Report on a QI Project Eligible for MOC – ABMS Part IV and AAPA PI-CME

MiPART (Michigan Patient Arrival and Rapid Throughput)
Priority Discharge Program – Cardiovascular Center

Instructions

Determine eligibility. Before starting to complete this report, go to the UMHS MOC website [ocpd.med.umich.edu], click on “Part IV Credit Designation,” and review sections 1 and 2. Complete and submit a “QI Project Preliminary Worksheet for Part IV Eligibility.” Staff from the UMHS Part IV MOC Program will review the worksheet with you to explain any adjustments needed to be eligible. (The approved Worksheet provides an outline to complete this report.)

Completing the report. The report documents completion of each phase of the QI project. (See section 3 of the website.) Final confirmation of Part IV MOC for a project occurs when the full report is submitted and approved.

An option for preliminary review (strongly recommended) is to complete a description of activities through the intervention phase and submit the partially completed report. (Complete at least items 1-20.) Staff from the UMHS Part IV MOC Program will provide a preliminary review, checking that the information is sufficiently clear, but not overly detailed. This simplifies completion and review of descriptions of remaining activities.

Questions are in bold font. Answers should be in regular font (generally immediately below or beside the questions). To check boxes, hover pointer over the box and click (usual “left” click).

For further information and to submit completed applications, contact either:
Grant Greenberg, MD, MHSA, MA, UMHS Part IV Program Lead, 763-232-6222, ggreenbe@med.umich.edu
R. Van Harrison, PhD, UMHS Part IV Program Co-Lead, 734-763-1425, rvh@umich.edu
Ellen Patrick, UMHS Part IV Program Administrator, 734-936-9771, partivmoc@umich.edu

Report Outline

Section | Items
--- | ---
A. Introduction | 1-6. Current date, title, time frame, key individuals, participants, funding
B. Plan | 7-10. Patient population, general goal, IOM quality dimensions, ACGME/ABMS competencies
| 11-13. Measures, baseline performance, specific aims
| 14-17. Baseline data review, underlying (root) causes, interventions, who will implement
C. Do | 18. Intervention implementation date
D. Check | 19-20. Post-intervention performance
E. Adjust – Replan | 21-24. Post-intervention data review, underlying causes, adjustments, who will implement
F. Redo | 25. Adjustment implementation date
H. Readjust plan | 29-32. Post-adjustment data review, underlying causes, further adjustments, who will implement
I. Reflections & plans | 33-37. Barriers, lessons, best practices, spread, sustain
J. Participation for MOC | 38-40. Participation in key activities, other options, other requirements
K. Sharing results | 41. Plans for report, presentation, publication
L. Organization affiliation | 42. Part of UMHS, AAVA, other affiliation with UMHS
QI Project Report for Part IV MOC Eligibility

A. Introduction

1. Date (this version of the report): 11/8/2017

2. Title of QI effort/project (also insert at top of front page): MiPART (Michigan Patient Arrival and Rapid Throughput) Priority Discharge Program – Cardiovascular Center

3. Time frame
   a. MOC participation beginning date – date that health care providers seeking MOC began participating in the documented QI project (e.g., date of general review of baseline data, item #14): Overall Program: 6/6/2016
      For service specific dates, please refer to the service appendices.
   
   b. MOC participation end date – date that health care providers seeking MOC completed participating in the documented QI project (e.g., date of general review of post-adjustment data, item #33): Overall Program: 7/12/2017

4. Key individuals (+ service leaders)
   a. QI project leader [also responsible for confirming individual’s participation in the project]
      Name: Kristie Barazsu
      Title: Project Senior Manager, Inpatient Hospital Operations
      Organizational unit: Office of the Executive Director – UH/CVC
      Phone number: 734-936-6167
      Email address: kbarazsu@umich.edu
      Mailing address: UMH Ops & Ancillary Svcs Admin, 300 North Ingalls Building, Ann Arbor, MI 48109-5426

   b. Clinical leader to whom the project leader reports regarding the project [responsible for overseeing/”sponsoring” the project within the specific clinical setting] (will include service detail on table when services confirm participation)
      Name: Jeff Desmond, MD
      Title: Chief Medical Officer
      Organizational unit: University of Michigan Health System (Michigan Medicine)
      Phone number: 734-936-5814
      Email address: jsdesmo@umich.edu
      Mailing address: Office of Clinical Affairs C201 MIN Ann Arbor, MI 48109

