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

Improving Chlamydia Screening Rates in Family Medicine: Addressing Process and Individual Barriers

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. Reflections & plans	31-35.	Barriers, lessons, best practices, spread, sustain
J. Participation for MOC	36-38.	Participation in key activities, other options, other requirements
K. Sharing results	39.	Plans for report, presentation, publication
L. Organization affiliation	40.	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):* 11/14/2018

2. Title of QI effort/project *(also insert at top of front page)***:** Improving Chlamydia Screening Rates in Family Medicine: Addressing Process and Individual Barriers

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)**:*** 2/15/2018

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)*: 11/15/2018

4. Key individuals

a. QI project leader *[also responsible for confirming individual's participation in the project]*
Name: Kathryn M Harmes, MD, MHSA
Title: Associate Chair of Population Medicine
Organizational unit: Department of Family Medicine
Phone number: 734-232-6222
Email address: jordankm@med.umich.edu
Mailing address: 300 North Ingalls St., Ann Arbor MI 48109-5435

b. Clinical leader who oversees project leader regarding the project *[responsible for overseeing/"sponsoring" the project within the specific clinical setting]*
Name: Same as above.
Title:
Organizational unit:
Phone number:
Email address:
Mailing address:

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	Family Medicine		61
Residents/Fellows	Family Medicine		24
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)***:** Adult and pediatric female patients ages 16-24 seen twice in the past two years by Family Medicine clinic with one of those visits in the past 365 days.

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)?
Chlamydia infections in female patients can be asymptomatic, and if left untreated can lead to infertility. All sexually active female patients between the ages of 16 and 24 should be screened annually for asymptomatic infection (USPSTF Grade B). The 2017 Michigan Medicine 90th percentile goal for screening of women within this age range is 73%.

(2) What is occurring now and why is this a concern (costs/harms)?
The 2017 Family Medicine rate of chlamydia screening was 42% of patients between the ages of 16 and 17, and 65% of patients between the ages of 18 to 24. Inadequate screening could lead to underdiagnosis of asymptomatic chlamydia infection with downstream individual and public health consequences.

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 #11.)
Our goal is to increase Family Medicine screening rates for patients between the ages of 16 and 24 to 73% or above (i.e., the Michigan Medicine goal) by December 31, 2018.

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 . . .)***:** Pediatric Preventive Care, Chlamydia Screening

- **Measure components** – *describe the:*

Denominator *(e.g., for percent, often the number of patients eligible for the measure)*:
Total number of female patients 16-17 years of age who have been seen over the past year, including patients who declined the service.

Numerator *(e.g., for percent, often the number of those in the denominator who also meet the performance expectation)*: The number of these patients who have had at least one chlamydia screening test in the past year.

- **The source of the measure is:**
  - ☐ An external organization/agency, which is *(name the source)*:
  - ☒ Internal to our organization and it was chosen because *(describe rationale)*: Family Medicine chose this metric as a priority for 2018 because it was a goal for Michigan Medicine we were not meeting. Our screening rates have not shown improvement over time.
- **This is a measure of:**
  - ☒ Process – activities of delivering health care to patients
  - ☐ Outcome – health state of a patient resulting from health care

Measure 2

- **Name of measure** *(e.g., Percent of . . ., Mean of . . ., Frequency of . . .)***:** Adult Preventive Care, Chlamydia Screening
- **Measure components** – *describe the:*

  Denominator *(e.g., for percent, often the number of patients eligible for the measure)*: Total number of female patients age 18-24 years of age who have been seen over the past year, including patients who declined the service.

  Numerator *(e.g., for percent, often the number of those in the denominator who also meet the performance expectation)*: The number of these patients who have had at least one chlamydia screening test in the past year.
- **The source of the measure is:**
  - ☐ An external organization/agency, which is *(name the source)*:
  - ☒ Internal to our organization and it was chosen because *(describe rationale)*: Family Medicine chose this metric as a priority for 2018 because it was a goal for Michigan Medicine we were not meeting. Our screening rates have not shown improvement over time.
- **This is a measure of:**
  - ☒ Process – activities of delivering health care to patients
  - ☐ Outcome – health state of a patient resulting from health care

(If more than two measures are tracked across the two cycles, copy and paste the section for a measure and describe the additional measures.)

10. Baseline performance

a. What were the beginning and end dates for the time period for <u>baseline</u> data on the measure(s)? 1/1/17-12/31/17

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.*

Measure	Baseline (12/31/2017)
Pediatric Preventive Care, Chlamydia Screening	
N Female Patients Age 16-17 Yrs	400
% with Chlamydia Screen	42%
Adult Preventive Care, Chlamydia Screening	
N Female Patients Age 18-24 Yrs	2236
% with Chlamydia Screen	65%

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]."*

Our goal is to increase Family Medicine screening rates for both pediatric patients ages 16-17 and adult patients ages 18-24 to 73% or above (i.e., the Michigan Medicine goal) by December 31, 2018.

