QI Project Application for Part IV MOC Eligibility

Complete the following project description to apply for UMHS approval for participating physicians to be eligible to receive Part IV MOC credit through the Multi-Specialty Part IV MOC Pilot program. Actions regarding the application depend on the stage of the project, as described below. As stages are accomplished, you may submit updates of the application with the description of planned activities replaced by descriptions of actual activities performed. An application describing the completed project is required. Submitting earlier versions helps assure that when planned activities are carried out, they will meet Part IV requirements.

Preliminary approval. Plans have developed for the expected activities, but little actual work has been performed.

Part IV credit designation. Baseline data have been collected and the intervention performed, with completion of both steps documented on an application (or application update). The project has demonstrated its operational feasibility and the likelihood that subsequent data collections and adjustment will be performed.

Participation ("attestation") forms provided. The project has been completed with the expected sequence of activities performed and documented on an application (or application update), which is the "final report" on the project.

The introductory section asks for basic operational information. The next four sections ask about the project's activities organized within a basic sequential Plan–Do–Check–Act /Adjust–Recheck outline. The following section asks how physicians participate in the project. The last section asks about the relationship of this project to other UMHS institutional QI initiatives. Questions are in bold fond and answers should be in regular font (generally immediately below the questions). To check boxes electronically, either put an "X" in front of a box or copy and paste "☒" over the blank box.

For further information and to submit completed applications, contact either:
Terry Kowalenko, MD, UMHS Part IV Program Lead, 763-936-1671, terryk@med.umich.edu
R. Van Harrison, PhD, UMHS Part IV Program Co-Lead, 763-1425, rvh@umich.edu
Chrystie Pihalja, UMHS Part IV Program Administrator, 763-936-1671, cpihalja@umich.edu

A. Introduction

1. Date *(this version of the application):* 5/9/12

2. Title of QI project: Improving Classification of Admission Status for Patients Seen in the Emergency Department.

3. Time frame

a. At what stage is the project?

☐ Design is complete, but not yet initiated
☐ Initiated and now underway
X☐ Completed *(UMHS Part IV program began 1/1/11)*

Note: an *Annual Project Progress Report* form must be submitted annually in January while the project is underway and a final one submitted at the project's conclusion.

b. Time period

(1). Date physicians begin participating (may be in design phase): 7/1/11
(2). End date: X☐ actual January 2012 ☐ expected ___

4. QI project leader *[responsible for attesting to the participation of physicians in the project]:*

a. Name: Jason J. Ham, M.D.
b. Title: M.D. Clinical Assistant Professor of Emergency Medicine, Director of Adult Medical Observation Unit
c. Institutional/organizational unit/affiliation: Adult Medical Observation Unit, Dept of EM
d. Phone number: 734-763-7918
e. Email address: jasham@med.umich.edu

f. **Mailing address**: Department of Emergency Medicine, University of Michigan Health System, Taubman Center B1 354H

5. **What specialties and/or subspecialties are involved in this project?** IM, EM

6. **Will the funding and resources for the project come only from internal UMHS sources?**
   X☐ Yes, only internal UMHS sources
   ☐ No, funding and/or resources will come in part from sources outside UMHS, which are: _____

The Multi-Specialty Part IV MOC Program requires that projects engage in change efforts over time, including at least three cycles of data collection with feedback to physicians and review of project results. Some projects may have only three cycles while others, particularly those involving rapid cycle improvement, may have several more cycles. The items below are intended to provide some flexibility in describing project methods. If the items do not allow you to reasonably describe the methods of your specific project, please contact the UMHS Part IV MOC Program office.