5. Participants
   a. Approximately how many health care providers (by training level for physicians) participated in this QI effort (whether or not for MOC):

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number (fill in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing Physicians</td>
<td>75</td>
</tr>
<tr>
<td>Residents/Fellows</td>
<td>15</td>
</tr>
<tr>
<td>Physicians’ Assistants</td>
<td>20</td>
</tr>
<tr>
<td>Nurses (APNP, NP, RN, LPN)</td>
<td>250</td>
</tr>
<tr>
<td>Other Licensed Allied Health (e.g., PT/OT, pharmacists, dieticians, social workers)</td>
<td>50</td>
</tr>
</tbody>
</table>
b. Approximately how many physicians (by specialty/subspecialty and by training level) and physicians' assistants participated for MOC?

<table>
<thead>
<tr>
<th>Profession</th>
<th>Specialty/Subspecialty (fill in)</th>
<th>Number (fill in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing Physicians</td>
<td>Internal Medicine</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Advanced Heart Failure &amp; Transplant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiovascular Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical Cardiac Electrophysiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thoracic Surgery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thoracic and Cardiac Surgery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surgery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vascular Surgery</td>
<td></td>
</tr>
<tr>
<td>Fellows</td>
<td>Fellows – same as above</td>
<td>5</td>
</tr>
<tr>
<td>Residents</td>
<td>Residents – same as above</td>
<td>0</td>
</tr>
<tr>
<td>Physicians’ Assistants</td>
<td>Specialty N/A</td>
<td>20</td>
</tr>
</tbody>
</table>

6. How was the QI effort funded? (Check all that apply.)

☒ Internal institutional funds
☐ Grant/gift from pharmaceutical or medical device manufacturer
☐ Grant/gift from other source (e.g., government, insurance company)
☐ Subscription payments by participants
☐ Other (describe):

The Multi-Specialty Part IV MOC Program requires that QI efforts include at least two linked cycles of data-guided improvement. Some projects may have only two cycles while others may have additional cycles – particularly those involving rapid cycle improvement. The items below provide some flexibility in describing project methods and activities. If the items do not allow you to reasonably describe the steps of your specific project, please contact the UMHS Part IV MOC Program Office.

B. Plan

7. Patient population. What patient population does this project address (e.g., age, medical condition, where seen/treated):

Adult (>= age 18) inpatients on cardiovascular care units (7 specific in-scope services that discharge an average of 1 or more patients per day) from the University of Michigan Health System’s Cardiovascular Center Tuesday – Friday.

8. General goal

a. Problem/need. What is the problem (“gap”) in quality that resulted in the development of this project? Why is important to address this problem?

The demand for inpatient general care beds is outpacing bed availability. Admitted patients do not have a bed available while concurrently, patients ready for discharge have delays in being sent home. We discharge 24 patients per day on average. The need for beds at 11am is 6 per day and we are currently only discharging 1 per day by 11am. The days impacted include Tuesday – Friday.

b. Project goal. What general outcome regarding the problem should result from this project?

(State general goal here. Specific aims/performance targets are addressed in #13.)
The goal is to have a bed available for every admitted patient. This can be achieved by discharging 6 patients per day from the in-scope services by 11am on Tuesday – Friday to align bed availability with bed demand.

9. Which Institute of Medicine Quality Dimensions are addressed? [Check all that apply.]

☐ Effectiveness  ☐ Equity  ☑ Safety  
☐ Efficiency  ☒ Patient-Centeredness  ☒ Timeliness

10. Which ACGME/ABMS core competencies are addressed? (Check all that apply.)

☒ Patient Care and Procedural Skills  ☐ Medical Knowledge
☒ Practice-Based Learning and Improvement  ☐ Interpersonal and Communication Skills
☐ Professionalism  ☒ Systems-Based Practice

11. Describe the measure(s) of performance: (QI efforts must have at least one measure that is tracked across the two cycles for the three measurement periods: baseline, post-intervention, and post-adjustment. If more than two measures are tracked, copy and paste the section for a measure and describe the additional measures.)

