Project Option 1.7.1 Introduce, Expand, or Enhance Telemedicine/Telehealth: A1 UT Health Telemedicine

Unique RHP Project Identification Number: 111810101.1.6
Performing Provider Name/TPI: UTHealth, UTPhysicians/111810101

Project Description: 1.7 Introduce, Expand, or Enhance Telemedicine/Telehealth (Option 1.7.1)

A telemedicine program will be established that provides access to the UT Health Regional Multispecialty Physician Group. Due to the high demand for services from specialists at clinics in the area, patients wait a long time (as much as 4-6 months) to receive consultation, and it is inconvenient and expensive to travel to specialty clinics. We propose to develop a rapid e-mail and/or internet based/technologically driven consultation process to manage complicated diabetes and other patients who would otherwise require a referral and visit to specialists. We will recruit dedicated specialists, physician assistants and nurse practitioners to manage the process. A dedicated website will be set up for formal consultations. After completion of a patient-specific survey, the E-consult team will provide specific management recommendations to the primary care physician within 72 hours. The E-consult team will also maintain a database of all consults and track outcomes through e-mail communications with PCP's. 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 reduce disparities in access, outcome, cost and satisfaction that are created by geographic barriers by means of electronic health care services
One of the goals of the region is to "Increase access to primary and specialty care services, with a focus on underserved populations, to ensure patients receive the most appropriate care for their condition, regardless of where they live or their ability to pay." The telemedicine project will help the attainment of this goal by making it possible for the pool of specialists at UT Health to become reachable to diverse groups of patients even in remote parts of the region.

Challenges:
Need: 1) Shortage of primary and specialty care physicians. 2) Inadequate transportation options for individuals in distant locations and for indigent/low income populations. 3) Inadequate access to specialty care.
Implementation: 1) Technological challenges. 2) Reimbursement issues. Telemedicine is in an innovative way to address the inadequate supply and distribution of physicians in the region, especially with regards to remote populations. It will also minimize challenges posed by transportation barriers. The DSRIP funds will make it possible to offset the costs of this project to the benefit of the target population.

5-Year Expected Outcome for Provider and Patients:
Telemedicine will have become part of the health system, scaling-up the delivery of specialty health services to underserved areas, and resulting in increased access to specialty care in our region. We expect that this increased access will result in improved patient satisfaction.

Starting Point/Baseline:

To be determined during DY3.

Rationale:

One of the greatest challenges facing the U.S. healthcare system is to provide quality care to the large segment of the population, which does not have access to specialty physicians because of factors such as geographic limitations or socioeconomic conditions. The use of technology to deliver health care from a distance, has been demonstrated as an effective way of overcoming certain barriers to care. For instance, telemedicine can ease the gaps in providing crucial care for those who are underserved, principally because of a shortage of sub-specialty providers. Our region has problems of access to both primary an specialty care as reflected in the regional community needs assessment.

The development and installation of high-speed wireless telecommunications networks coupled with large-scale search engines and mobile devices will change healthcare delivery as well as the scope of healthcare services. It will allow for real-time monitoring and interactions with patients without bringing them into a hospital or a specialty care center. This real/near-time monitoring and interacting could enable a healthcare team to address patient problems before they require major interventions, creating a potentially patient-centered approach that could undoubtedly translate to magnificient improvement in outcomes.

Project Components:

Through the UTHealth Telemedicine Program, we propose to meet all required project components listed below.

e) Provide patient consultations by medical and surgical specialists as well as other types of health professional using telecommunications

f) Conduct quality improvement for project using methods such as rapid cycle improvement.

For the UTHealth Telemedicine 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-1.]: Conduct needs assessment to identify needed specialties that can be provided via telemedicine

Metric 1 [P-1.1.]: Needs assessment to identify the types of personnel needed to implement the program and hiring of the respective personnel.

Milestone 2 [P-3.]: Implement or expand telemedicine program for selected medical specialties, based upon regional and community need.

Metric 1 [P-3.1.]: Documentation of program materials including implementation plan, vendor agreements/ contracts, staff training and HR documents.

Milestone 3 [P-3.]: Implement or expand telemedicine program for selected medical specialties, based upon regional and community need.

