

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

Improving Surgical Plan Development and Communication for Congenital Heart Center Patients

Instructions

Determine eligibility. Before starting to complete this report, go to the Michigan Medicine MOC website [<http://www.med.umich.edu/moc-qi/index.html>], 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 Michigan Medicine 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 1-18.) Staff from the Michigan Medicine 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:

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Report Outline

Section	Items
A. Introduction	1-6. Current date, title, time frame, key individuals, participants, funding
B. Plan	7-8. Patient population, general goal 9-11. Measures, baseline performance, specific aims 12-15. Baseline data review, underlying (root) causes, interventions, who will implement
C. Do	16. Intervention implementation date
D. Check	17-18. Post-intervention performance
E. Adjust – Replan	19-22. Post-intervention data review, underlying causes, adjustments, who will implement
F. Redo	23. Adjustment implementation date
G. Recheck	24-26. Post-adjustment performance, summary of individual performance
H. Readjust plan	27-30. Post-adjustment data review, underlying causes, further adjustments, who will implement
I. Participation for MOC	31-33. Participation in key activities, other options, other requirements
J. Sharing results	34. Plans for report, presentation, publication
K. Organization affiliation	35. 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*): 08/13/2020

2. **Title of QI effort/project** (*also insert at top of front page*):

Improving Surgical Plan Development and Communication for Congenital Heart Center Patients

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 #12c*):

August 2019

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 #27c*):

June 30, 2020

4. **Key individuals**

a. **QI project leader** [*also responsible for confirming individual's participation in the project*]

Name: Gabe Owens, M.D.

Title: Associate Professor of Pediatrics, Medical School

Organizational unit: Pediatrics - Cardiology

Phone number: 734-936-8997

Email address: gabeo@med.umich.edu

Mailing address:

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Floor 11 C&W

1540 East Hospital Drive

Ann Arbor MI 48109-4204

b. **Clinical leader who oversees project leader regarding the project** [*responsible for overseeing/"sponsoring" the project within the specific clinical setting*]

Name: John Charpie, M.D.

Title: Amnon Rosenthal Collegiate Professor of Pediatric Cardiology and Professor of Pediatrics, Medical School

Organizational unit: Pediatrics - Cardiology

Phone number: 734-936-8993

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Mailing address:

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5. **Participants. Approximately how many physicians (by specialty/subspecialty and by training level) and physicians' assistants participated for MOC?**

Participating for MOC	Primary Specialty	Subspecialty, if any	Number
Practicing physicians	Cardiology	EP, ECHO	8
Residents/Fellows			0
Physicians' Assistants	(N/A)	(N/A)	1

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

- Internal institutional funds (e.g., regular pay/work, specially allocated)
- Grant/gift from pharmaceutical or medical device manufacturer
- Grant/gift from other source (e.g., government, insurance company)
- Subscription payments by participants
- Other source (*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):

Children (All Ages) who are Surgical Patients with Congenital Heart Disease, and who are seen/treated at Michigan Medicine's Congenital Heart Center (CHC), both Inpatient and admit day of procedure (ADP)

8. General purpose.

a. Problem with patient care ("gap" between desired state and current state)

(1) What should be occurring and why should it occur (benefits of doing this)?

Having Cardiologists, ECHO Cardiologists, PA, Anesthesiologists, Surgeons, Residents, & Fellows participate in the discussions around, development and finalization of each patient's surgical plan prior to treatment is important to ensure the most appropriate approach for the patient's condition and is taken in the safest way. Documentation of the surgical plan should be located in the patient's chart so all care team members have access to the information, which helps ensure continuity of care across the continuum. It is also important to have this information in the patient's chart and not sent out/shared via email or other non-EMR methods to protect patient information from being shared inappropriately.

(2) What is occurring now and why is this a concern (costs/harms)?

Currently, the responsibility of developing the surgical plan for each patient is the responsibility of the primary cardiologist and surgeon. Comprehensive review of the surgical plan from all senior faculty within the CHC only takes place for about 10% of patients on service, however, the ideal goal, to provide best care to all patients, would be to have this review performed for 100% of patients. Currently, communication/documentation of the plan is located external to the patient's chart in something called the "Pre-Intervention Form" created internally using a system that can only be accessed from specific computers at Michigan Medicine. When a senior faculty member or multiple members are not involved in the review of a surgical plan, critical experience and viewpoints may be missing from the conversation. In this case, the surgical

plan may not be comprehensive and the patient may receive more or less than the optimal and appropriate amount of care.