Measure 1

• Name of measure: Percent of daily discharge orders that are placed before 9:30am (Pre-9:30 discharge order percentage)

• Measure components – for a rate, percent, or mean, describe the:
  Denominator (e.g., for percent, often the number of patients eligible for the measure):
  Total number of discharge orders per day (Tuesday - Friday)
  Numerator (e.g., for percent, often the number of those in the denominator who also meet the performance expectation):
  Total number of discharges ordered before 9:30am (Tuesday - Friday)

• The source of the measure is:
  ☒ Internal to our organization and it was chosen because (describe rationale): Ordering discharges before 9:30 am will frequently result in patients being discharged by 11 am

• This is a measure of:
  ☒ Process – activities of delivering health care to patients
  ☐ Outcome – health state of a patient resulting from health care

12. Baseline performance

a. What were the beginning and end dates for the time period for baseline data on the measure(s)?
   July 1, 2015 – June 30, 2016

b. What was (were) the performance level(s) at baseline? (E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)

Overall program baseline data: Pre-9:30 am discharge orders = 4% of total daily discharge orders. See table below for service-specific baseline data.
13. Specific performance aim(s)/objective(s)

a. What is the specific aim of the QI effort? “The Aim Statement should include: (1) a specific and measurable improvement goal, (2) a specific target population, and (3) a specific target date/time period. For example: We will [improve, increase, decrease] the [number, amount percent of [the process/outcome] from [baseline measure] to [goal measure] by [date].”

   Our specific aim is to increase the percentage of discharges ordered by 9:30 am each day (Tue – Friday) from 4% to 35% by July 12, 2017.

b. How were the performance targets determined, e.g., regional or national benchmarks?
   They were determined locally based on projections of the number of discharges ordered by 9:30 am that would make sufficient beds available by 11 am for admitted patients needing a bed.

14. Baseline data review and planning. Who was involved in reviewing the baseline data, identifying underlying (root) causes of problem(s) resulting in these data, and considering possible interventions (“countermeasures”) to address the causes? (Briefly describe the following.)

   • Who was involved? (e.g., by profession or role)
     Physicians (attendings, fellows, residents), Advance Practice Providers (APP’s: PA’s and NP’s), Clinical Assistants (CAs), Resident Assistants (RAs), nurses, RN Case Managers, Social Workers, Allied Health Care Providers (PT/OT, Lab, Pharmacy, etc.), and health center management staff

   • How? (e.g., in a meeting of clinic staff)
     Departmental/service unit staff meetings

   • When? (e.g., date(s) when baseline data were reviewed and discussed)
     Varied by service and occurred within 8/16/16 – 11/15/16.

Use the following table to outline the plan that was developed: #15 the primary causes, #16 the intervention(s) that addressed each cause, and #17 who carried out each intervention. This is a simplified presentation of the logic diagram for structured problem solving explained at http://ocpd.med.umich.edu/moc/process-having-part-iv-credit-designation in section 2a. As background, some summary examples of common causes and interventions to address them are:

<table>
<thead>
<tr>
<th>Service</th>
<th>Baseline (7/1/2015 – 6/30/2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service A</td>
<td>0%</td>
</tr>
<tr>
<td>Service B</td>
<td>7%</td>
</tr>
<tr>
<td>Service C</td>
<td>9%</td>
</tr>
<tr>
<td>Service D</td>
<td>9%</td>
</tr>
<tr>
<td>Service E</td>
<td>3%</td>
</tr>
<tr>
<td>Service F</td>
<td>5%</td>
</tr>
<tr>
<td>Service G</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total – All Services</strong></td>
<td><strong>4%</strong></td>
</tr>
</tbody>
</table>


**Common Causes** | **Common Relevant Interventions**
---|---
**Individuals:** Are not aware of, don’t understand. | Education about evidence and importance of goal.  
**Individuals:** Believe performance is OK. | Feedback of performance data.  
**Individuals:** Cannot remember. | Checklists, reminders.  
**Team:** Individuals vary in how work is done. | Develop standard work processes.  
**Workload:** Not enough time. | Reallocate roles and work, review work priorities.  
**Suppliers:** Problems with provided information/materials. | Work with suppliers to address problems there.