Metric 1 [P-3.2]: Documentation of the number of consults delivered by each specialty

Improvement Milestones and Metrics:

Milestone 4 [I-12.]: Increase number of telemedicine visits for each specialty identified as high need

Metric 1 [I-12.1]: Number of telemedicine visits

Milestone 5 [I-12.]: Increase number of telemedicine visits for each specialty identified as high need

Metric 1 [I-12.2.]: RHPs and providers should provide analysis demonstrating how the telemedicine services provided align with their needs assessment.

Unique community need identification numbers the project addresses:

This project addresses community needs CN.2 (Inadequate access to specialty care), CN.16 (Shortage of primary and specialty care physicians) and CN.21 (Inadequate transportation options for individuals in rural areas and for indigent/low income populations).

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

This project is an expansion of a service that is currently only offered sparingly. We propose to expand our telemedicine program to provide primary care physicians and their patients, who are in more distant locations access to specialty consultations.

Related Category 3 Outcome Measure(s):

OD-6 Patient Satisfaction
IT-6.1 (3) Percent improvement over baseline of patient satisfaction scores: (3) patient's rating of doctor access to specialist; (Stand-alone measure)
Percent improvement over baseline of patient satisfaction scores for one or more of the patient satisfaction domains that the provider targets for improvement in a specific tool. Certain supplemental modules for the adult CG-CAHPS survey may be used to establish if patients: (3) patient's rating of doctor access to specialist; (patients of other primary care practices that accessed the specialty care services via Telemedicine program)

Relationship to other Projects:

1.1 (C3) - The expansion of primary care capacity and access to health care services will also result in an increased demand for specialty care. Specialty care consults provide via telemedicine will be an important resource in the primary care setting.
1.2 (A2, SPH1) - Enhanced training will include education on telemedicine as a cost-effective alternative to the more traditional face-to-face way of providing medical care.
1.6 (C11) - For patients in distant locations, the nurse triage line will be able to arrange consults via telemedicine were appropriate.
2.1 (C1-2) - Via telemedicine, the UT Health Multispecialty Physician Group will serve as a Virtual Acountable Care Organization (ACO) that will provide an extensive network of specialty support centers for primary care providers, built on the concept of "advanced medical home".
2.2 (CL3, C5 - C9) - Telemedicine will ensure that chronic care patients will get specialist input into their care when needed, without the current delays being experienced.
2.11 (C10) - The medication management project will ensure that patient medications are managed in a coordinated manner even with inputs and prescriptions from specialists at different sites.
2.12 (A3, CL1, CL2, MS4) - Telemedicine will provide a valuable resource during the care transition processes, further ensuring that patients get the right care at the right time.

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)).

<div align="center">This project's score for this criteria: 2 X 2 = 4</div>

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.

<div align="center">This project's score for this criteria: 1 X 2 = 2</div>

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.

<div align="center">This project's score for this criteria: 3 X 2 = 6</div>

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.

<div align="center">This project's score for this criteria: 2 X 2 = 4</div>

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**

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UTHealth, UTPhysicians				111810101
Related Category 3 Outcome Measure(s):	111810101.3.8	IT-6.1 (3)	Percent improvement over baseline of patient satisfaction scores: (3) patient's rating of doctor access to specialist; (Stand-alone 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-1.]: Conduct needs assessment to identify needed specialties that can be provided via telemedicine Metric 1 [P-1.1.]: Needs assessment to identify the types of personnel needed to implement the program and hiring of the respective personnel. Baseline/Goal: TBD Data Source: Needs assessment Milestone 1 Estimated incentive payment: $ 1,413,045	Milestone 2 [P-3.]: Implement or expand telemedicine program for selected medical specialties, based upon regional and community need. Metric 1 [P-3.1.]: Documentation of program materials including implementation plan, vendor agreements/ contracts, staff training and HR documents. Baseline/Goal: TBD Milestone 2 Estimated incentive payment: $ 775,849 Milestone 3 [P-3.]: Implement or expand telemedicine program for selected medical specialties, based upon regional and community need. Metric 1 [P-3.2]: Documentation of the number of consults delivered by each specialty Baseline/Goal: TBD Data Source: Program records		Milestone 4 [I-12.]: Increase number of telemedicine visits for each specialty identified as high need Metric 1 [I-12.1]: Number of telemedicine visits Goal: TBD Data Source: EMR or electronic referral processing system; encounter records from telemedicine program Milestone 4 Estimated incentive payment: $ 1,659,955	Milestone 5 [I-12.]: Increase number of telemedicine visits for each specialty identified as high need Metric 1 [I-12.2.]: RHPs and providers should provide analysis demonstrating how the telemedicine services provided align with their needs assessment. Goal: TBD Data source: Needs Assessment prioritized, telemedicine records Milestone 5 Estimated incentive payment: $ 1,603,821

