-16.2 Metric: Number of intervention sites

d. Data Source: Project documentation

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.

2.15 Integrate Primary and Behavioral Health Care Services

Project Goal

Integrate primary care and behavioral health care services in order to improve care and access to needed services.

The concept of a medical home that can address the needs of the whole person is increasingly recognized as a key in improving both access to care, continuity of care, improved outcomes. The importance of simultaneously addressing the physical health needs and the behavioral health needs of individuals has become recognized over the past three decades.

A recent study of adults discharged from psychiatric hospitals found 20% with chronic and serious conditions such as HIV infection, brain trauma, cerebral palsy and heart disease. As many as 75% of individuals with schizophrenia have been found to have high rates of serious physical illnesses, such as diabetes, respiratory, heart and/or bowel problems and high blood pressure. High rates were also seen for vision (93%), hearing (78%), and dental (60%) problems ... the effects of atypical antipsychotic medications, which exacerbate this predisposition, individuals with schizophrenia have especially high rates of diabetes. Cardiovascular diseases are also very prevalent among people with mental illnesses. Again, psychiatric medications exacerbate the problem because they are associated with obesity and high triglyceride levels, known risk factors for cardiovascular disease. Adults with serious mental illnesses are known to have poor nutrition, high rates of smoking and a sedentary lifestyle—all factors that place them at greater risk for serious physical disorders, including diabetes, cardiovascular disease, stroke, arthritis and certain types of cancers. Despite such extensive medical needs, adults with serious mental illnesses often do not receive treatment... Among people with schizophrenia, fewer than 70% of those with co-occurring physical problems were currently receiving treatment for 10 of 12 physical health conditions studied.¹²⁴

Medical Homes and similar collaborative care approaches have been determined to be beneficial in the treatment of mental illness in a variety of controlled studies.¹²⁵

Behavioral health problems are often cyclical in nature meaning that over a course of months or years a person may experience periods of time when symptoms are well controlled (or in remission) while at other times symptoms can range from moderate to severe. The concept of a Medical home where physical and behavioral health care is integrated and provides supports for individuals who are in any quadrant of the National Council for Community Behavioral Health (NCCBH) Four Quadrant Clinical Integration Model at a given time.

The use of the Four Quadrant Model to consider subsets of the population, the major system elements and clinical roles would result in the following broad approaches:

124 Bazelon Center for Mental Health Law (2004), GET IT TOGETHER How to Integrate Physical and Mental Health Care for People with Serious Mental Disorders

125 Thielke, S., Vannoy, S. & Unützer, J. (2007). Integrating mental health and primary care. Primary Care: Clinics in Office Practice, 34

- Quadrant I: Low BH-low physical health complexity/risk, served in primary care with BH staff on site; very low/low individuals served by the PCP, with the BH staff serving those with slightly elevated health or BH risk.
- Quadrant II: High BH-low physical health complexity/risk, served in a specialty BH system that coordinates with the PCP.
- Quadrant III: Low BH-high physical health complexity/risk, served in the primary care/medical specialty system with BH staff on site in primary or medical specialty care, coordinating with all medical care providers including disease managers.
- Quadrant IV: High BH-high physical health complexity/risk, served in both the specialty BH and primary care/medical specialty systems; in addition to the BH case manager, there may be a disease manager, in which case the two managers work at a high level of coordination with one another and other members of the team.

Other integration models include the IMPACT Model¹²⁶ and Wagner's Chronic Care Model.

Through the integration of behavioral health and physical health care services, opportunities to address both conditions during a single visit are vastly increased. Co-location, when coupled with protocols, training, technology and team building has the potential to improve communications between providers and enhance coordination of care. Additionally, access to care is enhanced because individuals do not have to incur the cost or inconvenience of arranging transportation or making multiple trips to different locations to address physical and behavioral health needs.

Finally, given the ever-increasing cost of transportation, a "one stop shopping" approach for health care improves the chances that individuals with multiple health needs will be able to access the needed care in a single visit and thereby overcome the negative synergy that exists between physical and behavioral health conditions.

Co-location alone is not synonymous with integration. Levels of interaction between physical and behavioral health providers may range from traditional minimally collaborative models to fully integrated collaborative models.

1. **Minimal Collaboration:** mental health providers and primary care providers work in separate facilities, have separate systems, and communicate sporadically.
2. **Basic Collaboration at a Distance:** separate systems at separate sites; periodic communication about shared patients, typically by telephone or letter.
3. **Basic Collaboration On-site:** separate systems, but shared facility; more communication, but each provider remains in his/her own professional culture.
4. **Close Collaboration in a Partly Integrated System:** providers share the same facility and have some systems in common (scheduling appointments, medical records); regular face-to-face communication; sense of being part of a team.
5. **Close Collaboration in a Fully Integrated System:** providers are part of the same team and system; the patient experiences mental health treatment as part of their regular primary care or vice versa.

126 Excerpted from the IMPACT website at the University of Washington at <http://impact-uw.org/about/key.html>.

Delivery system reform projects proposed under this category should be structured to achieve level 4 or, preferably level 5 levels of interaction.

Project Options:

2.15.1 Design, implement, and evaluate projects that provide integrated primary and behavioral health care services.

Required core components:

- a) Identify sites for integrated care projects, which would have the potential to benefit a significant number of patients in the community. Examples of selection criteria could include proximity/accessibility to target population, physical plant conducive to provider interaction; ability / willingness to integrate and share data electronically; receptivity to integrated team approach.
- b) Develop provider agreements whereby co-scheduling and information sharing between physical health and behavioral health providers could be facilitated.
- c) Establish protocols and processes for communication, data-sharing, and referral between behavioral and physical health providers
- d) Recruit a number of specialty providers (physical health, mental health, substance abuse, etc. to provide services in the specified locations.
- e) Train physical and behavioral health providers in protocols, effective communication and team approach. Build a shared culture of treatment to include specific protocols and methods of information sharing that include:
 - Regular consultative meetings between physical health and behavioral health practitioners;
 - Case conferences on an individualized as-needed basis to discuss individuals served by both types of practitioners; and/or
 - Shared treatment plans co-developed by both physical health and behavioral health practitioners.
- f) Acquire data reporting, communication and collection tools (equipment) to be used in the integrated setting, which may include an integrated Electronic health record system or participation in a health information exchange – depending on the size and scope of the local project.
- g) Explore the need for and develop any necessary legal agreements that may be needed in a collaborative practice.
- h) Arrange for utilities and building services for these settings
- i) Develop and implement data collection and reporting mechanisms and standards to track the utilization of integrated services as well as the health care outcomes of individual treated in these integrated service settings.
- j) 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.

