

Project Option 2.2.1 Expand Chronic Care Management Models: C5 Redesign the Outpatient Delivery System of UT Physicians to Coordinate Care for Patients with Diabetes

Unique RHP Project Identification Number: 111810101.2.5

Performing Provider Name/TPI: UTHealth, UTPhysicians/111810101

Project Description: 2.2 Expand Chronic Care Management Models (Option 2.2.1)

Almost half of all Americans live with a chronic condition, and almost half of all people with chronic illness have multiple conditions. This also the situation in our region, as our community needs assessment shows that there are high rates of chronic diseases in our population, including diabetes. Because chronic care requires ongoing interaction between patients and the health system, there often arises challenges in care coordination. The evidence-based Chronic Care Model (Coleman et al. Evidence On The Chronic Care Model In The NewMillennium Health Affairs 28, no. 1 (2009): 75–85; 10.1377/hlthaff.28.1.75), summarizes the basic elements for improving care of chronic disease patients, and there is need to apply such a model, if care outcomes are to be improved for diabetic patients.

The outpatient delivery system of UT Physicians will be redesigned to coordinate care for patients with diabetes based on Wagner's chronic care model and the American Diabetes Association (ADA) Standards of Medical Care in Diabetes. This will entail the following: Scheduling of next appointment before patient leaves office, Use of appointment reminders to contact patients to confirm appointments, Follow up of patients who missed appointments – calls, etc, Encouraging patients to bring in all medications from all physicians and other sources when coming in for appointment, Use of complimentary skills and knowledge of nurses, physician assistants, pharmacists, registered dietitians, optometrists, dentists, community health workers, and podiatrists, Ensuring patients can access their care teams by phone or email as well as access their medical information through an electronic patient portal, Referral of selected patients for more intensive counseling

Also, regular diabetes self-management education (DSME) and support sessions will be provided free of charge to patients at these clinics by certified dietitians. These will entail the following: Holding exit interviews to clarify regimen, Assessing patient's understanding and acceptance of the diagnosis of diabetes, Discuss patient's concerns and clarify misunderstandings, Telling the patient the glucose reading and providing a written copy, Coming to agreement with the patient on goal blood glucose level, Informing patient about recommended treatment and provide specific written information about the role of lifestyle including diet, physical activity, dietary supplements, and alcohol intake (using standard brochures when available), Eliciting concerns and questions and providing opportunities for the patient to state specific behaviors to carry out treatment recommendations, Emphasize (Need to continue treatment, Control does not mean cure, One cannot tell if Blood glucose is elevated by feeling or symptoms; it must be Measured), Encouraging self-monitoring with reliable glucometers, Self-management behavior change is the key outcome of DSME and should be measured and monitored as part of care, and DSME should address psychosocial issues, since emotional well-being is strongly associated with positive diabetes outcomes.

Finally, quality improvement processes will be put in place to assess project impacts and opportunities for continuous improvement.

Goal and Relationship to Regional Goals:

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.

The implementation of chronic care management models for diabetic patients will ensure better outcomes for these patients, in line with regional goal to "transform health care delivery from a disease-focused model of episodic care to a patient-centered, coordinated delivery model that improves patient satisfaction and health outcomes, reduces unnecessary or duplicative services, and builds on the accomplishments of our existing health care system."

Challenges:

Need: 1) High rates of chronic disease and inadequate access to treatment programs and services for illnesses associated with chronic disease. 2) Lack of access to programs providing health promotion education, training and support, including screenings, nutrition counseling, patient education programs

Implementation: 1) Willingness of physicians to transit to a 'team-based' model of care that gives greater roles to other providers. 2) Low health literacy levels and low economic resources can influence patients' ability to be effective partners in their own care. With training on the chronic care model and its application to chronic care, physicians and other providers will be better motivated to work as a team to deliver proactive care that keeps chronic disease patients stable and without a need for urgent care. The care team will also be made up of support personnel that will provide education and other support services that will help to assist patients in overcoming barriers to their participation in self-care.

