Project Option 1.6.2 - C11 UT Health Nurse-line Medical Triage Call Center - Enhance Urgent Medical Advice

Unique RHP Project Identification Number: 111810101.1.5

Performing Provider Name/TPI: UTHealth, UTPhysicians / 111810101

Project Description:
UT Physicians will expand access to medical advice and direction to the appropriate level of care to reduce Emergency Department use for non-emergent conditions and increase patient access to health care by implementing a nurse-line medical triage call center that will be staffed 24/7/365.

Nurses receiving the calls will have access to the UT Physicians Schedule Now system to find an appropriate physician to see the patient in a primary care setting for non-emergent conditions. The UT Physicians practice includes 1,400 physicians located in the Texas Medical Center and in 4 out-lying clinics, which provides patients with greater access to care. Furthermore, for patients needing urgent medical guidance who are already patients of UT Physicians, the nurses will have access to their EMR through Allscripts. Also, UT Health will be participating in the local public hospital HIE with Memorial Hermann to provide patients with the ability to participate in an HIE for enhanced patient care and provider communication as well as enhanced PI and QI initiatives. This will further enhance the triage nurse's ability to access pertinent information when advising callers. Finally, quality improvement processes will be put in place for continual improvement.

Goal and Relationship to Regional Goals:
To provide urgent medical advice so that patients who need it can access it telephonically, and an appropriate appointment can be scheduled so that access to urgent medical care is increased and avoidable utilization of urgent care and the ED can be reduced.

This project relates to the regional goal that aims to "develop a regional approach to health care delivery that leverages and improves on existing programs and infrastructure, is responsive to patient needs throughout the entire region, and improves health care outcomes and patient satisfaction", since it is going to expand the existing nurse line to better meet the needs of patients.

Challenges:
Need: 1) High rates of inappropriate emergency department utilization. 2) High rates of preventable hospital admissions.
Implementation: 1) Low health literacy levels and low economic resources of the population can influence the ability to effectively utilize the nurse line. 2) Marketing. By providing readily available triage services patients can conveniently get guidance and advice on non-urgent medical issues and be able to get an appointment set up with a primary care physician when necessary. This will keep people away from the ED. This program will be aggressively advertised to the target population thereby getting them informed about the availability of this free service and increasing its uptake

5-Year Expected Outcome for Provider and Patients:
We would have a fully functional nurse line and there will be increased education of patients on the availability of the service. We expect to record increased uptake of the triage services which would decrease admissions for ambulatory care sensitive admissions.
Starting Point/Baseline:
To be determined during DY3.

Rationale:
This project will expand the existing help line to become available to patients around the clock whenever needed. It will also be made more culturally sensitive by expanding to offer the service in Spanish and it will be marketed widely to inform the target population of its availability. With the provision of the triage service from nurses who have access to their records at the time of call, patients will receive advice that will guide them in getting the right care at the right time, thereby preventing inappropriate use of the ED and quickening the process of getting appointment for urgent primary care needs. This project will address the need to provide the right care in the right setting at the right time, and the need to reduce primary care related emergency department visits.

Through the Nurse-line Medical Triage Call Center Program, we propose to meet all required project components listed below.

a) Develop a process (including a call center) that in a timely manner triages patients seeking primary care services in an ED to an alternate primary care site. Survey patients who use the nurse advice line to ensure patient satisfaction with the services received.

b) Enhance linkages between primary care, urgent care, and Emergency Departments in order to increase communication and improve care transitions for patients.

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

For the Nurse-line Medical Triage Call Center 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.

Milestones & Metrics:

Process Milestones and Metrics:
- Milestone 1 [P-4.]: Expand nurse advice line by XX% based on baseline data to increase access to patients based on need within the RHP.
- Metric 1 [P-4.1.]: Number of nurses staffing advice line per shift and number of patient calls per shift
- Milestone 2 [P-5.]: Establish a multilingual nurse advice line
- Metric 1 [P-5.1.]: Number of bi-lingual nurses staffing advice line per shift
- Milestone 3 [P-6.]: Inform and educate patients on the nurse advice line
- Metric 1 [P-6.1.]: Number of targeted patients informed/educated
- Milestone 4 [P-7.]: Develop/distribute a bilingual (English and Spanish) patient-focused educational newsletter with proactive health information and reminders based on nurse advice line data/generated report identifying common areas addressed by the nurse advice line.
- Metric 1 [P-7.1.]: Newsletter distribution

Improvement Milestones and Metrics:
- Milestone 5 [I-13.]: Increase in the number of patients that accessed the nurse advice line
- Metric 1 [I-13.1.]: Utilization of nurse advice line
- Milestone 6 [I-14.]: Increase patients in defined population who utilized the nurse advice line and were given an urgent medical appointment via the nurse advice and appointment line when needed
- Metric 1 [I-14.1.]: Number of urgent medical appointments scheduled via the nurse advice line

Unique community need identification numbers the project addresses:
This project addresses community needs CN.8 (High rates of inappropriate emergency department utilization) and CN.10 (High rates of preventable hospital admissions).