### 15. What were the primary underlying/root causes for the problem(s) at baseline that the project can address?

- Personnel are not aware of the problem with available beds  
  Define the problem and educate them about it  
  All personnel on the service participated in the education  
- Personnel believe that current performance is OK on their service  
  Review hospital and service level data with them  
  All personnel on the service received feedback on performance of the service  
- Personnel do not remember to perform or delay performing activities needed for discharge  
  Develop standard roles, processes, and resources to prompt and facilitate timely performance of activities needed for discharge  
  All personnel on the service participated in developing standard roles and processes and identifying needed resources

Note: If additional causes were identified that are to be addressed, insert additional rows.

### 16. What intervention(s) addressed this cause?

- 15. Define the problem and educate them about it  
- 16. Review hospital and service level data with them  
- 17. Develop standard roles, processes, and resources to prompt and facilitate timely performance of activities needed for discharge

### 17. Who was involved in carrying out each intervention? (List the professions/roles involved.)

- All personnel on the service participated in the education  
- All personnel on the service received feedback on performance of the service  
- All personnel on the service participated in developing standard roles and processes and identifying needed resources

### C. Do

**18. By what date was (were) the intervention(s) initiated?**  
If multiple interventions, date by when all were initiated.

Interventions will be fully initiated approximately 2-4 weeks following the review and planning. Specific dates will vary by service and occurred between 7/27/2016 – 2/24/2017

### D. Check

19. Post-intervention performance measurement. Are the population and measures the same as those for the collection of baseline data (see items 10 and 11)?

- Yes  
- No – If no, describe how the population or measures differ:

### 20. Post-intervention performance

**a. What were the beginning and end dates for the time period for post-intervention data on the measure(s)?** March 14, 2017 – April 21, 2017

**c. What was (were) the overall performance level(s) post-intervention?** (E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)
<table>
<thead>
<tr>
<th>Service</th>
<th>Baseline</th>
<th>PDCA Cycle #1 (3/14/17-4/21/17)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>6-Week Average – Average # of pre-0930 d/c orders</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-week average</td>
</tr>
<tr>
<td>Service A</td>
<td>0%</td>
<td>0.5</td>
</tr>
<tr>
<td>Service B</td>
<td>7%</td>
<td>0.2</td>
</tr>
<tr>
<td>Service C</td>
<td>9%</td>
<td>1.7</td>
</tr>
<tr>
<td>Service D</td>
<td>9%</td>
<td>2.2</td>
</tr>
<tr>
<td>Service E</td>
<td>3%</td>
<td>3.2</td>
</tr>
<tr>
<td>Service F</td>
<td>5%</td>
<td>3.7</td>
</tr>
<tr>
<td>Service G</td>
<td>0%</td>
<td>1.8</td>
</tr>
<tr>
<td>Total - All Services</td>
<td>4%</td>
<td>13.3</td>
</tr>
</tbody>
</table>

c. Did the intervention(s) produce the expected improvement toward meeting the project’s specific aim (item 13.a)? Overall, the program made significant improvements towards achieving the overall goal of 35%, with an increase from a baseline of 4% to 17%. However, we are still working towards achieving the overall goal, as well as towards each service achieving the goal independently.

E. Adjust – Replan

21. Post-intervention data review and further planning. Who was involved in reviewing the post-intervention data, identifying underlying (root) causes of problem(s) resulting in these new data, and considering possible interventions (“countermeasures”) to address the causes? (Briefly describe the following.)

- **Who was involved?** (e.g., by profession or role)
  - ☒ Same as #14?  ☐ Different than #14 (describe):

- **How?** (e.g., in a meeting of clinic staff)
  - ☒ Same as #14?  ☐ Different than #14 (describe):

- **When?** (e.g., date(s) when post-intervention data were reviewed and discussed)

  April 24, 2017. This was an iterative process being monitored by each service weekly with the support of the Project Manager. In addition, this data was shared at the CVC Operations Committee Meeting to review PDCA cycle #1 and results.