B. Plan

7. **General goal**

   a. **Problem/need. What is the "gap" in quality that resulted in the development of this project? Why is this project being undertaken?** InterQual criteria sometimes classify patients as needing observation (observation status) when the patient's condition is serious enough for inpatient admission to occur (Inpatient status). Physicians working in the Acute Medical Observation Unit (AMOU) may clinically determine that a patient initially classified as observation status is sufficiently ill to go directly to inpatient care. However, the classification status of the patient may not be reviewed and patients needing and requiring inpatient care may be eventually discharged while staff classified as observation rather than inpatient. This results in high patient copays, inappropriate placement of Inpatients in Observation beds, hospital funding losses, and no credit toward Nursing Home placement.

   b. **Project aim. What aspects of the problem does this project aim to improve?** Improve the accuracy and efficiency of determining the appropriate classification status (observation or inpatient) of patients classified by InterQual as needing observation, but the AMOU physician clinically determines should be admitted as an inpatient. This will be accomplished by creating a process that notifies the Utilization Review (UR) dept. of AMOU physician initiated Clinical Denials (denying appropriateness of classification as observation status) to create a priority list of patients who need expedited review. Upgrading the AMOU admission form to reflect UR needs may improve the accuracy of InterQual reviews. Success in this process may move the decision process upstream, closer to the ED decision to admit, with further admission process restructuring.

8. **Patient population. What patient population does this project address.** All adult medical patients who meet Observation Status classification upon submission of admission from the ED.

9. **Targeted causes. What are the primary underlying/root causes for the problem (see 6.a) that the project can address?** When patients are admitted, they are first reviewed by Bed Control using InterQual criteria for status. These criteria have a high false negative rate for meeting inpatient status, resulting in some "Inpatient Status" patients getting referred to "Observation Status" areas (AMOU). Identifying these mismatches following the initial bed control InterQual review moves these patients to

an appropriate Inpatient Bed, and notifying Utilization Review (UR) of this discrepancy, patient' status, bed, and financial expectations will be more accurate.

10. What is the experimental design for the project?

X☐ Pre-post comparisons (baseline period plus two or more follow-up measurement periods)
☐ Pre-post comparisons with control group
☐ Other: _____

11. Baseline measures of performance:

a. What measures of quality are used? If rate or %, what are the denominator and numerator? InterQual Screens at time of Bedslip submission, AMOU Doctor Clinical Denials, Final discharge Status observation vs. inpatient determination at time of discharge.

Denominator: # of Patients that (1) InterQual classified as "Observation Status" and (2) AMOU physician subsequently "clinically denied" the classification of "Observation Status, recommending instead that the patient be classified as "Inpatient Status."

Numerator: # of above patients who were discharged with classification of "Inpatient Status"

b. Are the measures nationally endorsed? If not, why were they chosen?
InterQual Screens are nationally standardized by McKessen Corporation.

c. What is the source of data for the measure (e.g., medical records, billings, patient surveys)?
1. Medical records (initial InterQual status determination).
2. Physician Logs (AMOU Clinical Denials).
3. Medical Records (Final Utilization Review of InterQual status).

d. How reliable are the data being collected for the purpose of this project?
Data entry error, InterQual determination error is infrequent (no known rate).

e. How are data to be analyzed over time, e.g., simple comparison of means, statistical test(s)?
Change in percent of these patients who are discharged with classification of Inpatient status.

f. To whom are data reported?
Reported to Medical Observation Service (MOS) and the Department of Admission and Bed Control (ABCC).

g. When did the baseline data collection occur?
8/1/11 – 8/15/11

12. Specific performance objectives

a. What is the overall performance level(s) at baseline?
Baseline Numerator/Denominator 40%

Time Period	Number of Patients InterQual Classified as "Observation Status" and Clinically Denied by AMOU Physician (i.e. should be inpatient status)	Number of These Patients Discharged as "Inpatient Status"	Percent of These Patients Discharged as Inpatient status
Baseline: 8/1/11 – 8/15/11	62	25	40%

b. What are the targets for future performance on the measures?
Numerator/Denominator of 60% or greater

c. How were the performance targets determined, e.g., regional or national benchmarks?
There is no national benchmark. Improved performance goal was determined by author consensus.