Process Milestones

- P-1. Milestone: Conduct needs assessment to determine areas of the state where the co-location of services has the potential to benefit a significant number of people who have physical/behavioral health needs.
- P-1.1. Metric: Description of numbers of patients in various areas who might benefit from integrated services including demographics, location, & diagnoses
 - a. Data Sources: Inpatient, discharge and ED records; survey of primary care providers; survey of behavioral health providers; state demographic information relating to treated health conditions; Medicaid claims data
- P-2. Milestone: Identify existing clinics or other community-based settings where integration could be supported. It is expected that physical health practitioners will share space in existing behavioral health settings, but it may also be possible to include both in new settings or for physicians to share their office space with behavioral health practitioners.
- P-2.1. Metric: Partnerships with community healthcare providers (physical and behavioral), city and county governments, charities, faith-based organizations and other community based helping organizations.
 - a. Description of community-based setting and clinics
 - b. Data Source: Information from persons interviewed
- P-3. Milestone: Develop and implement a set of standards to be used for integrated services to ensure effective information sharing, proper handling of referrals of behavioral health clients to physical health providers and vice versa.
- P-3.1. Description of number and types of referrals that are made between providers at the location
 - a. Description of set standards for service integration and referral, description of implementation and impact on the population served
 - b. Data Sources: Surveys of providers to determine the degree and quality of information sharing; Review of referral data and survey results
 - P-3.2. Description of number of referrals that are made outside of the location
 - a. Description of the referrals and the estimated number
 - b. Data Sources: Surveys of providers to determine the degree and quality of information sharing; Review of referral data and survey results
 - P-3.3. Description of number of referrals which follow the established standards
 - a. Description of the referrals and the estimated number
 - b. Data Sources: Surveys of providers to determine the degree and quality of information sharing; Review of referral data and survey results
- P-4. Milestone: Assess ease of access to potential locations for project implementation
- P-4.1. Metric: Description of access to major roadways, bus routes, or proximity to a large number of individuals who may benefit from services.
 - a. Description of access to potential locations
 - b. Data Source: City/County data, maps, demographic data relating to prevalence of health conditions.

- P-5. Milestone: Develop integrated sites reflected in the number of locations and providers participating in the integration project:
- P-5.1. Metric: Description and number of agreements signed for the provision of integrated services
 - a. Data Source: Project data
 - P-5.2. Metric: Description and number of primary care providers newly located in behavioral health settings.
 - a. Data Source: Project data
 - P-5.3. Metric: Description and number of behavioral health providers newly located in primary care clinics.
 - a. Data Source: Project data
- P-6. Milestone: Develop integrated behavioral health and primary care services within co-located sites.
- P-6.1. Metric: Description and number of providers achieving Level 4 of interaction (close collaboration in a partially integrated system).
 - a. Data Source: Project data
 - P-6.2. Metric: Description and number of providers achieving Level 5 of interaction (close collaboration in a fully integrated system)
 - a. Data Source: Project data
- P-7. Milestone: Evaluate and continuously improve integration of primary and behavioral health services.
- P-7.1. 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 (e.g. 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. .
 - 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: Description of and the 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-8. Milestone: Integrated Services

I-8.1. (QPI) Metric: Number of individuals receiving both physical and behavioral health care at the established locations.

a. Number of individuals receiving both physical and behavioral health care in project sites

b. Data Source: Project data; claims and encounter data; medical records

I-8.2. Metric: Number of encounters provided under the integrated model.

a. Number of integrated service visits provided.

b. Data Source: Project data; claims and encounter data; medical records

- I-9. Milestone: Coordination of Care
- I-9.1. Metric: Percentage of individuals with a treatment plan developed and implemented with primary care and behavioral health expertise
- a. Numerator: Number of individuals with treatment plans developed and implemented with primary care and behavioral health expertise
 - b. Denominator: Number of individuals receiving services at project sites.
 - c. Data Source: Project data; claims and encounter data; medical records
- I-10. Milestone: No-Show Appointments
- I-10.1. Metric: Percentage of “no shows” for behavioral and physical health appointments.
- a. Numerator: Number of appointments for behavioral or physical health services that were not kept in the project sites.
 - b. Denominator: Number of scheduled appointments for behavioral and physical health services in the project site.
 - c. Data Source: Project Data; Clinic Registry Data; Claims and Encounter Data
- I-11. Milestone: Health Metrics
- I-11.1. Metric: Percentage of positive results of standardized health metrics, which may include :
- Objective health indicators such as Body Mass Index, glycated hemoglobin (A1c), blood pressure, and other specific blood assays, etc.
 - Behavioral health instruments such as the Child Behavior Checklist (CBCL) the Quality of Life (QOL) Questionnaire, the Child Needs and Strengths Assessment (CANS), the Adult Needs and Strengths Assessment (ANSA).
- a. Numerator: The number of people receiving services at project sites with positive results on standardized health metrics.
 - b. Denominator: The number of people receiving services at project sites.
 - c. Data Source: Project Data; Medical Records; Claims and Encounter Data.
- I-12. Milestone: Improved Consumer satisfaction with Integrated Services
- I-12.1. Metric: Percentage of individuals reporting satisfaction with integrated services
- a. Numerator: The number of individuals receiving integrated services that have expressed satisfaction with services.
 - b. Denominator: The number of individuals receiving integrated services
 - 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:

- 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.

2.16 Provide virtual psychiatric and clinical guidance to all participating primary care providers delivering services to behavioral patients regionally.

Project Goal

Provide ready access to psychiatric consultation in primary care to enhance and improve treatment for individuals with behavioral health conditions. Virtual psychiatric consultation may include (but is not limited to) the following modalities of communication: telephone, instant message, video conference, facsimile, and e-mail. Primary Care Providers (PCPs) tend to be the first (and often last) stop for services for individuals with mental illness and substance use disorders. Indeed, more than 1/3 of all patients rely solely on PCPs to treat psychiatric disorders. These individuals may have medical conditions that are created or exacerbated by untreated or under-treated mental illness and substance abuse. This trend means PCPs should have adequate resources and expertise to treat behavioral health conditions. Treating behavioral health conditions during a PCP visit reduces the chances of losing the patient during the referral process.