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

The project's goal is to improve: 1) surgical plans through more comprehensive input from the interdisciplinary team, and 2) to improve the efficiency and effectiveness of communicating and documenting surgical plans for all Congenital Heart Center patients. This will be achieved by implementing InDepth Conversations for inpatients and improving Monday Conferences for ADP (Admit Day of Procedure) patients, and also by creating and implementing a tool within the EMR (EPIC/MiChart) that will allow the clinical team to electronically document conversations/plans discussed during these conversations/conferences. The tool is located in one specific location within the EMR and is a standardized template for information to be entered and updated specific to a patient's procedure/plan of care. Use of this tool along with the InDepth Conversations and Monday Conferences will improve the efficiency and inclusiveness of surgical plans, improve the safety of the patients care by ensuring continuity among the members of the care team, and improve the satisfaction of the team with the surgical plan development process.

9. 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** (e.g., Percent of . . . , Mean of . . . , Frequency of . . .):

% of CHC inpatients with InDepth Discussion

- **Measure components** – describe the:

Denominator (e.g., for percent, often the number of patients eligible for the measure):

Total number of CHC surgical inpatients

Numerator (e.g., for percent, often the number of those in the denominator who also meet the performance expectation):

Total number of CHC surgical inpatients with an InDepth Discussion MiChart (Electronic Health Record) Activity Report

- **The source of the measure is:**

An external organization/agency, which is (name the source, e.g., HEDIS):

Internal to our organization

- **This is a measure of:**

Process – activities of delivering health care to patients

Outcome – health state of a patient resulting from health care

10. Baseline performance

a. What were the beginning and end dates for the time period for baseline data on the measure(s)?

January 2019 to June 2019

- b. What was (were) the performance level(s) at baseline?** *Display in a data table, bar graph, or run chart (line graph). Can show baseline data only here or refer to a display of data for all time periods attached at end of report. Show baseline time period, measure names, number of observations for each measure, and performance level for each measure.*

Measures	Baseline* 1/1/19 – 6/30/19	Goal
CHC Inpatients with InDepth Discussion N CHC Inpatients % with InDepth Discussion	0 NA	90%

*Not yet using InDepth Discussion or EMR Tool

11. 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].”*

The EMR documentation tool will be built, tested and implemented in MiChart (EMR).
By 6/30/2020 we aim to have InDepth Discussion performed and MiChart Activity Form (documentation) completed for 90% of all inpatient CHC surgical patients.

- b. How were the performance targets determined, e.g., regional or national benchmarks?**

The specific aims were based on initial interest/goals of the team and their knowledge of best practices at other institutions reflecting a commitment to reviewing/discussing all of their surgical cases.

12. 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.)

- a. Who was involved?** (e.g., by profession or role)
Cardiologist, surgeons, nursing, techs, ECHO, Anesthesiologists, Residents, Fellows and IT
- b. How?** (e.g., in a meeting of clinic staff)
Bi-weekly design reviews with clinical staff to review current state and proposed future state tools
- c. When?** (e.g., date(s) when baseline data were reviewed and discussed)
8/21/2019

Use the following table to outline the plan that was developed: #13 the primary causes, #14 the intervention(s) that addressed each cause, and #15 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:

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

13. What were the primary underlying/root causes for the <u>problem(s) at baseline</u> that the project can address?	14. What intervention(s) addressed this cause?	15. Who was involved in carrying out each intervention? (List the professions/roles involved.)
Not all care team members know the surgical plan or don't know where to find the surgical plan	Create a standardized activity report in MiChart where plan is documented and is accessible by everybody on care team	Physicians, PA & IT
Comprehensive reviews not done on most surgical plans - All faculty only give input on the most critical cases performed by the CHC	InDepth team will be formed that includes all faculty and meets every morning, as needed, to discuss all inpatient cases.	Physicians, PA, IT, & Entire Care Team

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

C. Do

16. By what date was (were) the intervention(s) initiated? (If multiple interventions, date by when all were initiated.)
InDepth Activity Report: November 20, 2019

D. Check

17. Post-intervention performance measurement. Are the population and measures the same as those for the collection of baseline data (see item 9)?
 Yes No – If no, describe how the population or measures differ:

18. Post-intervention performance

- a. **What were the beginning and end dates for the time period for post-intervention data on the measure(s)?**
12/18/2019 – 1/7/2020
- b. **What was (were) the overall performance level(s) post-intervention?** Add post-intervention data to the data table, bar graph, or run chart (line graph) that displays baseline data. Can show baseline and post-intervention data incrementally here or refer to a display of data for all time periods attached at end of report. Show baseline and post-intervention time periods and measure names and for each time period and measure show number of observations and performance level.

Measures	Baseline* 1/1/19 – 6/30/19	Post-Intervention 12/18/19 – 1/7/20	Goal
CHC Inpatients with InDepth Discussion N CHC Inpatients % with InDepth Discussion	0% NA	100%	90%

*Not yet using InDepth Discussion or EMR Tool

- c. **Did the intervention(s) produce the expected improvement toward meeting the project’s**
 Yes, the interventions produced the expected improvement toward meeting the project’s specific aims. We achieved 100% InDepth Discussions.