5-Year Expected Outcome for Provider and Patients:

Successful implementation of the chronic care model in diabetes care will lead to better monitoring by the patient's care team and increased patient engagement in self-care, as evidenced by an increased percentage of patients with diabetes that have a blood pressure readings <140/80 mm Hg.

Starting Point/Baseline:

To be determined during DY3.

Rationale:

Hispanics have a 66% higher risk of being diagnosed with diabetes than non-Hispanic whites and non-Hispanic blacks have a 77% higher risk. (2011 National Diabetes Fact Sheet, National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation, Centers for Disease Control and Prevention. <http://www.cdc.gov/diabetes/pubs/estimates11.htm#8> Last reviewed and updated May 23, 2011. Accessed 10-11-12.). About 40% of Harris County residents are of Hispanic origin (U.S. Census Bureau, 2010 Census Summary File 1), compared to 16.3% of the US population. Uncontrolled diabetes can result in complications with dire consequences for the patient. For example, the risk of stroke is 2 - 4 times higher among people with diabetes; diabetes is the leading cause of new onset blindness among adults aged 20 - 74 years in the US; nearly half of all cases of kidney failure can be attributed to diabetes; and more than half of all cases of nontraumatic lower limb amputations are because of poorly controlled diabetes. Diabetes also predisposes patients to dental diseases, pregnancy complications, among other problems. Overall, the risk for death among people with diabetes is about twice that of people of similar age but without diabetes. Studies in the United States have shown that improved glycemic control benefits people with either type 1 or type 2 diabetes. In general, every percentage point drop in A1c blood test results (e.g., from 8.0% to 7.0%) can reduce the risk of microvascular complications (eye, kidney, and nerve diseases) by 40%. After adjusting for population age

and sex differences, average medical expenditures among people with diagnosed diabetes were 2.3 times higher than what expenditures would be in the absence of diabetes. Hence achieving good glycemic control among our diabetic patients will save the health system a lot of resources.

Project Components:

Through the Redesign the Outpatient Delivery System of UT Physicians to Coordinate Care for Patients with Diabetes Program, we propose to meet all required project components listed below.

- 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.

For the Redesign the Outpatient Delivery System of UT Physicians to Coordinate Care for Patients with Diabetes Program, we have chosen the below milestones and metrics based upon the above project components and relationship to project goals and population needs. All baselines and goals will be determined during DY2.

Process Milestones and Metrics:

Milestone 1 [P-3.]: Develop a comprehensive care management program for diabetes mellitus

Metric 1 [P-3.1.]: Documentation of Care management program. The Wagner Chronic Care Model will be utilized in program development.

Milestone 2 [P-2.]: Train staff in the Chronic Care Model, including the essential components of a delivery system that supports high-quality clinical and chronic disease (diabetes mellitus) care

Metric 1 [P-2.1.]: Increase percent of staff trained

Milestone 3 [P-4.]: Formalize multi-disciplinary teams, pursuant to the chronic care model defined by the Wagner Chronic Care Model or similar

Metric 1 [P-4.1.]: 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

Improvement Milestones and Metrics:

Milestone 4 [I-17.]: Apply the Chronic Care Model to targeted chronic disease (diabetes mellitus), which is prevalent locally

Metric 1 [I-17.1.]: X additional patients receive care under the Chronic Care Model for diabetes mellitus

Milestone 5 [I-18.]: Improve the percentage of patients with diabetes mellitus that have self-management goals

Metric 1 [I-18.1.]: Patients with diabetes mellitus with self-management goals

Unique community need identification numbers the project addresses:

This project addresses community needs CN.11 (High rates of chronic disease and inadequate access to treatment programs and services for illnesses associated with chronic disease) and CN.20 (Lack of access to programs providing health promotion education, training and support, including screenings, nutrition counseling, patient education programs).

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

This project represents a new initiative. UT Physicians proposes to provide chronic care management to its patients with diabetes, based upon Wagner's Chronic Care Model, which is a comprehensive, proactive, patient-centered model of care, that is tailored specifically to this disease and the patient's needs for managing it.