The goal of this project is to provide PCPs delivering services regionally with the necessary resources and guidance to adequately treat patients who present with behavioral health conditions. Clinical guidance will be provided remotely via the following communication methods: telephone, instant message, video conference, facsimile, and e-mail. Access to these services will allow the medical treatment team to utilize behavioral health expertise in areas including, but not limited to: diagnostic impressions, psychiatric medication administration, trajectory and outcomes of mental health diagnoses, cultural considerations relevant to behavioral health treatment, and referral recommendations for ongoing treatment, and behavioral health self-management resources. PCPs will increase their knowledge base about behavioral health conditions while also having quick access to cutting edge and research based behavioral health interventions over several communication methods. This effort will bridge the often disparate disciplines of behavioral and physical health, providing better outcomes for patients who increasingly rely on primary care settings for treatment of their behavioral health conditions.

Project Options:

2.16.1 Design, implement, and evaluate a program to provide remote psychiatric consultative services to all participating primary care providers delivering services to patients with mental illness or substance abuse disorders

Required core project components:

- a)** Establish the infrastructure and clinical expertise to provide remote psychiatric consultative services.
- b)** Determine the location of primary care settings with a high number of individuals with behavioral health disorders (mental health and substance abuse) presenting for services, and where ready access to behavioral health expertise is lacking. Identify what expertise primary care providers lack and what they identify as their greatest needs for psychiatric and/or substance abuse treatment consultation via survey or other means.
- c)** Assess applicable models for deployment of virtual psychiatric consultative and clinical guidance models
- d)** Build the infrastructure needed to connect providers to virtual behavioral health consultation. This may include:
 - Procuring behavioral health professional expertise (e.g., Psychiatrists, Psychologists, Psychiatric Nurses, Licensed Professional Counselors, Masters level Social Workers, Licensed Chemical Dependency

Counselors, Licensed Marriage and Family Therapists, Certified Peer specialists, and Psychiatric Pharmacists,). This will include expertise in children and adolescents (e.g. Child and Adolescent Psychiatrists, Psychologists, Nurses, and Pharmacists); expertise in psychotropic medication management in severe mental illness.

- e) Ensuring staff administering virtual psychiatric consultative services are available to field communication from medical staff on a 24-hour basis.
- f) Identify which medical disciplines within primary care settings (nursing, nursing assistants, pharmacists, primary care physicians, etc.) could benefit from remote psychiatric consultation.
- g) Provide outreach to medical disciplines in primary care settings that are in need of telephonic behavioral health expertise and communicate a clear protocol on how to access these services.
- h) Identify clinical code modifiers and/or modify electronic health record data systems to allow for documenting the use of telephonic behavioral health consultation.
- i) Develop and implement data collection and reporting standards for remotely delivered behavioral health consultative services.
- j) Review the intervention(s) impact on access to telephonic psychiatric consults 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

Optional Project Components:

- k) Develop a database or information resource center for behavioral health professionals to ensure appropriate research based interventions are being communicated to providers.
- l) Develop or adapt best practice resources and research based literature to medical professions on a range of behavioral health topics that frequently occur in primary care settings (including guidelines for best practices for administration of psychotropic medications for specific mental health conditions and monitoring of these medications).
- m) Review the intervention(s) impact 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

Process Milestones:

- P-1. Milestone: Conduct needs assessment of complex behavioral health populations and primary care providers who could benefit from telephonic psychiatric consultation.
 - P-1.1. Metric: Conduct needs assessment including items such as the following:
 - Numbers of patients who could benefit from project
 - Numbers of PCP locations that could benefit from project
 - Description of expertise that PCPs have identified they lack and that would be most helpful if offered by a telephonic consultative service
 - Demographics, location, & diagnoses

- a. Description of the needs assessment based on the specified criteria
 - b. Data Source: Inpatient, discharge and ED records; survey of primary care providers; literature review

- P-2. Milestone: Design psychiatric consultation services that would allow medical professionals in primary care settings to access professional behavioral health expertise (via methods such as telephone, instant messaging, video conference, facsimile, and e-mail).
 - P-2.1. Metric: Establish project plans which are based on evidence / experience and which address the project goals
 - a. Data Source: Project documentation
 - P-2.2. Metric: Documentation of use of the psychiatric consultative services by primary care providers
 - a. Data Source: Follow-up surveys of primary care providers to indicate that they are using the service and that it is meeting their needs

- P-3. Milestone: Enroll primary care settings into the remote behavioral health consultation services.
 - P-3.1. Metric: Description and number of PCP settings that use psychiatric consultative services
 - a. Data Source: Project documentation

- P-4. Milestone: Determine the impact of the project.
 - P-4.1. Metric: Evaluation plan including metrics, operational and evaluation protocols
 - a. Provider's report with the project evaluation
 - b. Data Source: Project documentation

- P-5. Milestone: Evaluate and continuously improve psychiatric consultative services
 - P-5.1. 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, monthly dashboards, and feedback from primary care providers to drive improvement)

- 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.

- 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: Description of the 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-6. Milestone: ED Use
 - I-6.1. Metric: Percentage of Emergency Department usage for individuals with mental illness and/or substance use disorders who are treated in primary care settings which had access to virtual psychiatric consultative services.
 - a. Numerator: total number of individuals receiving care in primary care settings which had access to virtual psychiatric consultative services who used Emergency Departments
 - b. Denominator: total number of individuals receiving care in primary care settings which had access to virtual psychiatric consultative services.
Data Source: Project data; Claims data and encounter data from ED
- I-7. Milestone: Evidence Based Protocols and Guidelines
 - I-7.1. Metric: Percentage of use of evidence-based treatment protocols and adherence to evidence-based guidelines for specific behavioral health conditions (these conditions could include schizophrenia, autism, bipolar depression, etc) by primary care physicians
 - a. Numerator: The number of primary care providers with access to psychiatric consultative services who used evidence based protocols and guidelines to treat behavioral health conditions.
 - b. Denominator: The number of primary care providers with access to psychiatric consultative services to treat behavioral health conditions.
 - c. Data Source: Project Data; Provider Survey Data; Medical Records
- I-8. Milestone: Improved Consumer Satisfaction with Treatment
 - I-8.1. Metric: Percentage of people reporting satisfaction with treatment
 - a. Numerator: The number of individuals receiving care in primary care settings which had access to virtual psychiatric consultative services and who have expressed satisfaction with services.
 - b. Denominator: The number of individuals receiving care in primary care settings which had access to virtual psychiatric consultative services
 - c. Data Source: Survey data from CAHPS, MHSIP or other validated instrument.
- I-9. Milestone: Primary Care Provider Satisfaction with virtual Psychiatric Consultative Services
 - I-9.1. Metric: Percentage of Primary Care Providers reporting improved satisfaction with virtual psychiatric consultative services.
 - a. Numerator: The number of primary care providers with access to virtual psychiatric consultative services who express satisfaction with these services.
 - b. Denominator: The number of primary care providers with access to virtual psychiatric consultative services
 - c. Data Source: Primary Care Provider Survey data