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

The Nurse-line Medical Triage Call Center project is an expansion of what is mainly an appointment line at this time. UT Physicians currently has a help line that patients, or would-be patients can call, but it does not operate except during business hours and it does not routinely provide consultation with a nurse for urgent needs. This project proposes to operate a medical triage call center, staffed 24/7/365 by nurses who will have access to patient records and provide guidance to patients regarding next steps that include arranging for same-day appointments in a primary care setting where the need is more urgent.

**Related Category 3 Outcome Measure(s):**

OD-2 Potentially Preventable Admissions

IT-2.11 Ambulatory Care Sensitive Conditions Admissions Rate: (Standalone measure)

Numerator: Total number of acute care hospitalizations for ambulatory care sensitive conditions under age 75 years (including any one most responsible diagnosis code of: Grand mal status and other epileptic convulsions, Chronic obstructive pulmonary diseases, Asthma, Heart failure and pulmonary edema, Hypertension, Angina, and Diabetes). Exclusions: Individuals 75 years of age and older, or death before discharge.

Denominator: Total mid-year population under age 75

**Relationship to other Projects:**

1.10 (MS1) - The systems engineering and dashboard project will provide a system for continuous quality improvement in the service provided by the nurse triage line.

2.1 (C1-2) - The medical home project and the nurse line will complement each other to ensure that patients get the right care at the right time.

2.9 (A4) - The nurse line will complement the care navigation program, as a 24/7 point of contact, further reducing the risk of avoidable utilization of the ED.

2.11 (C10) - The medication management program with its technological support will provide the nurses with useful information on patients to inform more efficient triaging.

2.12 (A3, CL1, CL2, MS4) - The nurse triage line will complement the care transition projects, as a 24/7 point of contact to ensure 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)).
   
   This project’s score for this criteria: 3 X 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: 5 X 2 = 10

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: 3 X 2 = 6

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: 2 X 2 = 4

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: 5
<table>
<thead>
<tr>
<th>Category 3 Outcome Measure(s):</th>
<th>Related Category 3 Outcome Measure(s):</th>
<th>Ambulatory Care Sensitive Conditions Admissions Rate: (Standalone measure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>111810101.3.7</td>
<td>IT-2.11</td>
<td>111810101</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 (10/1/2012 – 9/30/2013)</th>
<th>Year 3 (10/1/2013 – 9/30/2014)</th>
<th>Year 4 (10/1/2014 – 9/30/2015)</th>
<th>Year 5 (10/1/2015 – 9/30/2016)</th>
</tr>
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<tbody>
<tr>
<td>Milestone 1 [P-6.]: Inform and educate patients on the nurse advice line</td>
<td>Metric 1 [P-6.1.]: Number of targeted patients informed/educated</td>
<td>Metric 1 [I-13.1.]: Utilization of nurse advice line</td>
<td>Milestone 5 [I-13.1.]: Increase in the number of patients that accessed the nurse advice line</td>
</tr>
<tr>
<td>Baseline/Goal: TBD</td>
<td>Data Source: Documentation in patient’s paper or electronic medical record that patient was contacted and received information about accessing the nurse advice line and education about how to use the nurse advice line.</td>
<td>Goal: TBD</td>
<td>Goal: TBD</td>
</tr>
<tr>
<td>Data Source: Documentation of nurse advice line staffing levels.</td>
<td></td>
<td>Data Source: Call Center phone and encounter records and appointment scheduling software records</td>
<td>Data Source: Call Center phone and encounter records and appointment scheduling software records</td>
</tr>
<tr>
<td>Milestone 1 Estimated incentive payment: $ 1,177,537</td>
<td>Milestone 3 Estimated incentive payment: $ 1,293,081</td>
<td>Milestone 5 Estimated incentive payment: $ 2,766,592</td>
<td>Milestone 6 Estimated incentive payment: $ 2,673,036</td>
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| Milestone 1 [P-4.]: Expand nurse advice line by XX% based on baseline data to increase access to patients based on need within the RHP. | Milestone 2 [P-5.]: Establish a multilingual nurse advice line | Milestone 3 [I-13.]: Increase in the number of patients that accessed the nurse advice line |
| Metric 1 [P-4.1.]: Number of nurses staffing advice line per shift and number of patient calls per shift | Metric 1 [P-5.1.]: Number of bilingual nurses staffing advice line per shift | Metric 1 [I-13.1.]: Utilization of nurse advice line |
| Baseline/Goal: TBD | Baseline/Goal: TBD | Goal: TBD |
| Data Source: Documentation of nurse advice line staffing levels. | Data Source: HR documents or other documentation demonstrating employed and/or contracted nurses to staff a nurse advice line. | Data Source: Call Center phone and encounter records and appointment scheduling software records |
| Milestone 1 Estimated incentive payment: $ 1,177,537 | Milestone 2 Estimated incentive payment: $ 1,177,537 | Milestone 5 Estimated incentive payment: $ 2,766,592 |