  Use the following table to outline the next plan that was developed: **#22 the primary causes, #23 the adjustments/second intervention(s) that addressed each cause, and #24 who carried out each intervention.** This is a simplified presentation of the logic diagram for structured problem solving explained at [http://ocpd.med.umich.edu/moc/process-having-part-iv-credit-designation](http://ocpd.med.umich.edu/moc/process-having-part-iv-credit-designation) in section 2a.

  Note: Initial intervention(s) occasionally result in performance achieving the targeted specific aims and the review of post-intervention data identifies no further causes that are feasible or cost/effective to address. If so, the plan for the second cycle should be to continue the interventions initiated in the first cycle and check that performance level(s) are stable and sustained through the next observation period.
<table>
<thead>
<tr>
<th>22. What were the primary underlying/root causes for the problem(s) following the intervention(s) that the project can address?</th>
<th>23. What adjustments/second intervention(s) addressed this cause?</th>
<th>24. Who was involved in carrying out each adjustment/second intervention? (List the professions/roles involved.)</th>
</tr>
</thead>
</table>
| Variation among providers regarding when and how to initiate discharge planning | Develop standard clinical pathways needed to facilitate timely discharge
Develop standard rounding processes to facilitate timely discharge | All personnel on the service participated in developing standard roles and processes and identifying needed resources |
| Providers do not remember to implement program | Develop daily visual management systems to facilitate timely discharge
Develop weekly and monthly standard data review processes to review hospital level and service level data | All personnel on the service received feedback on performance of the service |
| Inconsistent communication with Care Management | Provide standard roles, processes and resources to structure communication within service | All personnel on the service participated in developing standard roles and processes and identifying needed resources |

Note: If additional causes were identified that are to be addressed, insert additional rows.

**F. Redo**

25. By what date was (were) the adjustment(s)/second intervention(s) initiated? (If multiple interventions, date by when all were initiated.) April 25, 2017

**G. Recheck**

26. Post-adjustment performance measurement. Are the population and measures the same as indicated for the collection of post-intervention data (item #21)?

☑ Yes ☐ No – If no, describe how the population or measures differ:

27. Post-adjustment performance

a. What were the beginning and end dates for the time period for post-adjustment data on the measure(s)? April 25, 2017 – June 2, 2017

b. What was (were) the overall performance level(s) post-adjustment? (E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)
University of Michigan Health System Part IV Maintenance of Certification Program

PDCA Cycle #1 (3/14/17 - 4/21/17) PDCA Cycle #2 (4/25/17 - 6/2/17)

<table>
<thead>
<tr>
<th>Service</th>
<th>Baseline</th>
<th>6-Week Average</th>
<th>% pre-0930 d/c orders</th>
<th>6-Week Average</th>
<th>% pre-0930 d/c orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service A</td>
<td>0%</td>
<td>0.5</td>
<td>50%</td>
<td>0.5</td>
<td>27%</td>
</tr>
<tr>
<td>Service B</td>
<td>7%</td>
<td>0.2</td>
<td>17%</td>
<td>0.3</td>
<td>15%</td>
</tr>
<tr>
<td>Service C</td>
<td>9%</td>
<td>1.7</td>
<td>16%</td>
<td>1.2</td>
<td>13%</td>
</tr>
<tr>
<td>Service D</td>
<td>9%</td>
<td>2.2</td>
<td>18%</td>
<td>3.0</td>
<td>29%</td>
</tr>
<tr>
<td>Service E</td>
<td>3%</td>
<td>3.2</td>
<td>13%</td>
<td>2.8</td>
<td>16%</td>
</tr>
<tr>
<td>Service F</td>
<td>5%</td>
<td>3.7</td>
<td>20%</td>
<td>4.5</td>
<td>27%</td>
</tr>
<tr>
<td>Service G</td>
<td>0%</td>
<td>1.8</td>
<td>21%</td>
<td>1.5</td>
<td>17%</td>
</tr>
<tr>
<td>Total-All Services</td>
<td>4%</td>
<td>13.3</td>
<td>17%</td>
<td>13.8</td>
<td>20.9%</td>
</tr>
</tbody>
</table>

c. Did the adjustment(s) produce the expected improvement toward meeting the project’s specific aim (item 13.a)? The program continued to build on the performance improvements from PDCA Cycle #1 and, in aggregate, the metric increased from 17% to 21%. We are still working towards achieving the overall goal of 35%, in addition to each service achieving the goal independently.