- I-10. Milestone: Adherence to antipsychotics for individuals with schizophrenia who are seen in primary care settings.
- I-10.1. Metric: Percentage of individuals with schizophrenia 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: Number of 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: Number of 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 were seen in a primary care setting.
 - c. Data Source: Claims data; Project Data (RHP's may also consider automated devices which measure prescription utilization)
- I-11. Milestone: Anti-depressant medication management over six months for Major Depressive Disorder anti-depressant medication during acute phase over 12 weeks (NQF# 0105)
- I-11.1. Metric: The percentage of individuals with behavioral health disorders who are seen in primary care settings 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 with behavioral health disorders who are seen in primary care settings 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 with behavioral health disorders who are seen in primary care settings 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 who are seen in primary care settings with behavioral health disorders 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-12. Milestone: Utilization of virtual psychiatric consultations in primary care settings
- I-12.1. Metric: Number of individuals provided virtual consultation
 - a. Number of unique individuals served
 - b. Data source: Claims, Encounter data
 - c. Rationale/Evidence: Describes the patient impact of the intervention
 - I-12.2. Metric (QPI): Number of virtual consultations provided
 - a. Number of primary care encounters in which virtual psychiatric consultation is provided
 - b. Data source: Claims, Encounter data
 - c. Rationale/Evidence: Describes the patient impact of the intervention

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.

2.17 Establish improvements in care transition from the inpatient setting for individuals with mental health and / or substance abuse disorders.

Project Goals:

The goal of this project is to implement improvements in care transitions and coordination of care from inpatient to outpatient, post-acute care, and home care settings in order to prevent increased health care costs and hospital readmissions of individuals with mental health and substance use (behavioral health) disorders. For people with mental health and substance use disorders, these transitions are especially critical in reducing the risk of readmission. Texas Medicaid data on potentially preventable inpatient readmissions demonstrates that behavioral health conditions are a significant driver of inpatient costs. Mental health and substance abuse conditions comprise 8 percent of initial inpatient readmissions to general acute and specialty inpatient hospitals but represent 24 percent of potentially preventable admissions.¹²⁷ The implementation of effective care transitions requires that providers learn and develop effective ways to successfully manage one disease in order to effectively manage the complexity of multiple diseases.¹²⁸ Preventable admissions in Texas are commonly indicative of “the absence of excellent care, especially during the transition from inpatient care to care at home or in a post-acute facility.”¹²⁹

Relatively simple steps can make a real difference. These include scheduling the follow-up appointment before discharge, voice-to-voice transfer of care between the attending physician and the primary care physician / provider community-based services, reconciling medication instructions, and follow-up phone calls or visits after discharge. More complex populations with severe behavioral health disorders and other issues, such as homelessness may require more intensive follow-through post discharge. Strategies, such as Critical Time Intervention (CTI), are designed to prevent recurrent adverse outcomes, such as readmissions among persons with severe mental illness. Such interventions may include pre-transition planning, intensive transition support, assessment and adjustment of support and transfer to community sources of care. Peer support can be an important strategy for individuals transitioning from inpatient to community settings. In Texas, the Department of State Health Services, has developed a peer certification program which could be leveraged by partnerships to develop peer support capacity.

Project Options:

2.17.1 Design, implement, and evaluate interventions to improve care transitions from the inpatient setting for individuals with mental health and/or substance abuse disorders.

Required core project components:

- a) Develop a cross-continuum team comprised of clinical and administrative representatives from acute care, ambulatory care, behavioral health and community-based non-medical supports
- b) Conduct an analysis of the key drivers of 30-day hospital readmissions for behavioral health conditions using a chart review tool (e.g. the Institute for

127 Potentially Preventable Readmissions in the Texas Medicaid Population, Fiscal Year 2010, Texas Health and Human Services Commission (2012)

128 Rittenhouse D, Shortell S, et al. “Improving Chronic Illness Care: Findings from a National Study of Care Management Processes in Large Physician Practices.” *Medical Care Research and Review Journal* (2010) 67(3): 301-320

129 Ibid.

- Healthcare Improvement's (IHI) State Action on Avoidable Re-hospitalizations (STAAR) tool) and patient and provider interviews.
- c) Identify baseline mental health and substance abuse conditions at high risk for readmissions, (example include schizophrenia, bipolar disorder, major depressive disorder, chemical dependency).
 - d) Review best practices for improving care transitions from a range of evidence-based or evidence-informed models
 - e) Identify and prioritize evidence-based strategies and clinical protocols that support seamless care transitions and reduce preventable 30-day readmissions.
 - f) Implement two or more pilot intervention(s) in care transitions targeting one or more patient care units or a defined patient population. Examples of interventions include, but are not limited to, implementation of:
 - g) 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.

Examples of interventions include, but are not limited to, implementation of:

- Discharge checklists
- "Hand off" communication plans with receiving medical and behavioral health providers
- Wellness initiatives targeting high-risk behavioral health patients, such as WRAP, health planning and motivation strategies, Screening, Brief Intervention and Referral to Treatment (SBIRT) for substance use disorders,
- Individual and family education initiatives including self-management skills.
- Post-discharge medication planning
- Early follow-up such as homecare visits, primary care outreach, and/or patient call-backs.
- Transition and wellness support from certified peer specialists for mental health and /or substance use disorders.
- More intensive follow-through programs, such as CTI or other evidence-informed practices, for individuals with more severe behavioral health disorders and other challenges, such as homelessness.
- Electronic data exchange for critical clinical information to support excellent continuity of care.