Related Category 3 Outcome Measure(s):

OD-1 Primary Care and Chronic Disease Management

IT-1.11 Diabetes care: BP control (<140/80mm Hg) – NQF 0061 (Standalone measure)

Improve the number of patients with Diabetes whose blood pressure is less than <140/80mm Hg (NQF 0061) (Patients of UT Physicians, who are not of reproductive age)

Relationship to other Projects:

- 1.1 (C3) - Expanded capacity in primary care will ensure the availability of staff to implement the expansion of the chronic care management model for patients with diabetes mellitus.
- 1.2 (A2, SPH1) - Part of the innovative training of primary care providers will be centered on the chronic care model with emphasis on team-based practice.
- 1.3 (C12) - The disease management registry (Information Technology support) is a very important component of Wagner's Chronic Care Model.
- 1.7 (A1) - Telemedicine will help to ensure that chronic care patients will get specialist input into their care when and where needed.
- 1.9 (C4) - Also, the expansion of specialty care in the primary care setting will help to ensure that chronic care patients will get specialist input into their care when and where needed.
- 1.10 (MS1) - The QI project will aid in the adoption of a 'whole systems' approach to chronic management, enabling the implementation of a comprehensive and proactive approach to chronic care in which the patient is kept in continuous contact with the care team.
- 2.1 (C1) - The expansion of chronic care management models will ensure more effective care for patients enrolled in UT Medical Homes.

Relationship to Other Performing Providers' Projects in the RHP:

To be described by RHP Anchor.

Plan for Learning Collaborative:

UTHealth will participate in a region-wide learning collaborative(s) as offered by the Anchor entity for Region 3, Harris Health System. Our participation in this collaborative with other Performing Providers within the region that have similar projects will facilitate sharing of challenges and testing of new ideas and solutions to promote continuous improvement in our Region's healthcare system.

Project Valuation:

The anchor, Harris Health, provided a spreadsheet which contained 6 criteria, which could be rated on a 10-point scale each project. The ratings for each criteria were weighted, summed for each project to arrive at a total score (value weight) for each project. The sum of all the project's total scores were then divided by the percent of total DSRIP funds available for that year to arrive at a dollar value multiplier to be applied towards each project's total score (value weight), thereby allocating a greater proportion of available funds towards those projects valued highest based upon the 6 criteria. UTHealth used this approach, with a couple of exceptions. First, we did not use two of the criteria and second, we began with a 5-point scale for each criteria rated, then doubled the score to put it on a 10-point scale. Following are the criteria, the way points were awarded for projects using that criteria, and the reasons two of the criteria were not used:

1. Transformational Impact (Weight = 20%): Points were awarded for projects that meet the community benefit criteria. Score – 1 point for each of the following: improves access; improves quality; improves costs (long-term cost-savings); transformative (Innovative), collaborative (partners with other organization(s)).

This project's score for this criteria: $3 \times 2 = 6$

2. Population Served/Project Size (Weight = 20%): Points were awarded based on the size of the population affected and whether the target population is uninsured or on Medicaid. Score - Four points for the whole population, 3 points for a relatively large population, 2 points for a moderate-sized population, and 1 point for a relatively small population. If a significant proportion of the target population is uninsured/Medicaid, add 1 additional point.

This project's score for this criteria: $1 \times 2 = 2$

3. Aligned with Community Needs (Weight = 20%): Points were awarded based on judgments in two categories: whether or not the CNA indicates a need in the area of the project and the severity of the health/healthcare need(s) the project addresses. Score A - CNA indication: 2 points for strong support (bottom 25%), 1 point for moderate support. Score B - Severity: 3 points for issues judged to have significant impact on population health, healthcare access, and quality; 2 points for moderate severity issues.

This project's score for this criteria: $2 \times 2 = 4$

4. Cost Avoidance (Weight = 15%): Points were awarded based on judgment of project's cost effectiveness relative to similar projects. Score – 5 points for very low cost per person, 4 points for low cost per person, 3 points for moderate cost per person, 2 points for high cost per person, 1 point for very high cost per person.