28. Summary of program performance

a. Were data collected at the level of individual providers so that an individual’s performance on target measures could be calculated and reported?
   ☒ Yes ☐ No – go to item 29

b. If easily possible, for each listed group of health care providers:
   • Participants with data available:
     ○ Indicate the number participating (if none, enter “0” and do not complete rest of row)
     ○ If any are participating, are data on performance of individuals available? (If “No”, do not complete rest of row.)
   • If data on performance are available, then enter the number of participants in three categories regarding reaching target rates (i.e. the specific aims for measures). (If you do not have this information or it is not easily available, leave the table blank.)

<table>
<thead>
<tr>
<th>Profession</th>
<th>Participants with Data Available (from #5.a)</th>
<th>Data on Performance of Individuals Available? (Enter Yes or No)</th>
<th>Number of These Participants Reaching Targets</th>
<th>If Multiple Target Rates, # Reaching All Target Rates (If only one rate, enter NA.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing Physicians</td>
<td>75</td>
<td>Yes</td>
<td>56</td>
<td>19</td>
</tr>
<tr>
<td>Residents/ Fellows</td>
<td>15</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Physicians Assistants</td>
<td>20</td>
<td>Yes</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Nurses (APNP, NP, RN, LPN)</td>
<td>250</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Other Licensed Allied Health</td>
<td>50</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
H. Readjust

29. Post-adjustment data review and further planning. Who was involved in reviewing the post-adjustment data, identifying underlying (root) causes of problem(s) resulting in these new data, and considering possible interventions (“countermeasures”) to address the causes? (Briefly describe the following.)

- **Who was involved?** (e.g., by profession or role)
  - ☒ Yes, same as #21?
  - ☐ Different than #21 (describe):

- **How?** (e.g., in a meeting of clinic staff)
  - ☒ Yes, same as #21?
  - ☐ Different than #21 (describe):

- **When?** (e.g., date(s) when post-adjustment data were reviewed and discussed)
  - July 12, 2017

*Use the following table to outline the next plan that was developed: #30 the primary causes, #31 the adjustments(second intervention) that addressed each cause, and #32 who would carry out each intervention. This is a simplified presentation of the logic diagram for structured problem solving explained at [http://ocpd.med.umich.edu/moc/process-having-part-iv-credit-designation](http://ocpd.med.umich.edu/moc/process-having-part-iv-credit-designation)* in section 2a.

Note: Adjustments(s) may result in performance achieving the targeted specific aims and the review of post-adjustment data identifies no further causes that are feasible or cost/effective to address. If so, the plan for a next cycle could be to continue the interventions/adjustments currently implemented and check that performance level(s) are stable and sustained through the next observation period.

| 30. | What were the primary underlying/root causes for the problem(s) following the adjustment(s) that the project can address? |
| 31. | What further adjustments/intervention(s) might address this cause? |
| 32. | Who would be involved in carrying out each further adjustment/intervention? (List the professions/roles involved.) |

| The major problem was still inconsistent communication within care team. | Reinforcing the standard roles, processes and resources to structure communication within service | All personnel on the service participated in developing standard roles and processes and identifying needed resources. All personnel will be expected to use the new standard work for communication within the care team. |

Note: If additional causes were identified that are to be addressed, insert additional rows.

33. Are additional PDCA cycles to occur for this specific performance effort?

- ☐ No further cycles will occur.
- ☒ Further cycles will occur, but will not be documented for MOC.

- ☐ Further cycles will occur and are to be documented for MOC. *If checked, contact the UM Part IV MOC Program to determine how the project’s additional cycles can be documented most practically.*
I. Reflections and Future Actions