Process Milestones

- P-1. Milestone: Establish Task Force or Team to support or lead project.
 - P-1.1. Establishment of Task Force or Team

- a. Description of the task force and its activities
 - b. Data Source: Documentation of task force or team and description of activities

- P-2. Milestone: Collect information and /or analyze data on factors contributing to preventable readmissions within 30 days. Metrics may include:
 - P-2.1. Metric: Conduct a minimum of 10 interviews with patient/family members regarding an occurrence of a preventable 30 day hospital readmission
 - a. Description of interview procedures and selection of population interviewed
 - P-2.2. Review interview data conducted by multidisciplinary team
 - a. Description of interview findings including analysis of modifiable factors associated with the readmissions
 - P-2.3. Improve electronic reporting of readmission data
 - a. Description of system improvements and demonstration of reporting functionality.
 - P-2.4. Determine baseline metric for all cause 30 day readmission
 - a. Establish baseline rate all cause 30 day readmission rate for BH conditions
 - b. Numerator: number of admissions for any reason that occur within 30 days of index BH admission
 - c. Denominator: number of discharges for BH conditions
 - d. Data Source: claims, encounter data
 - P-2.5. Identification of key factors that increase the likelihood of preventable 30 day readmissions for individuals with mental health and substance use disorders
 - a. Description of determinants of 30 day readmissions including methods of analysis
 - b. Data Sources:
 - Documented summary of interview results
 - Report template on readmission
 - Minutes of meetings analyzing interview results
 - Report on readmission data
 - Report listing key contributing factors

- P-3. Milestone: Identify baseline high-risk patients analyzing Diagnoses, Diagnostic-related Groups (DRGs) and /or other data elements regarding 30-day readmissions for acute care and home care patients. (Examples of other data elements include but are not limited to age, social support, co-occurring behavioral health conditions, and housing status)
 - P-3.1. Description of analysis and findings
 - a. Provider's report of the analysis and findings
 - b. Data Source: DRG driven report

- P-4. Milestone: Hire clinician(s) with care transition/disease management expertise.
 - P-4.1. Number of clinicians hired with specified expertise

- a. Number of individuals hired and the description of functions and responsibilities
 - b. Data Source: Documentation of position of offer letters/ Human Resources records

- P-5. Milestone: Develop an assessment tool to identify patients who are at high risk for readmission.
 - P-5.1. Multidisciplinary committee approves assessment tool
 - a. Provider's submission of the assessment tool and its description
 - b. Data Source: Approved sample tool and meeting minutes

- P-6. Milestone: Identify evidence-based frameworks that support seamless care transitions and impact preventable 30-day readmissions.
 - P-6.1. Selection of an evidence based framework
 - a. Meeting minutes displaying the selection of evidence based framework

- P-7. Milestone: Develop operations manual for care transitions intervention with administrative protocols and clinical guidelines.
 - P-7.1. Development of operations manual
 - a. Written operations manual

- P-8. Milestone: Pilot test care management/ intervention approaches at selected provider sites (inpatient or outpatient). Metrics may include:
 - P-8.1. Implementation of evidence-based interventions on a pilot inpatient unit, including number of patients served by the pilot;
 - P-8.2. Implementation of pilot program involving inpatient and community behavioral health providers, including number of patients served by the pilot
 - a. Data Sources: Detailed implementation plan; program records

- P-9. Milestone: Analyze pilot test results
 - P-9.1. Analyze pilot report
 - a. Pilot findings
 - b. Data Source: Evidence of how pilot test results were used in rapid-cycle improvement to inform the scaled-up plans for a hospital care transition process or community-based program for high-risk patients

- P-11. Milestone: Evaluate and continuously improve care transitions programs
 - P-11.1. Project planning and implementation documentation demonstrates plan, do, study act quality improvement cycles
 - a. 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, monthly dashboards with data on readmissions, and feedback from patients to drive improvement)

- P-12. Milestone: Conduct study to determine feasibility of providing a wellness, self management and /or peer support program on hospital campus for patients with high risk diagnoses.
 - P-12.1. Hospital program plan

- a. Internal hospital records/documentation
- P-13. Milestone: Conduct baseline study and annual reassessments of high-risk patients readmitted to hospital < 30 days to determine interval between hospital discharge and visit to PCP/behavioral health provider.
- P-13.1. Study of high risk patients readmitted in less than 30 days to hospital in a given year
 - a. Internal hospital records/documentation
- P-14. Milestone: Collect baseline patient-centered measures for high-risk patients.
- P-14.1. Baseline report on number of high-risk patients
 - a. Internal hospital records/documentation
- P-15. Milestone: Educate appropriate clinical staff on key contributing factors to preventable readmissions.
- P-15.1. Number of key clinical staff completing educational sessions and the description of the training
 - a. Data Sources: Internal hospital records/documentation; Training curricula
- P-16. Milestone: Dedicate additional Advanced Practice RN resources to provide a bridge visit to high risk patients between hospital discharge and PCP visit.
- P-16.1. Advanced Practice RN position descriptions and work schedule
 - P-16.2. Number of patients seen by Advanced Practice RNs
 - a. Data Source: Documentation of patients served by Advanced Practice RN position and description of services delivered.
- P-17. Milestone: Re-engineer hospital discharge process for all admitted patients.
- P-17.1. Development of high-risk tool and discharge checklist
 - a. Data Source: Documentation of high risk tool and discharge check list including medication reconciliation
- P-18. Milestone: Develop reports and studies on lessons learned and share with health care community.
- P-18.1. Development of "Lessons Learned" report
 - a. Data Source: Internal hospital records/documentation
- P-19. Milestone: Implement enhanced assessment tool for inpatients with substance abuse and behavioral health issues.
- P-19.1. Multidisciplinary committee approves assessment tool
 - a. Data Source: Documentation of committee approval of tool
- P-20. Milestone: Identify community-based care transition partners.
- P-20.1. Number of care transition partners
 - P-20.2. Number of partner post-acute facilities
 - a. Data Source: Internal hospital records/documentation

- P-21. Milestone: Assess current knowledge / barriers to implementing evidence-based care transition tool or framework.
- P-21.1. Completion of survey or report
 - a. Data Source: Internal hospital records/documentation
- P-22. Milestone: Train hospital staff on standard use of evidence-based care transition tool or framework.
- P-22.1. Number of hospital staff trained
 - a. Data Source: Internal hospital records/documentationTraining curricula
- P-23. Milestone: Train post-acute partners on standard use of evidence-based care transition tool or framework.
- P-23.1. Number of post-acute staff trained
 - a. Data Source: Internal hospital records/documentation
- P-24. Milestone: Develop workflow protocol including use of evidence-based care transition tool or framework.
- P-24.1. Completion of written workflow protocol
 - a. Data Source: Internal hospital records/documentation
- P-25. Milestone: Implement workflow protocol including use of evidence-based care transition tool or framework.
- P-25.1. Dissemination of written workflow protocol to appropriate staff and demonstrate implementation into clinical practice
 - a. Data Source: Internal hospital records/documentation
- P-26. Milestone: Establish baseline measure for the percentage of “High Risk” patients with customized care plans before discharge.
- P-26.1. Baseline percentage of “High Risk” patients with customized care plans before discharge
 - a. Numerator: Number of high risk patients that receive personalized care planning prior to discharge
 - b. Denominator: Number of high risk patients discharged
 - c. Data Source: Report on “High Risk” patients with customized care plan before discharge
- P-27. Milestone: Creation of Patient Experience of Care Council, (including patient / caregiver representation) to provide advice to Regional Healthcare Partnership on factors influencing care transition and strategies for improving care transition.
- P-27.1. Council creation and meeting minutes detailing discussion of determinants of successful care transitions
 - a. Data Source: Internal hospital records/documentation
- P-28. Milestone: Gap analysis regarding patient communication with doctors, nurses, and/or discharge information.
- P-28.1. Analysis complete

