## Quest for Excellence Award Application

**Hospital Name:** Gila Regional Medical Center

**Application Contact:** (Rennie Mariscal, RN, ACM-RN :Director of Case Management )

**Title of Project:** Reduction in Readmission Through Care Transitions Program

<table>
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<tr>
<th>Project Components</th>
<th>Hospital Response</th>
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| **1. Leadership/Planning (max 300 words)** | Gila Regional Medical Center (GRMC) is a top performing hospital with respect to reducing avoidable readmissions *(near Top 10% benchmark for IBM Care Discovery's Small Community Hospital Top 10% group)* and HCAHPS Care Transitions Domain scores *(GRMC Press-Ganey ranking in the top 10%).* The healthcare landscape requires consistent effectiveness to promote safety and quality outcomes as measures for success and value-based reimbursement. It is of utmost importance to GRMC to embrace opportunities to improve the care transitions across the care continuum. While the primary purpose of this project is to establish a program that will support the continuum of care in the outpatient, acute care and community settings, there is a direct correlation resulting in a reduction of avoidable readmissions. Care transition objectives are accomplished through the promotion of timely access to appropriate care in the most appropriate setting, increased utilization of preventive care services, and patient education of chronic disease states.

The project concept and design were presented to the Utilization Review Committee. After multi-disciplinary
discussion, the committee voted and approved project design and implementation. Senior leadership reviewed, endorsed and incorporated the project, “Reduction in Readmission Through Care Transitions Program” into the 2018/2019 Quality Strategic Plan. Support and engagement from the C-Suite Leadership and Board of Trustees is accomplished through monthly reporting and accountability to the Board.

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<th>2. <strong>Process of Identifying Need (max 300 words)</strong></th>
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<td>In 2015, readmissions accounted for $3.2 trillion of US Healthcare spending, costing ~$9,990 per person. Researchers find that hospitals are most likely to be responsible for readmissions within a week of discharge, but outpatient clinics and homecare givers are most likely responsible for later readmissions. Early readmissions, within the first 7 days after hospital discharge, are more likely to be preventable than those within a late period of 8 to 30 days. Readmissions within the first 7 days after hospital discharge are more likely amenable to interventions within the hospital and are to be caused by factors for which the hospital is directly accountable. GRMC’s Utilization Review Committee closely monitors key utilization metrics on a monthly basis, including readmissions within 30 days of initial discharge. It was noted that GRMC’s readmission rate was significantly higher than the national average. After reviewing, analyzing and discussing the readmission data, the UR Committee voted to re-evaluate and institute the Care Transitions program with a more comprehensive scope of interventions by partnering with physician’s practices, community-based health care programs, and community social support services. Goals of the project include: 1.) the reduction of avoidable hospital readmissions for the same or related...</td>
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| 3. Process Improvement Methods | Diagnosis/disease states and inappropriate emergency utilization. 2.) improved patient experience satisfaction (as reflected in the Care Transitions Domain of the HCAHPS and 3.) Reduction in the 30-day Readmit Extra Readmit Cost. GRMC’s Care Transitions program emphasizes efforts on the top primary DRGs for readmissions: Respiratory (e.g. COPD, Asthma, Pneumonia); Diabetes; Heart Failure; and Sepsis. |

Describe who was involved in the improvement effort, methodology used (PDSA, LEAN, Six Sigma, etc.)

Describe how the data was collected, and the process that was used to achieve the results.

Describe how you used the data and information to guide your process improvement efforts.

GRMC’s Case Management department began a care transitions pilot project in 2016 for approximately 11 months. The program was primarily a telephone based program with acute inpatients screened face to face by the care transitions nurse with telephonic follow-up when deemed appropriate. Moderate success was achieved in reducing readmissions albeit the improvement was not sustained. Due to institutional financial challenges, the care transitions nurse position and program were eliminated.

In the third quarter of 2017, a senior baccalaureate nursing student conducted her capstone project focusing on care transitions. The student was instrumental in assisting with the research, analysis, and preliminary program design. Using a scientific and analytical approach to identifying the at risk population for readmission, a new program was designed keeping components of the previous program that appeared to be effective in combination with expansion of the scope of the interventions that would be components on the new program. Analysis of the top 10 admission diagnoses for the most recent three (3) years along with a further in-depth analysis of the top five (5) diagnoses associated with readmissions within 30 days of discharge was used to identify those patients that would be the program’s primary focus.

The Deming model of rapid cycle continuous quality improvement, commonly referred to as PDSA, was selected as
the improvement methodology for this project. The analysis component of the cycle concentrated more on *why did it work* rather than *did it work*.

GRMC serves a population that has particular challenges that were continually considered in the basic program design. Per capita, Grant county residents are older, poorer, sicker and have a higher percentage of chronic diseases with comorbidities.

The program design includes interventions and strategies that demonstrated effectiveness in the initial pilot program. These, in combination with implementation of new interventions found to be successful in evidence based care transitions models cited in the literature, became the framework of the new care transitions program.

### 4. Results

Describe the results including the patient outcomes, process changes and service delivery results.

Additionally, may include any financial and market performance improvements, leadership, or community improvements.

**Risk-Adjusted Planned and Unplanned Readmissions day 1-7**

Risk-Adjusted Planned and Unplanned Readmissions day 1-7 are calculated by IBM Care Discovery. GRMC uses the median benchmark for IBM Care Discovery's Small Community Hospital Top 10% group. GRMC All-Payer planned and unplanned readmissions for Day 1-7 show long-term downward trends. *(See Graph 1-A)*

In 2015 Q1 and Q2 Gila Regional’s count was near the comparative median. GRMC recognized that the hospital based home health agency patients had frequent ED visits resulting in inpatient readmission rates between 20% and 25% in program. It was noted that once the GRMC based home health agency was sold in July of 2015, there was a decrease in day 1-7 readmissions for 2015 Q3 and Q4. By 2016 Q1, GRMC saw day 1-7 readmission counts return to the comparative median. Analysis of the readmitted patients
showed a need for better support through the discharge transition, therefore the Care Transitions Pilot Program was initiated. The program helped stabilize readmissions and ran through 2016 Q4. By 2016 Q4, the day 1-7 readmission count had decreased to 36% below the median. The quarterly count of readmissions remained below the benchmark median from 2016 Q4 through 2018 Q2.