This project's score for this criteria: $3 \times 2 = 6$

5. Partnership/Collaboration (Weight = 10%): ***This was not rated***, because UTHealth plans to partner with Harris Health to perform many similar projects, so the rating would have been the same for all projects. This would have diluted the scores, hiding the more significant variations in other value criteria.

6. Sustainability (Weight = 15%): ***This was also not rated***, because UTHealth does not consider any of the projects to be unsustainable, or at the very least do not consider one project less sustainable than another, so giving the projects the same, or very similar ratings on this criteria would have again had a diluting effect, hiding the more significant variations in other value criteria.

Total Valuation Score for this project: **3.3**

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111810101.2.5	OPTION 2.2.1		C5 REDESIGN THE OUTPATIENT DELIVERY SYSTEM OF UT PHYSICIANS TO COORDINATE CARE FOR PATIENTS WITH DIABETES	
UTHealth, UTPhysicians			111810101	
Related Category 3 Outcome Measure(s):	111810101.3.16	IT-1.11	Diabetes care: BP control (<140/80mm Hg) – NQF 0061 (Standalone measure)	
Year 2 (10/1/2012 – 9/30/2013)	Year 3 (10/1/2013 – 9/30/2014)	Year 4 (10/1/2014 – 9/30/2015)	Year 5 (10/1/2015 – 9/30/2016)	
Milestone 1 [P-3.]: Develop a comprehensive care management program for diabetes Metric 1 [P-3.1.]: Documentation of Care management program. The Wagner Chronic Care Model will be utilized in program development. Baseline/Goal: TBD Data Source: Program materials Milestone 1 Estimated incentive payment: \$ 1,544,349	Milestone 2 [P-2.]: Train staff in the Chronic Care Model, including the essential components of a delivery system that supports high-quality clinical and chronic disease (diabetes mellitus) care Metric 1 [P-2.1.]: Increase percent of staff trained Baseline/Goal: TBD Data Source: HR, training program materials Milestone 2 Estimated incentive payment: \$ 853,433 Milestone 3 [P-4.]: Formalize multi-disciplinary teams, pursuant to the chronic care model defined by the Wagner Chronic Care Model or similar Metric 1 [P-4.1.]: Increase the number of multi-disciplinary teams (e.g., teams may include physicians, mid-level practitioners, dieticians, licensed clinical social workers,	Milestone 4 [I-17.]: Apply the Chronic Care Model to targeted chronic disease (diabetes mellitus), which is prevalent locally Metric 1 [I-17.1.]: X additional patients receive care under the Chronic Care Model for diabetes mellitus Goal: TBD Data Source: Registry Milestone 4 Estimated incentive payment: \$ 1,825,951	Milestone 5 [I-18.]: Improve the percentage of patients with diabetes mellitus that have self-management goals Metric 1 [I-18.1.]: Patients with diabetes mellitus with self-management goals Goal: TBD Data Source: Registry Milestone 4 Estimated incentive payment: \$ 1,764,204	

111810101.2.5	OPTION 2.2.1		C5 REDESIGN THE OUTPATIENT DELIVERY SYSTEM OF UT PHYSICIANS TO COORDINATE CARE FOR PATIENTS WITH DIABETES	
UTHealth, UTPhysicians			111810101	
Related Category 3 Outcome Measure(s):	111810101.3.16	IT-1.11	Diabetes care: BP control (<140/80mm Hg) – NQF 0061 (Standalone measure)	
Year 2 (10/1/2012 – 9/30/2013)	Year 3 (10/1/2013 – 9/30/2014)	Year 4 (10/1/2014 – 9/30/2015)	Year 5 (10/1/2015 – 9/30/2016)	
	psychiatrists, and other providers) or number of clinic sites with formalized te Baseline/Goal: TBD Data Source: TBD by UT Physicians Milestone 3 Estimated incentive payment: \$ 853,434			
Year 2 Estimated Milestone Bundle Amount: \$1,554,349	Year 3 Estimated Milestone Bundle Amount: \$1,706,867	Year 4 Estimated Milestone Bundle Amount: \$1,825,951	Year 5 Estimated Milestone Bundle Amount: \$1,764,204	
TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD: \$6,851,371				