- a. Data Source: Internal hospital records/documentation
- P-29. Milestone: Develop peer specialist positions that focus on providing emotional support and practical guidance regarding the discharge and recovery process. Techniques could include: teaching patients techniques, such as keeping wellness journals or recovery inventories; meeting with patients individually and in recovery support groups, conducting panel presentations to provide the patient perspective to physicians, nurses, medical and nursing students and other hospital staff; conducting evidence-based self help training sessions with patients. (Examples of EBPs include Wellness Recovery Action Planning (WRAP), Chronic Disease Self Management)
- P-29.1. Number of positions filled
 - a. Data Source: Internal personnel records
- P-30. 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-30.1. Metric: Number of bi-weekly meetings, conference calls, or webinars organized by the RHP.
 - 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-30.2. 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-31. 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-31.1. Metric: Description of the 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-32. 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-32.1. 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-32.2. 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-30. Milestone: Enrollment in Community Based Support Program
- I-30.1. Metric: Percentage of high-risk patients enrolled in community-based support programs.
- a. Numerator: number of high-risk patients in the RHP Project Sites who were enrolled in community support programs
 - b. Denominator: number of high-risk patients served by provider
Data Source: project documentation, EMR, participation logs
- I-31. Milestone: Warm Handoffs
- I-31.1. Metric: Percentage of warm handoffs (a clinician to clinician real time live communication) for adult inpatients being discharged to the community
- a. Numerator: Number of individuals in target population transitioned from adult inpatient units into community behavioral health programs via a warm handoff.
 - b. Denominator: Number of individuals in target population transitioned from adult inpatient units into community behavioral health programs
 - c. Data Source: Report on percentage of adult transfers to alternative care settings during which warm handoff occurred
- I-32. Milestone: Teach-back Methodology Education
- I-32.1. Metric: Percentage of selected hospital clinicians (e.g. RNs, hospitalists) educated on use of teach-back methodologies.
- a. Numerator: The number of selected hospital clinicians (e.g. RNs, hospitalists) who have been educated on use of teach-back methodologies
 - b. Denominator: The number of selected hospital clinicians (e.g. RNs, hospitalists) in the provider's facility
 - c. Data Source: Provider Survey; Project Data; Clinician Logs

- I-33. Milestone: Patient Teach-back
 - I-33.1. Metric: Percentage of patients educated using the teach-back methodology in project sites
 - a. Numerator: The number of patients in project sites educated using the teach-back methodology
 - b. Denominator: The number of patients in project sites Data Source: Project Data; Clinician Logs, EMR
- I-34. Milestone: Care Transition Tool Education
 - I-34.1. Metric: Percentage of selected hospital clinicians (e.g. RNs, hospitalists) educated on use of evidence based care transition tool or framework.
 - a. Numerator: The number of selected hospital clinicians (e.g. RNs, hospitalists) who have been educated on use of use of evidence based care transition tool or framework
 - b. Denominator: The number of selected hospital clinicians (e.g. RNs, hospitalists) in the project site(s)
 - c. Data Source: Provider Survey; Project Data; Clinician Logs
- I-35. Milestone: Education for use of Care Transition Tool by Post-Acute Partner Staff
 - I-35.1. Metric: Percentage of Post-Acute Partner Staff educated on use of evidence based care transition tool or framework.
 - a. Numerator: The number of Post-Acute Partner Staff who have been educated on use of use of evidence based care transition tool or framework
 - b. Denominator: The number of Post-Acute Partner Staff
 - c. Data Source: Provider Survey; Project Data; Clinician Logs
- I-38. Milestone: Customized Care Plans
 - I-38.1. Metric: Percentage of High Risk Patients who are discharged with customized care plans
 - a. Numerator: The number of high risk patients discharged from inpatient settings who are provided with customized care plans upon discharge
 - b. Denominator: The number of high risk patients discharged from inpatient settings within the project site(s)
 - c. Data Source: Medical Records; Project Data; Clinician Logs; Patient / Family Satisfaction Survey
- I-39. Milestone: Enhanced Screening and Assessment
 - I-39.1. Metric: Percentage of target inpatient population members screened and assessed for a substance abuse or mental health disorder
 - a. Numerator: The number of patients in the target population discharged from inpatient settings who were screened and assessed for a substance abuse or mental health disorder.
 - b. Denominator: The number of patients in the target population discharged from inpatient settings
 - c. Data Source: Medical Records; Project Data; Clinician Logs

- I-40. Milestone: Assessment and Follow-up
- I-40.1. Metric: Percentage of target inpatient population members who have been discharged and have received clinician follow-up calls to review treatment plans and assess compliance.
- a. Numerator: The number of patients in the target population discharged from inpatient settings who have received follow-up contact (two attempts) to review treatment plans and assess compliance.
 - b. Denominator: The number of patients in the target population discharged from inpatient settings
 - c. Data Source: Medical Records; Project Data; Clinician Logs
- I-41. Milestone: Timely Transmission of Transition Record (NQF# 0648)
- I-41.1. Metric: Percentage of discharged patients for whom a transition record was transmitted to the receiving community provider within 24 hours of discharge.
- a. Numerator: The number of discharged patients for whom a transition record was transmitted to the receiving community provider within 24 hours of discharge.
 - b. Denominator: The number of discharged patients.
 - c. Data Source: Medical Records; Project Data; Clinician Logs
- I-42. Milestone: Follow-up after Hospitalization
- I-42.1. Metric: Percentage of patients receiving Follow-Up After Hospitalization for Mental Illness within 7 and 30 days (NQF#-576)
- a. Numerator: Number of discharges for target population who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner within 7 and 30 days after discharge.
 - b. Denominator: Number of discharges for target population who were hospitalized for treatment of selected mental health disorders
 - c. Data Source: Project Data; Encounter/ Claims Data; Medical Records
- I-43. Milestone: Preventable All-Cause Admissions and Readmissions
- I-43.1. Metric: Percentage of preventable all-cause admissions and readmissions to psychiatric and other inpatient facilities for target population;
- a. Numerator: The number of individuals in the target population receiving improved care transition services that had a potentially preventable readmission within the measurement period. Denominator: The number of individuals in the RHP service area in the target population receiving improved care transition services
 - b. Data Source: Claims/ encounter and clinical record data; anchor hospital and other partner hospitals, local MH authority and state MH(CARE) data system records

- I-44. Milestone: Improved Care Transitions
- I-44.1. (QPI) Metric: Number of unique individuals receiving enhanced care transitions.
- a. Number of patients served by care transitions project
 - b. Data Source: project documentation, EMR, participation logs
 - c. Rationale/Evidence: Describes patient impact of care transitions project.
- I-44.2. Metric: Number of encounters provided using enhanced care transitions.
- a. Number of discharges (encounters) receiving improved care transitions through the project
 - b. Data Source: project documentation, EMR, participation logs
 - c. Rationale/Evidence: Describes patient impact of care transitions project.