Risk-Adjusted Unplanned Readmissions
Risk-Adjusted Unplanned Readmissions are calculated by IBM Care Discovery and mimic CMS Hospital-Wide Readmissions (HWI). GRMC uses the median and Top 10% benchmarks for IBM Care Discovery's Small Community Hospital Top 10% group. GRMC All-Payer and Medicare unplanned readmissions show long-term downward trends. (See Graphs 2-A and 2-B)

GRMC baseline all-payer unplanned readmission rate is 11.4%, and the Medicare baseline is 12.2%. In 2015 Q1 and Q2 that rate had returned to the comparative median. Once again it was noted that the GRMC based home health agency had readmission rates between 20% and 25%. The sale of the Home Health agency resulted in a decrease in readmissions for 2015 Q3 and Q4. Medicare readmissions showed a greater decrease in the last 2 quarters of 2015. As stated earlier, by 2016 Q1, GRMC saw readmission rates return to just above the comparative median. The need for a care transitions program became evident through the analysis of the causative factors leading to the readmissions and the readmission diagnoses. This led to the initiation of the Care Transitions Program Pilot. The program demonstrated moderate stabilization of the readmission rates and ran through 2017 mid Q1 until it was discontinued. During 2017 Q2 and Q3, Case Management applied the principles and processes of the discontinued pilot program hoping to avert a resurgence of readmissions. During 2017
Q4, the Expanded Care Transition Program was initiated and fully implemented in January 2018. In 2018 Q2 readmissions began running near the top 10% benchmark.

**HCAHPS Care Transitions Domain**
GRMC uses Press Ganey as the CMS HCAHPS vendor. Benchmarks for the 90th Percentile of National Performance are obtained from CMS data through the Summary Reports on hcahpsonline.org.

GRMC Care Transitions Domain had a high score of 65.4 (above the national top 10%) in 2015 Q3. (See Graph 3-A)

In 2016 Q2, the Care Transitions Domain was 59.7 with a national top 10% benchmark of 61 that was attributed to the implementation of the Care Transitions Program Pilot. HCAHPS scores declined steadily as the program was being phased out and ultimately discontinued the end of 2016. Scores continued to decline while readmissions increased after the program ceased. Care Transitions Domain scores eventually hit the low point score of 41.9 in Q3 2017.

In 2017 Q4, when the Expanded Care Transitions Program began, the Care Transitions Domain began an upward trend through 2018 Q2. The 2018 Q2 score of 61.8 compared to a national top 10% benchmark of 62 represents a statistically significant improvement from the low of 41.9 in 2017 Q3.

**30-day Readmit Extra Readmit Cost**
Additional hospital costs for a readmission visit are examined with the help of IBM Care Discovery Quality Impact on Readmissions report. Within the data provided by this report, the 2018 annualized cost of readmissions will be reduced to $910,411 as compared to the 2017 cost of $1.47 million. New
Care Transitions activities are on track to save GRMC $560,000 in CY 2018. *(See Graph 4-A)*

### 5. Lessons Learned and Sustainability (max 300 words)

Describe the lessons learned and how you applied what was learned from this project to other areas in your facility.

Describe how other facilities could replicate what you did.

Describe your plans to sustain the success achieved.

The Care Transitions pilot project assessed which components proved effective and what needed to be changed or eliminated to increase the efficacy of the program. Some of the key lessons learned include: Care Transitions must be an organization wide endeavor rather than conducted by a single department or individual. While oversight, initial assessment, implementation, and direction is provided by a care transition/case manager, post discharge follow-up calls are conducted by staff in Med-Surge, Behavioral Health, Maternal Child, and ED Units.

- Clear understanding of medication management is essential at the time of discharge to prevent the need to return to the hospital. A clinical pharmacist is a care transitions team member who performs the following:
  - Participates in morning multi-disciplinary rounds
  - Provides bedside patient education regarding home medication regimen
  - Gives bedside nurses feedback and makes recommendations as they review discharge instructions and medications with the patient.

- Post discharge calls are scripted to assure consistency between callers. Calls are conducted by nurses and patient care technicians. The care transitions nurse reviews 100% of the call sheets and will call those patients who have additional questions or score above the set threshold indicating readmission risk.

- 100% of the discharged patients receive a post discharge call within 48-72 hours of discharge.

- No patient is discharged without having a PCP assigned and a follow-up appointment scheduled.
Partnerships and care transition counter-parts were established at larger primary care provider offices and high volume specialist offices (Cardiologist, OB-GYN, Pulmonologists)

Close working relationships are established with key community based case management programs (e.g. Social Detox Center; Health Home program for patients who have both a SMI and chronic medical condition.)

This Care Transitions program model can easily be replicated by any hospital or facility without having to purchase expensive software, using current staff, and establishing collaborative working relationships with outpatient clinics and community programs.

GRMC is committed to keep this program as a long-term ongoing initiative, closely monitoring health outcomes, readmission rates and patient experience scores.
Graph 4–A

30-day Readmit Extra Readmit Cost
Source - IBM Care Discovery

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018 Annualized</th>
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<tr>
<td>Millions</td>
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<td>$1.68</td>
<td>$1.47</td>
<td>$0.91</td>
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