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

X☐ Safety	X☐ Equity	X☐ Timeliness
X☐ Effectiveness	X☐ Efficiency	X☐ Patient-Centeredness

C. Do

14. Intervention(s).

a. Describe the interventions implemented as part of the project.
Re-Tool the AMOU Admission Form to include details of reasons for clinical denials that can be understood/reviewed by the Dept. of Utilization Review (Done, see versions 1,2).
Educate AMOU Physicians about the new process and form (Done and ongoing).
Fast Track the AMOU Physician initiated Clinical Denials to the UR Dept. to prioritize conversion of status to Inpatient (Done, see fax form).

b. How do the interventions address underlying/root causes (see #9)?
Recognize the Gap, create a focus to highlight, prioritize the discrepancy for review and upgrading.

15. Who is involved in carrying out the intervention(s) and what are their roles?
AMOU Physician, Utilization Review Dept.

16. When will/did the intervention(s) occur?
9/13/11: New AMOU Admission form was implemented.
9/13/11: AMOU physicians educated as to importance and use of new form.

D. Check

17. Post-intervention performance measurement. Is this data collection to follow the same procedures as the initial collection of data described in #11: population, measure(s), and data source(s)?

X☐ Yes ☐ No – If no, describe how this data collection

18. Data collection following the intervention.

a. The collection of performance data following the intervention either:
Will occur on:
Has occurred on: September 15-30, 2011

b. If the data collection has occurred, what is post-intervention performance level?

Time Period	Number of Patients InterQual Classified as "Observation Status" and Clinically Denied by AMOU Physician (i.e.	Number of These Patients Discharged as "Inpatient Status"	Percent of These Patients Discharged as Inpatient status

	should be inpatient status)		
Baseline: 8/1/11 – 8/15/11	62	25	40%
Post-Intervention: 9/15-30/11	36	24	67%

E. Act/Adjust

19. Following the collection of post-intervention data:

a. When did/will the review of post-intervention data and plans for adjustments occur?
When did 19 a-b occur
October 4, 2011

b. How did/will the following processes occur:
- **Review the most recent performance data to identify current problems**
- **Analyze the current underlying causes of those problems**
- **Redesign the intervention to address underlying causes**

Co Leaders reviewed and analyzed the data. Consideration of adjusting the AMOU Clinical Denial form was not required due to improvement in results. Results of the study were shared with AMOU Faculty and ABCC leadership.

c. When did/will the adjustment (second intervention) occur?
October 1-31, 2011

d. If the adjustment has occurred, (1) what problems were identified in the review and (2) what adjustments/interventions occurred to addressed those problems?
The form and procedures worked well when they were followed. The main problem was that AMOU physicians sometimes did not utilize the form and procedures. At a regular meeting of AMOU physicians the data regarding improvement in patient classification at discharge was shared and the importance of utilizing the form and procedures were reviewed and reinforced.

20. Data collection following the adjustment(s).

a. The collection of performance data following the adjustment(s) either:
Will occur on:
Has occurred on: October 1-31, 2011

b. If the data collection has occurred, what is post-adjustment(s) performance level?

Time Period	Number of Patients InterQual Classified as "Observation Status" and Clinically Denied by AMOU Physician (i.e. should be inpatient status)	Number of These Patients Discharged as "Inpatient Status"	Percent of These Patients Discharged as Inpatient status
Baseline: 8/1/11 – 8/15/11	62	25	40%
Post-Intervention: 9/15-30/11	36	24	67%
Post-Adjustment 10/1-31/11	113	71	63%

21. Following the third (post-adjustment) collection of data:

a. When did/will the review of post-adjustment data occur?
November 3, 2011

b. How did/will the following processes occur:
- **Review the most recent performance data to identify current problems**
- **Analyze the current underlying causes of those problems**
- **Redesign the intervention to address underlying causes**

The data revealed stability in the process. The process will be moved upstream in the admitting process after a new system-wide program is implemented (MiChart).

c. If the post-adjustment review has occurred, what problems were identified in the review?
A large gap (35%) still occurs between AMOU physician's clinical denial of observation status and the official status reported at hospital discharge. Likely factors contributing to this remaining gap include: AMOU physician behavior, InterQual inadequacies, Dept. of Utilization Review work flow, need for real time Physician Reviews of InterQual status. These have been considered and prioritized for subsequent action.