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.

2.18 Recruit, train, and support consumers of mental health services to provide peer support services

Project Goal:

The goal of this project is to use consumers of mental health services who have made substantial progress in managing their own illness and recovering a successful life in the community to provide peer support services. These services are supportive and not necessarily clinical in nature. Building on a project originally established under the State's Mental Health Transformation grant, consumers are being trained to serve as peer support specialists. In addition to the basic peer specialist training and certification, an additional training is provided to certified peers specialists in "whole health". With the whole health training peer specialists learn to work with other consumers to set achievable goals to prevent or self-manage chronic diseases such as diabetes and COPD. While such training currently exists, very limited numbers of peers are trained due to resource limitations. Evidence exists that such an approach can work with particularly vulnerable populations with serious mental illness¹³⁰. The need for strategies to improve the health outcomes for people with behavioral health disorders is evidenced by their disparate life expectancy (dying 29 years younger than the general population¹³¹), increased risk of mortality and poor health outcomes as severity of behavioral health disorders increase¹³².

Project Options

2.18.1 Design, implement, and evaluate whole health peer support for individuals with mental health and /or substance use disorders.

Required core project components:

- a) Train administrators and key clinical staff in the use of peer specialists as an essential component of a comprehensive health system.
- b) Conduct readiness assessments of organization that will integrate peer specialists into their network.
- c) Identify peer specialists interested in this type of work.
- d) Train identified peer specialists in whole health interventions, including conducting health risk assessments, setting SMART goals, providing educational and supportive services to targeted individuals with specific disorders (e.g. hypertension, diabetes, or health risks (e.g. obesity, tobacco use, physical inactivity).
- e) Implement health risk assessments to identify existing and potential health risks for behavioral health consumers.
- f) Identify patients with serious mental illness who have health risk factors that can be modified.
- g) Implement whole health peer support.

130 Benjamin G. Druss, MD, MPH, Liping Zhao, MSPH, Silke A. von Esenwein, PhD, Joseph R. Bona, MD, MBA, Larry Fricks, Sherry Jenkins-Tucker, Evelina Sterling, MPH, CHES, Ralph DiClemente, PhD, and Kate Lorig, RN, DrPH, The Health and Recovery Peer (HARP) Program: A peer-led intervention to improve medical self-management for persons with serious mental illness, Schizophrenia Research, Volume 118, Issue 1, Pages 264-270, May 2010

131 Parks, J, Svendsen, D, et. al. "Morbidity and Mortality in People with Serious Mental Illness", National Association of State Mental Health Program Directors, 2006.

132 Druss BG, Reisinger Walker E., "Mental Disorders and Medical Co-Morbidity." Robert Wood Johnson Foundation, The Synthesis Project: Issue 21 (2011).

- h) Connect patients to primary care and preventive services.
- i) Track patient outcomes. Review the intervention(s) impact on participants 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.

Process Milestones:

- P-1. Milestone: Train administrators and key clinicians (e.g. PCP, BH clinicians) on:
 - Understanding what recovery/wellness is and that it is possible
 - Understanding the value of peer specialists and peer support workers
 - Understanding how to integrate and support peer workers in their organizations
 - P-1.1. Metric: Number of staff trained
 - P-1.2. Metric: Positive participant evaluations of training
 - a. Data Source: Training records and training evaluation records

- P-2. Milestone: Conduct an organizational readiness assessment to determine what changes must occur to successfully integrate peers into the traditional workforce.
 - P-2.1. Metric: Description of assessment findings
 - a. Data Source: Organization records of assessment scores

- P-3. Milestone: Identify and train peer specialists to conduct whole health classes.
 - P-3.1. Metric: Number of peers trained in whole health planning
 - a. Data Source: Training records

- P-4. Milestone: Select and implement a health risk assessment (HRA) tool.
 - P-4.1. Metric: Description of HRA selected, mechanism of deliver, number of HRAs completed by consumers, and relevant results.
 - a. Data Source: Internal data base

- P-5. Milestone: Identify health risks of consumers with serious mental illness.
 - P-5.1. Metric: Description of health risks, method of determining which patients have risks that are modifiable, and number of consumers identified with modifiable health risks.
 - a. Data Source: Internal data base

- P-6.

- P-7. Milestone: Evaluate and continuously improve peer support services
 - P-7.1. 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, monthly dashboards with data on readmissions, and feedback from consumers 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.
 - 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: Description of and 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-17. Milestone: Receipt of Recommended Preventative Services
- I-17.1. Metric: The percentage of individuals 18 years and older who receive peer support services and who also receive services as recommended by the US Preventative Services Task Force.
- a. Numerator: The number of people receiving services as recommended by the US Preventative Services Task Force
 - b. Denominator: Individuals aged 18 years and older who receive peer support services.
 - c. Data Source: Clinical Records
 - d. Rationale/Evidence: See project goal.
- I-18. Milestone: Health Outcomes
- I-18.1. Metric: Improvements in standardized health measures for consumers who participate in whole health peer support
- a. Numerator: The number of people who participate in whole health peer support and experience improvement in standardized health measures
 - b. Denominator: The number of people who participate in whole health peer support in the RHP Sites.
 - c. Data Source: Project Data; Medical Record Data; Participant Surveys;
- Note: RHP may select from health measures, including but not limited to: NQF# 0549-- Pharmacotherapy Management of COPD Exacerbation (PCE); NQF# 0047--Asthma: Pharmacologic Therapy for Persistent Asthma; NQF#0575-- Comprehensive Diabetes Care: HbA1c control (< 8.0%); and NQF# 0074 Chronic Stable Coronary Artery Disease: Lipid Control.*
- I-19. Milestone: Use of peer support services
- I-19.1. (QPI) Metric: The number of individuals who receive peer support services
- a. Data Source: Clinical Records
 - b. Rationale/Evidence: Describes patient impact of peer support project

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.