| Milestone 4 [P-7.]: Develop/distribute a bilingual (English and Spanish) patient-focused educational newsletter with proactive health information and reminders based on nurse advice line data/generated report identifying common areas addressed by the nurse advice line. | | |
| Metric 1 [P-7.1.]: Newsletter distribution | | |
| Baseline/Goal: TBD | | |
| Data Source: Mailer vendor invoice | | |
| Milestone 4 Estimated incentive payment: $ 1,293,081 | | |

| Milestone 5 [I-14.]: Increase patients in defined population who utilized the nurse advice line and were given an urgent medical appointment via the nurse advice and appointment line when needed | Milestone 6 [I-14.]: Increase patients in defined population who utilized the nurse advice line and were given an urgent medical appointment via the nurse advice and appointment line when needed |
| Metric 1 [I-14.1.]: Number of urgent medical appointments scheduled via the nurse advice line | Metric 1 [I-14.1.]: Number of urgent medical appointments scheduled via the nurse advice line |
| Goal: TBD | Goal: TBD |
| Data Source: Call Center phone and encounter records and appointment scheduling software records | Data Source: Call Center phone and encounter records and appointment scheduling software records |
| Milestone 5 Estimated incentive payment: $ 2,766,592 | Milestone 6 Estimated incentive payment: $ 2,673,036 |

| Milestone 6 [I-14.]: Increase patients in defined population who utilized the nurse advice line and were given an urgent medical appointment via the nurse advice and appointment line when needed | Milestone 6 [I-14.]: Increase patients in defined population who utilized the nurse advice line and were given an urgent medical appointment via the nurse advice and appointment line when needed |
| Metric 1 [I-14.1.]: Number of urgent medical appointments scheduled via the nurse advice line | Metric 1 [I-14.1.]: Number of urgent medical appointments scheduled via the nurse advice line |
| Goal: TBD | Goal: TBD |
| Data Source: Call Center phone and encounter records and appointment scheduling software records | Data Source: Call Center phone and encounter records and appointment scheduling software records |
| Milestone 6 Estimated incentive payment: $ 2,673,036 | Milestone 6 Estimated incentive payment: $ 2,673,036 |
### 111810101.5  
**Option 1.6.2**

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<thead>
<tr>
<th>111810101.3.7</th>
<th>UTHealth, UTPhysicians</th>
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#### Related Category 3 Outcome Measure(s):

<table>
<thead>
<tr>
<th>Measure</th>
<th>IT-2.11</th>
<th>Ambulatory Care Sensitive Conditions Admissions Rate: (Standalone measure)</th>
</tr>
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</table>

#### Year 2 (10/1/2012 – 9/30/2013)

- Milestone 4 Estimated incentive payment: $1,293,081

#### Year 3 (10/1/2013 – 9/30/2014)

- Year 2 Estimated Milestone Bundle Amount: $2,355,074

#### Year 4 (10/1/2014 – 9/30/2015)

- Year 3 Estimated Milestone Bundle Amount: $2,586,162

#### Year 5 (10/1/2015 – 9/30/2016)

- Year 4 Estimated Milestone Bundle Amount: $2,766,592

**TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD:** $10,380,864
Title of Outcome Measure (Improvement Target): OD-2 Potentially Preventable Admissions