33. Describe any barriers to change that were encountered during this QI effort and how they were addressed.
   1) The sheer size and complexity of the problem was a barrier to change. Appreciable resources were required, including strong executive sponsorship from the top leaders of the clinical enterprise and to resource the effort with experienced project managers to support the busy clinicians engaged in the work.
   2) It was challenging to change the workflow of, improve communication among, and coordinate/synchronize the activities of, all the diverse members of the health care team who play a role in discharging patients. Some of the root causes to early discharge that required new standard work processes included:
      ▪ There was difficulty in conducting rounding while also responsibly discharging. By prioritizing the order of the service’s rounding duties and by identifying how the different team members would divide tasks allowed a reorganization helped effectively increase patient discharges before 11AM.
      ▪ Getting patients the needed specialty services before discharge was an initial barrier. By working with PT, OT, laboratory, and Speech-Language Pathology, a reordering of work efforts enabled the necessary support for the patient’s needs so as to assist with quality discharges earlier in the day.
      ▪ Having a ride for the patient ready for early discharge was a barrier to early discharge. Making the patient and family aware earlier (improved anticipatory conversation) the day prior to discharge helped in getting schedules set so that the patient could get their educational needs met and ride established.
      ▪ When needing to complete the patient education while completing the other items needed for discharge, the patient’s nurse was overwhelmed with early AM work. Getting the patient needed discharge education by night nursing helped remove the strain of multiple needed activities just prior to discharge.

34. Describe any key lessons that were learned as a result of the QI effort.
   ▪ Set realistic goals. In retrospect, our target of 35% may have been overly-ambitious given the complexity of the CVC services.
   ▪ Taking the time up front to evaluate each unit or service’s culture and work systems is essential to incorporating best practices. Structuring the program into existing work flow where able, and changing to best practices through new work flow adapted to local conditions when needed, makes it easier to obtain the frontline healthcare workers’ buy in and support the program.
   ▪ Even patients not going home but rather to SAR or LTACH, can have priority discharge with proper set up of accepting facility, transportation, and communication.
   ▪ Determining which patients will be ready for discharge the next day requires more thoughtful evaluation of the patient’s medical readiness. This skill requires some trial and error to become part of the standard daily work.
   ▪ Learning to tolerate incremental growth of the program as consistent interventions and program changes were being made was a key lesson. Constantly looking with a critical eye to the program’s structure and accountability allows the program to build in a positive manner.
35. Describe any best practices that came out of the QI effort.

**Priority Discharge: Observed Best Practices**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Best Practices</th>
<th>Stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership Support</strong></td>
<td>• Leadership from Service, Nursing, and Care Management supports the efforts of local champions to ensure success</td>
<td>Service Chief Care Mgmt. Nursing Admin.</td>
</tr>
</tbody>
</table>
| **Patient Identification** | • Service and CM* meet daily at appointed time to identify patients  
• APT*/residents and CMs are empowered to jointly identify patients  
• Physicians actively contribute to the identification process  
• CA/RA prompts provider to follow up with CM by 1:30pm when Priority Discharge status is unclear during identification discussion | Providers Case Managers |
| **Rounding**            | • The “provider champion” who drives the discharge work attends daily rounds  
• The party with authority to clear patients for discharge attends rounds  
• Rounds ends with sufficient time to finalize the discharge plan and submit discharge orders by 9:30am (surgical services)  
• Service pre-rounds or prioritizes rounding pattern to ensure that discharge orders can be submitted by 9:30am (medical services) | Providers |
| **Case Manager Leadership** | • CM serves as daily manager of Priority Discharge plan: explicitly defines roles and responsibilities, requests specific orders needed from providers  
• CM input on logistical discharge barriers is critical to identification process  
• CM reminds providers of 2pm target for submitting ancillary service orders and 9:30am deadline for submitting discharge orders | Providers Case Managers |
| **Discharge Preparation** | • A local “provider champion” drives daily discharge work, keeps team on track  
• APT/residents update discharge documentation daily throughout stay  
• Case-specific templates used for discharge documentation | Providers |
| **Patient Population**  | • Service has defined the patient attributes favorable for Priority Discharges  
• Service targets patients with defined clinical care pathways where possible | Providers Case Managers |
| **Team Coordination**   | • Daily sign-out sent to full team, includes status of Priority Discharge patients  
• APT/residents coordinate to keep discharge documentation on track  
• Night provider advances the Priority Discharge plan to tee up the AM team  
• Culture of continuous communication about updates to the discharge plan | Providers Case Managers |
| **Patient Communication** | • Patient is updated daily on the discharge plan by the provider champion | Providers |
| **Continuity**          | • Weekly continuity among parties who own identification and discharge work | Providers Case Managers |
36. Describe any plans for spreading improvements, best practices, and key lessons.
   - Clinical Best Practices: There is now an effort to share best practices around Foley and fluid management issues both pre-operatively and during the patient’s operation that might benefit the patient’s independent voiding capabilities within their hospital stay to assist with early discharge. Planning is underway for spreading the program to units located in our Children’s and Women’s facilities.