2.19 Develop Care Management Function that integrates primary and behavioral health needs of individuals

Project Goal:

Provide a targeted care management intervention program for the population of people with co-occurring mental health, substance use and chronic physical disorders to increase use of primary and specialty care and reducing the use of ER, crisis and jail diversion services. The prevalence of co-occurring mental health, substance use and chronic physical disorders is high in the indigent population. This is due to the lack of access to and the complexity of navigating primary care and specialty care services. These individuals end up consuming a great deal of community resources due to ER visits, involvement of crisis response systems and often unnecessary incarcerations when routine treatment would be a better alternative. Early engagement in appropriate services to address the multiple conditions for these individuals, as well as their needs for housing and social support, requires both behavioral health case managers and chronic disease care managers working closely to make service settings accessible and to track progress.

Project Options:

2.19.1 Design, implement, and evaluate care management programs and that integrate primary and behavioral health needs of individual patients

Required core project components:

- a) Conduct data matching to identify individuals with co-occurring disorders who are:
 - not receiving routine primary care,
 - not receiving specialty care according to professionally accepted practice guidelines,
 - over-utilizing ER services based on analysis of comparative data on other populations,
 - over-utilizing crisis response services.
 - Becoming involved with the criminal justice system due to uncontrolled/unmanaged symptoms.
- b) Review chronic care management best practices such as Wagner's Chronic Care Model and select practices compatible with organizational readiness for adoption and implementation.
- c) Identification of BH case managers and disease care managers to receive assignment of these individuals.
- d) Develop protocols for coordinating care; identify community resources and services available for supporting people with co-occurring disorders.
- e) Identify and implement specific disease management guidelines for high prevalence disorders, e.g. cardiovascular disease, diabetes, depression, asthma.
- f) Train staff in protocols and guidelines.
- g) Develop registries to track client outcomes.
- h) Review the intervention(s) impact on quality of care and integration of 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.

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Process Milestones:

- P-1.
- P-2. Milestone: Identify community agencies that have the relevant data to identify the service utilization patterns of persons with co-occurring disorders.
 - P-2.1. Metric: Description of relevant agencies and the data elements each has available.
 - a. Data Source: Records of lead organization
- P-3. Milestone: Data sharing agreements are in place to allow authorized use of information among relevant agencies.
 - P-3.1. Metric: Description of number of agencies participating and extent of data sharing.
 - a. Data Source: Agreements
- P-4. Milestone: Data matching is performed identifying service utilization patterns of people with co-occurring disorders and analysis conducted to identify over and under utilization patterns.
 - P-4.1. Metric: Data analysis report produced.
 - a. Data Source: Utilization report
- P-5. Milestone: BH case managers and disease care managers are identified.
 - P-5.1. Metric: Number of staff identified with the capacity to support the targeted population.
 - a. Data Source: Staff rosters and documents of caseloads.
- P-6. Milestone: Care coordination protocols are developed.
 - P-6.1. Metric: Description of protocols and dissemination plan.
 - a. Data Source: Written protocols
- P-7.
 - a. .
- P-8. Milestone: Staff members are trained in care coordination protocols and practice guidelines for disorders identified in the data matching.
 - P-8.1. Metric: Number of staff receiving training on care coordination protocols.
 - a. Data Source: Training materials and records of participation
- P-9. Milestone: Implement or expand registries to track client outcomes.
 - P-9.1. Metric: Description of registry use and clinical outcomes being tracked to include number of patients entered in the registry.
 - a. Data Source: Registry functionality report and summary of performance in clinical outcomes of interest as well as number of patients being managed through registry.
- P-10. Milestone: Assess chronic disease registry functionality in electronic health record (EHR) systems.

- P-10.1. Metric: Review and analyze functionality and interface capability for EHR systems used by hospitals and affiliated provider practices to determine if they have necessary elements for a chronic disease registry. Necessary elements may include inpatient admissions, emergency department visits, test results, medications, weight, activity level changes and/or diet changes
 - a. Data Source: EHR systems
- P-11. Milestone: Develop an interface plan between EHR systems used by hospital and affiliated physician office practices.
 - P-11.1. Metric: Production of interface model
 - a. Data Source: EHR systems
- P-12.
- P-13.
- P-14. Milestone: Evaluate workflow and use of chronic disease registry using Lean methodology.
 - P-14.1. Metric: Review current and future state of workflow using chronic disease registry and identification of barriers to implementation
 - a. Data Source: Review of Lean event
- P-15.
- P-16. Milestone: Develop an implementation plan for a chronic disease registry.
 - P-16.1. Metric: Development of implementation plan
 - a. Data Source: Documentation of plan
- P-17. Milestone: Pilot test the selected chronic disease registry.
 - P-17.1. Metric: Evaluate and identify gaps in information exchange in the registry within the hospital's identified staff and departments
 - a. Data Source: Implementation and testing plan
- P-18. Milestone: Identify target patient population with chronic disease to be managed by the registry.
 - P-18.1. Metric: Description of how target population was identified, pertinent data points and anticipated size of registry (number of patients)
 - a. Data Source: Registry needs assessment
- P-19. Milestone: Develop and implement test plan to determine accuracy of information populated into the registry.
 - P-19.1. Metric: Implement and document results of test plan
 - a. Data Source: Test plan and results of validity study
- P-20. Milestone: Educate and train staff on the chronic disease registry.
 - P-20.1. Metric: Number of staff trained in registry use and management and the description of the training
 - a. Data Source: Attendance list and training materials

Improvement Milestones:

- I-21. Milestone: Increase use of routine preventive and primary care for behavioral health patients.
- I-21.1. Metric: Percentage of patients receiving all recommended primary care visits.
- a. Numerator: Number of behavioral health patients that have documented receipt of all recommended routine primary care services
 - b. Denominator: Number of behavioral health patients served
 - c. Data Source: Encounter / claims data
- I-25. Milestone: Identify patients with chronic disease entered into registry who receive instructions appropriate for their chronic disease such as: activity level, diet, medication management, etc.
- I-25.1. Metric: Percentage of patients with chronic disease who receive appropriate disease specific instructions.
- a. Numerator: Number of patients receiving disease specific counseling that is documented in the registry
 - b. Denominator: Number of patients entered in the registry.
 - c. Data Source: Registry reports
- I-26. Milestone: Services provided by enhanced care management functions integrating primary and behavioral health services.
- I-26.1. (QPI) Metric: Number of unique individuals receiving care management
- a. Data source: EMR, Registry reports, project documentation
 - b. Rationale/Evidence: Describes patient impact of the integrated care management project.

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.