Title of Outcome Measure (Improvement Target): OD-1 Primary Care and Chronic Disease Management

Unique RHP outcome identification number(s): 111810101.3.16

Outcome Measure Description:

IT-1.11 Diabetes care: BP control (<140/80mm Hg) – NQF 0061 (Standalone measure)

Improve the number of patients with Diabetes whose blood pressure is less than <140/80mm Hg (NQF 0061) (Patients of UT Physicians, who are not of reproductive age)

Process Milestones:

DY2:

P-1 Project planning - engage stakeholders, identify current capacity and needed resources, determine timelines and document implementation plans

DY3:

P-3 Develop and test data systems

P-2 Establish baseline rates

Outcome Improvement Targets for each year:

DY4:

IT-1.11 Improve by 3% the percentage of patients with Diabetes whose blood pressure is less than <140/80mm Hg (NQF 0061) by 3%

DY5:

IT-1.11 Improve by 5% the percentage of patients with Diabetes whose blood pressure is less than <140/80mm Hg (NQF 0061) by 5%

Rationale:

Diabetes is one of the most costly and highly prevalent chronic diseases in the United States. Approximately 20.8 million Americans have diabetes, and half these cases are undiagnosed. Complications from the disease cost the country nearly \$100 billion annually. In addition, diabetes accounts for nearly 20 percent of all deaths in people over 25 years of age. Many complications, such as amputation, blindness, and kidney failure, can be prevented if detected and addressed in the early stages. Although many people live with diabetes years after diagnosis, it is a costly condition that leads to serious and potentially fatal health complications. Diabetes control can improve the quality of life for millions of Americans and save billions of health care dollars.

Outcome Measure Valuation:

Using the same project valuation scores assigned to the projects, the dollars allotted for each year were distributed across the projects' related Category 3 measures. For demonstration year 2 the amount was 5%, and for DYs 3, 4, and 5, the proportion of the funds allotted were 10%, 10%, and 20%, respectively.

111810101.3.16	3.IT-1.11	Diabetes care: BP control (<140/80mm Hg) – NQF 0061 (Standalone measure)	
UTHealth, UTPhysicians			111810101
Related Category 1 or 2 Projects:	111810101.2.5		
Starting Point/Baseline:	To be determined during DY3.		
Year 2 (10/1/2012 – 9/30/2013)	Year 3 (10/1/2013 – 9/30/2014)	Year 4 (10/1/2014 – 9/30/2015)	Year 5 (10/1/2015 – 9/30/2016)
Process Milestone 1 [P-1]: Project planning - engage stakeholders, identify current capacity and needed resources, determine timelines and document implementation plans Data Source: Project reports and documents Process Milestone 1 Estimated Incentive Payment: \$ 81,808	Process Milestone 2 [P-2]: Establish baseline rates Data Source: Provider reports Process Milestone 2 Estimated Incentive Payment: \$ 94,826 Process Milestone 3 [P-3]: Develop and test data systems Data Source: Project reports, EMR, claims Process Milestone 3 Estimated Incentive Payment: \$ 94,826	Outcome Improvement Target 1 [IT-1.11]: Improve by 3% the percentage of patients with Diabetes whose blood pressure is less than <140/80mm Hg (NQF 0061) by 3% Data Source: EHR, Registry, Claims, Administrative clinical data. Outcome Improvement Target 1 Estimated Incentive Payment: \$ 202,883	Outcome Improvement Target 2 [IT-1.11]: Improve by 5% the percentage of patients with Diabetes whose blood pressure is less than <140/80mm Hg (NQF 0061) by 5% Data Source: EHR, Registry, Claims, Administrative clinical data. Outcome Improvement Target 2 Estimated Incentive Payment: \$ 441,051
Year 2 Estimated Outcome Amount: \$ 81,808	Year 3 Estimated Outcome Amount: \$ 189,652	Year 4 Estimated Outcome Amount: \$ 202,883	Year 5 Estimated Outcome Amount: \$ 441,051
TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD: \$ 915,394			

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