E. Adjust – Replan

19. 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.)

a. **Who was involved?** (e.g., by profession or role)

- Same as #12? Different than #12 (describe):

b. **How?** (e.g., in a meeting of clinic staff)

- Same as #12? Different than #12 (describe):

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

1/7/2020

Use the following table to outline the next plan that was developed: #20 the primary causes, #21 the adjustments/second intervention(s) that addressed each cause, and #22 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.

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.

20. What were the primary underlying/root causes for the <u>problem(s)</u> following the <u>intervention(s)</u> that the project can address?	21. What adjustments/second intervention(s) addressed this cause?	22. Who was involved in carrying out each adjustment/second intervention? (List the professions/roles involved.)
Discontent with format of current form	Redesigned form based on user feedback Educate physicians about changes	Physicians, PA, & IT
Discontent with how to access the current form	Created way to access form from Patient Conference List and InDepth Patient Discussion List in MiChart to access and view upcoming patients Educate physicians on how to access form and view upcoming patients.	Physicians, PA & IT

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

F. Redo

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

1/7/2020

G. Recheck

24. Post-adjustment performance measurement. Are the population and measures the same as indicated for the collection of post-intervention data (item #19)?

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

25. Post-adjustment performance

a. What were the beginning and end dates for the time period for post-adjustment data on the measure(s)?

1/7/2020 – 2/7/2020

b. What was (were) the overall performance level(s) post-adjustment? *Add post-adjustment data to the data table, bar graph, or run chart (line graph) that displays baseline and post-intervention data. Can show here or refer to a display of data for all time periods attached at end of report. Show time periods and measure names and for each time period and measure show the number of observations and performance level.*

Measures	Baseline* 1/1/19 – 6/30/19	Post- Intervention 12/18/19 – 1/7/20	Post- Adjustment 1/7/20 – 2/7/20	Goal
CHC Inpatients with InDepth Discussion N CHC Inpatients % with InDepth Discussion	0% NA	100%	100%	90%

*Not yet using InDepth Discussion or EMR Tool

c. Did the adjustment(s) produce the expected improvement toward meeting the project’s specific aim (item 11.a)?

Yes, the interventions produced the expected improvement toward meeting the project’s specific aims. We achieved and sustained 100% InDepth Discussions.

H. Readjust

26. 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.)*

a. Who was involved? *(e.g., by profession or role)*

Same as #19? Different than #19 *(describe):*

b. How? *(e.g., in a meeting of clinic staff)*

Same as #19? Different than #19 *(describe):*

- c. **When?** (e.g., date(s) when post-adjustment data were reviewed and discussed)
6/30/2020

Use the following table to outline the next plan that was developed: #27 the primary causes, #28 the adjustments(s)/second intervention(s) that addressed each cause, and #29 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> 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.

27. What were the primary underlying/root causes for the <u>problem(s)</u> following the <u>adjustment(s)</u> that the project can address?	28. What further adjustments/ intervention(s) might address this cause?	29. Who would be involved in carrying out each further adjustment/intervention? (List the professions/roles involved.)
Not all care team members had access to the form	Make the forms available to the PCTU nurses	Physicians, PA & IT
Inability to document multiple forms for same patient within same encounter	2 nd form added	Physicians, PA & IT

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

30. 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. *If checked, summarize plans:* After achieving success with the InDepth process, the CHC group is now working to develop a similar process/tool for outpatients, where the care team discusses plans in a Monday Conference. The InDepth tool will be modified and implemented to accommodate these cases.

I. Minimum Participation for MOC

31. 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 #32.*

- 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 #12.
- Implementing interventions described in item #14.
- Reviewing and interpreting post-intervention data, considering underlying causes, and planning intervention as described in item #19.
- Implementing adjustments/second interventions described in item #21.

- Reviewing and interpreting post-adjustment data, considering underlying causes, and planning intervention as described in item #26.

Yes No *If “Yes,” individuals are eligible for MOC unless other requirements also apply and must be met – see item # 38.*

32. 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 33.*

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 # 38. If “No,” continue to #37c.*

c. Did the individual(s) supervising 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 # 33.*

33. 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.

J. Sharing Results

34. Are you planning to present this QI project and its results in a:

Yes No Formal report to clinical leaders? Results have been presented to CHC Quality Committee

Yes No Presentation (verbal or poster) at a regional or national meeting? Process presentation submitted/accepted by LSS World Conference in Orlando, FL (postponed from 3/26/2020)

Yes No Manuscript for publication?

K. Project Organizational Role and Structure

35. 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):* Clinical Design and Innovation
- **Is the activity part of a larger UMHS institutional or departmental initiative?**

- No Yes – the initiative is (*name or describe*): Congenital Heart Center Reduction of SSIs

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*):