22. How many subsequent PDCA cycles are to occur?
2 were completed total. (More will occur after new system-wide program is implemented this summer.)

23. How will the project standardize processes to maintain improvements?
Established accuracy of AMOU Phisician Intitated Clinical Denials.
Supports an admission filter beyond InterQual for accuracy of the admission process.

24. Do other parts of UMHS face a similar problem? If so, how will the project be conducted so that improvement processes can be communicated to others for "spread" across applicable areas?
Surgery Admissions and Pediatric Admission

F. Physician Involvement

Note: To receive Part IV MOC a physician must both:
a. Be actively involved in the QI effort, including at a minimum:
- *Work with care team members to plan and implement interventions*
- *Interpret performance data to assess the impact of the interventions*
- *Make appropriate course corrections in the improvement project*

b. Be active in the project for the minimum duration required by the project

25. Physician's role. What are the minimum requirements for physicians to be actively involved in this QI effort?
A physician must understand the complexity of a patient beyond what is captured by InterQual and what criteria are needed for clinical denial to the AMOU, provider care in the QI project, implement changes to improve patient care as guided by the project leadership, actively participate or supervise data collection as part of this project, and review project data that reflect care the physician provided during the project.

26. If not addressed in #25, in conjunction with each cycle of data collection, what local (physician-level or practice/unit-level) feedback report and what overall project level report will be provided to physicians?

% of AMOU initiated clinical denials that end up as “Inpatient” status upon discharge from an inpatient location.

27. **If not addressed in # 25, how are reflections of individual physicians about the project utilized to improve the overall project?**
Individual physician reflections were used to create and retool the AMOU Clinical Denial form. Faculty meetings were used to further understand the process of how InterQual is used for Observation and Inpatient status and the discrepancies with the actual clinical status of a patient.

28. **How will the project ensure meaningful participation by physicians who subsequently request credit for Part IV MOC participation?**
Includes principals of consideration and inclusion of other Health System departments when changing a process/form. Sheds light in the complexity of the admission process in synchronicity with appropriate billing status (Observation or Inpatient). Involves data collection and analysis.

29. **What is the approximate number of physicians anticipated to participate in this project?** ***[Provide number or range – by specialties and/or subspecialties if more than one.]***
Total of 3: One Internal Medicine trained and certified, one Emergency Medicine/Internal Medicine trained and jointly certified, and one Family Medicine trained physician and EM certified.

G. Project Organizational Role and Structure

30. **Is this project part of a larger UMHS institutional or departmental initiative?**
☐ Yes X☐ No *If No, go to #31.*

    a. **What UMHS unit/group is overseeing or coordinating the larger initiative?**

    b. **What is the larger initiative?**

    c. **How does this project advance it?**

    d. **Is this project coordinated with related quality improvement activities?**

    e. **Has someone at a higher institutional level authorized/approved this project? If so, who?**

31. **What is the organizational structure of the project?** ***[Include who is involved, their general roles, and reporting/oversight relationships.]***
Jason J. Ham, M.D., Rawden Evans, M.D., Andy Barnosky, D.O. Co-Leaders

32. **Are resources needed beyond those under the control of the project lead(s) ?**
☐ Yes X☐ No *If No, go to #33.*

    a. **What types of resources are needed and who has agreed to provide them?**

33. **To what oversight person or group will project-level reports be submitted for review?**
Dr. Ham, Director AMOU

34. Have UMHS physicians who will participate in this project had the opportunity to participate in a UMHS Part IV project within the past two years?

☐ Yes X☐ No

a. If "Yes," why do these physicians need more frequent opportunities for Part IV credit *(e.g., board gives additional credit for more Part IV activities in a time period; qualify for CMS incentive payment)*?