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

Performance targets are internal standards set by the University of Michigan Medical Group internal standards.

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)*
Faculty Physicians
Family Medicine Residents
Family Medicine Fellows
Physician Assistants
MA Staff
Clinic Site Leadership

b. How? *(e.g., in a meeting of clinic staff)*
Faculty Meeting
Family Population Improvement Group (FPIG) – Departmental

Site-based QI committees
Site-based staff meetings

c. **When?** *(e.g., date(s) when baseline data were reviewed and discussed)*
Baseline data was discussed at the 2/21/2018 FPIG meeting and subsequent site meetings.

The data and project were presented at the 2/28/2018 Faculty Meeting.

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***
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.*

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.)*
Variable MA training and orientation regarding BPA processes triggering chlamydia screening	Develop standardized training materials and deployment of training.	Project Manager, Medical Directors, Site Managers, Site Physicians, Residents, Fellows, Physician Assistants, MA Leads, MA staff representation
Unclear expectations of MA role with regard to chlamydia screening.	Clarification of expectations.	Project Manager, Medical Directors, Site Managers, Site Physicians, Residents, Fellows, Physician Assistants, MA Leads
Monitoring of performance not systematic.	Development and implementation of a plan for monitoring performance.	Project Manager, Medical Directors, Site Managers, MA Leads

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 initiate*d.) 4/1/2018

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)?
4/1/2018-6/30/2018

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.*

Measure	Baseline (12/31/2017)	3 Months Post-Intervention (6/30/2018)
Pediatric Preventive Care, Chlamydia Screening		
N Female Patients Age 16-17 Yrs	400	383
% with Chlamydia Screen	42%	48%
Adult Preventive Care, Chlamydia Screening		
N Female Patients Age 18-24 Yrs	2236	2239
% with Chlamydia Screen	65%	65%

c. Did the intervention(s) produce the expected improvement toward meeting the project's specific aim (item 11.a)? No. While some increase occurred for pediatric patients, no change occurred for adult patients.

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)*
8/15/2018

Use the following table to outline the next plan that was developed: #20 the primary causes, #21 the adjustments(s)/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 problem(s) following the intervention(s) 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.)*
MA staff not consistently following standard process	Continued education and accountability for MA staff	Medical Directors, Site Manager, MA lead, MA staff
Physician attitudes regarding screening population	Education on importance of chlamydia screening. Open discussion regarding use of targeted vs universal screening practices.	Associate Chair of Clinical Programs, Associate Chair of Population Medicine, Faculty Physicians, Residents, Fellows, and Physician Assistants

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.)*
8/22/2018

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 <u>post-adjustment</u> data on the measure(s)?
8/22/2018 – 9/30/2018

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.*

Measure	Baseline (12/31/2017)	3 Months Post-Intervention (6/30/2018)	1 Month Post-Adjustment (9/30/2018)
Pediatric Preventive Care, Chlamydia Screening			
N Female Patients Age 16-17 Yrs	400	383	386
% with Chlamydia Screen	42%	48%	49%
Adult Preventive Care, Chlamydia Screening			
N Female Patients Age 18-24 Yrs	2236	2239	2194
% with Chlamydia Screen	65%	65%	67%

d. **Did the adjustment(s) produce the expected improvement toward meeting the project's specific aim (item 11.a)?**

Improvement in the metric was seen for both pediatric and adult patients. We did not, however, achieve our screening rate goal of 73% or above.

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)*

Data was reviewed at a Faculty meeting on 11/14/2018.

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 problem(s) following the adjustment(s) 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.)*
Lack of provider engagement consensus on screening protocol	Continued discussion at faculty meetings	Faculty, Residents, Fellows, PA
Non-adherence to standard clinic workflow processes	Continued monitoring of BPA utilization by staff	Site leadership – Medical Directors, Office Managers

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:*

☐ 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 [OPTIONAL]

31. Describe any barriers to change (i.e. problems in implementing interventions listed in #14 and #21) that were encountered during this QI effort and how they were addressed.

32. Describe any key lessons that were learned as a result of the QI effort.

33. Describe any best practices that came out of the QI effort.

34. Describe any plans for spreading improvements, best practices, and key lessons.

35. Describe any plans for sustaining the changes that were made.

J. Minimum Participation for MOC

36. 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 #37.*

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.*

37. 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 38.*

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 # 38.*

38. 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

39. 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

40. 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):* Department of Family Medicine
- **Is the activity part of a larger UMHS institutional or departmental initiative?**

☒ No ☐ Yes – the initiative is *(name or describe*):

☐ **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):*