37. Describe any plans for sustaining the changes that were made.
   - Monitoring: Consistent review of weekly data/dashboards for the discharging services, units and case management to look for changes and opportunities will continue to strengthen the program.
   - Accountability/Clarity of Responsibility: The program metric will be integrated into annual service performance goals. Each service will be required to review data quarterly with their respective Associate Chief Clinical Officer and Associate Hospital Director. Should performance fall below the expected outcome, it is the responsibility of the service to detail interventions to address performance gaps.

J. Minimum Participation for MOC

38. Participating directly in providing patient care.
   a. Did any individuals seeking MOC participate directly in providing care to the patient population?
      ☒ Yes ☐ No  If “No,” go to item #39.
   
   b. Did these individuals participate in the following five key activities over the two cycles of data-guided improvement?
      – Reviewing and interpreting baseline data, considering underlying causes, and planning intervention as described in item #14.
      – Implementing interventions described in item #16.
      – Reviewing and interpreting post-intervention data, considering underlying causes, and planning intervention as described in item #21.
      – Implementing adjustments/second interventions described in item #23.
      – Reviewing and interpreting post-adjustment data, considering underlying causes, and planning intervention as described in item #29.
      ☒ Yes ☐ No  If “Yes,” individuals are eligible for MOC unless other requirements also apply and must be met – see item # 40.

39. Not participating directly in providing patient care.
   a. Did any individuals seeking MOC not participate directly in providing care to the patient population?
      ☒ Yes ☐ No  If “No,” go to item 40.
   
   b. Were the individual(s) involved in the conceptualization, design, implementation, and assessment/evaluation of the cycles of improvement? (E.g., a supervisor or consultant who is involved in all phases, but does not provide direct care to the patient population.)
      ☒ Yes ☐ No  If “Yes,” individuals are eligible for MOC unless other requirements also apply and must be met – see item # 40. If “No,” continue to #39c..
   
   c. Did the individual(s) supervise residents or fellows throughout their performing the entire QI effort?
☐ Yes  ☒ No If “Yes,” individuals are eligible for MOC unless other requirements also apply and must be met – see item # 40.

40. Did this specific QI effort have any additional participation requirement for MOC? (E.g., participants required to collect data regarding their patients.)
☐ Yes  ☒ No If “Yes,” describe:

Individuals who want their participation documented for MOC must additionally complete an attestation form, confirming that they met/worked with others as described in this report and reflecting on the impact of the QI initiative on their practice or organizational role. Following approval of this report, the UMHS QI MOC Program will send to participants an email message with a link to the online attestation form.

K. Sharing Results

41. Are you planning to present this QI project and its results in a:
☒ Yes  ☐ No Formal report to clinical leaders?
☒ Yes  ☐ No Presentation (verbal or poster) at a regional or national meeting?
☒ Yes  ☐ No Manuscript for publication?

L. Project Organizational Role and Structure

42. UMHS QI/Part IV MOC oversight – indicate whether this project occurs within UMHS, AAVA, or an affiliated organization and provide the requested information.
☒ University of Michigan Health System
   • Overseen by what UMHS Unit/Group? (name): Office of Clinical Affairs
   • Is the activity part of a larger UMHS institutional or departmental initiative?
     ☐ No  ☒ Yes – the initiative is (name or describe): MIPART Priority Discharge Program

☐ Veterans Administration Ann Arbor Healthcare System
   • Overseen by what AAVA Unit/Group? (name):
   • Is the activity part of a larger AAVA institutional or departmental initiative?
     ☐ No  ☐ Yes – the initiative is:

☐ An organization affiliated with UMHS to improve clinical care
   • The organization is (name):
   • The type of affiliation with UMHS is:
     ☐ Accountable Care Organization (specify which member institution):
     ☐ BCBSM funded, UMHS lead state-wide Collaborative Quality Initiative (specify which):
     ☐ Other (specify):