Unique RHP outcome identification number(s): 111810101.3.7

Outcome Measure Description:
IT-2.11 Ambulatory Care Sensitive Conditions Admissions Rate: (Standalone measure)
Numerator: Total number of acute care hospitalizations for ambulatory care sensitive conditions under age 75 years (including any one most responsible diagnosis code of: Grand mal status and other epileptic convulsions, Chronic obstructive pulmonary diseases, Asthma, Heart failure and pulmonary edema, Hypertension, Angina, and Diabetes). Exclusions: Individuals 75 years of age and older, or death before discharge.
Denominator: Total mid-year population under age 75

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-2.11 Reduce by 3% the percentage of acute care hospitalizations for ambulatory care sensitive conditions (including any one most responsible diagnosis code of: Grand mal status and other epileptic convulsions, Chronic obstructive pulmonary diseases, Asthma, Heart failure and pulmonary edema, Hypertension, Angina, and Diabetes) for persons under the age 75 years. Exclusions: Individuals 75 years of age and older, or death before discharge.
- DY5:
  - IT-2.11 Reduce by 5% the percentage of acute care hospitalizations for ambulatory care sensitive conditions (including any one most responsible diagnosis code of: Grand mal status and other epileptic convulsions, Chronic obstructive pulmonary diseases, Asthma, Heart failure and pulmonary edema, Hypertension, Angina, and Diabetes) for persons under the age 75 years. Exclusions: Individuals 75 years of age and older, or death before discharge.

Rationale:
We expect the use of the Nurse-line medical triage call center to reduce hospitalizations for ambulatory care sensitive conditions (ACSC), which is an indicator of access to appropriate primary health care. The Nurse-line will facilitate access to appropriate primary care, thereby reducing hospitalizations for ambulatory care sensitive conditions. Appropriate primary care has the potential to prevent the onset of these types of illnesses, control acute episodes, or manage a chronic disease.

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.
<table>
<thead>
<tr>
<th>111810101.3.7</th>
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<th>Ambulatory Care Sensitive Conditions Admissions Rate: (Standalone measure)</th>
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<tbody>
<tr>
<td>Related Category 1 or 2 Projects:</td>
<td>111810101.1.5</td>
<td>111810101</td>
</tr>
<tr>
<td>Starting Point/Baseline:</td>
<td>To be determined during DY3.</td>
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<tr>
<td>Process Milestone 1 [P-1]: Project planning - engage stakeholders, identify current capacity and needed resources, determine timelines and document implementation plans</td>
<td>Process Milestone 2 [P-2]: Establish baseline rates</td>
<td>Outcome Improvement Target 1 [IT-2.11]: Reduce by 3% the percentage of acute care hospitalizations for ambulatory care sensitive conditions (including any one most responsible diagnosis code of: Grand mal status and other epileptic convulsions, Chronic obstructive pulmonary diseases, Asthma, Heart failure and pulmonary edema, Hypertension, Angina, and Diabetes) for persons under the age 75 years.</td>
<td>Outcome Improvement Target 2 [IT-2.11]: Reduce by 5% the percentage of acute care hospitalizations for ambulatory care sensitive conditions (including any one most responsible diagnosis code of: Grand mal status and other epileptic convulsions, Chronic obstructive pulmonary diseases, Asthma, Heart failure and pulmonary edema, Hypertension, Angina, and Diabetes) for persons under the age 75 years.</td>
</tr>
<tr>
<td>Data Source: Project reports and documents</td>
<td>Data Source: Provider reports</td>
<td>Data Source: EHR, Claims</td>
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<tr>
<td>Process Milestone 1 Estimated Incentive Payment: $ 123,951</td>
<td>Process Milestone 2 Estimated Incentive Payment: $ 143,676</td>
<td>Outcome Improvement Target 1 Estimated Incentive Payment: $ 307,399</td>
<td>Outcome Improvement Target 2 Estimated Incentive Payment: $ 668,259</td>
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<tr>
<td>Year 2 Estimated Outcome Amount: $ 123,951</td>
<td>Year 3 Estimated Outcome Amount: $ 287,352</td>
<td>Year 4 Estimated Outcome Amount: $ 307,399</td>
<td>Year 5 Estimated Outcome Amount: $ 668,259</td>
</tr>
</tbody>
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TOTAL ESTIMATED INCENTIVE PAYMENTS FOR 4-YEAR PERIOD: $ 1,386,961