111810101.1.6	OPTION 1.7.1		A1 UT HEALTH TELEMEDICINE	
UTHealth, UTPhysicians				111810101
Related Category 3 Outcome Measure(s):	111810101.3.8	IT-6.1 (3)	Percent improvement over baseline of patient satisfaction scores: (3) patient's rating of doctor access to specialist; (Stand-alone 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 3 Estimated incentive payment: $ 775,848			
Year 2 Estimated Milestone Bundle Amount: $1,413,045	Year 3 Estimated Milestone Bundle Amount: $1,551,697		Year 4 Estimated Milestone Bundle Amount: $1,659,955	Year 5 Estimated Milestone Bundle Amount: $1,603,821
TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD: $6,228,518				

Title of Outcome Measure (Improvement Target): OD-6 Patient Satisfaction

Unique RHP outcome identification number(s): 111810101.3.8

Outcome Measure Description:

IT-6.1 (3) Percent improvement over baseline of patient satisfaction scores: (3) patient's rating of doctor access to specialist; (Stand-alone measure)
Percent improvement over baseline of patient satisfaction scores for one or more of the patient satisfaction domains that the provider targets for improvement in a specific tool. Certain supplemental modules for the adult CG-CAHPS survey may be used to establish if patients: (3) patient's rating of doctor access to specialist; (patients of other primary care practices that accessed the specialty care services via Telemedicine program)

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-6.1 (3) Increase by 3% the improvement over baseline (for patients of non-UT Physician primary care practices that accessed the specialty care services via Telemedicine program) of patient satisfaction scores for patient's rating of doctor access to specialist using the adult CG-CAHPS survey module.
DY5:
IT-6.1 (3) Increase by 5% the improvement over baseline (for patients of non-UT Physician primary care practices that accessed the specialty care services via Telemedicine program) of patient satisfaction scores for patient's rating of doctor access to specialist using the adult CG-CAHPS survey module.

Rationale:

Telemedicine offers an innovative solution to the problem of poor access to specialist care. The telemedicine project will thus make it easier for patients and their primary care providers to get specialist consults in a timely manner and more convenient manner. Therefore, it is expected that patients' assessments of doctor access to specialists on the CG-CAHPS survey will be a good measure of this new telemedicine program.

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.

111810101.3.8	3.IT-6.1 (3)	Percent improvement over baseline of patient satisfaction scores: (3) patient's rating of doctor access to specialist; (Stand-alone measure)	
UTHealth, UTPhysicians			111810101
Related Category 1 or 2 Projects:	111810101.1.6		
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: $ 74,371
	Process Milestone 2 [P-2]: Establish baseline rates
	    Data Source: Provider reports
	
	Process Milestone 2 Estimated Incentive Payment: $ 86,205
	
	Process Milestone 3 [P-3]: Develop and test data systems
	    Data Source: Project reports, EMR, claims
	
	Process Milestone 3 Estimated Incentive Payment: $ 86,206
		Outcome Improvement Target 1 [IT-6.1 (3)]: Increase by 3% the improvement over baseline (for patients of non-UT Physician primary care practices that accessed the specialty care services via Telemedicine program) of patient satisfaction scores for patient's rating of doctor access to specialist using the adult CG-CAHPS survey module.
		    Data Source: Surveys
		
		Outcome Improvement Target 1 Estimated Incentive Payment: $ 184,439
			Outcome Improvement Target 2 [IT-6.1 (3)]: Increase by 5% the improvement over baseline (for patients of non-UT Physician primary care practices that accessed the specialty care services via Telemedicine program) of patient satisfaction scores for patient's rating of doctor access to specialist using the adult CG-CAHPS survey module.
			    Data Source: Surveys
			
			Outcome Improvement Target 2 Estimated Incentive Payment: $ 400,955

Year 2 Estimated Outcome Amount: $ 74,371	Year 3 Estimated Outcome Amount: $ 172,411	Year 4 Estimated Outcome Amount: $ 184,439	Year 5 Estimated Outcome Amount: $ 400,955
TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD: $ 832,176			