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

Improving Use of COPD Assessment Test (CAT) in Clinic – Wave 1 (Taubman Center)

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:
J. Kin, MHA, JD, Michigan Medicine Part IV Program Co-Lead, 734-764-2103, jkin@umich.edu
Tasha Vokally, JD, Michigan Medicine Part IV Program Co-Lead, tcronenw@umich.edu
Ellen Patrick, Michigan Medicine 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	7-8.	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):* 2/17/21

2. Title of QI effort/project *(also insert at top of front page)***:** Improving use of COPD Assessment Test (CAT) in clinic

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 1, 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)*: February 15, 2021

4. Key individuals

a. QI project leader *[also responsible for confirming individual's participation in the project]*
Name: Tammy Ellies
Title: Manager, Quality Program
Organizational unit: Internal Medicine Department
Phone number: 734-998-5662
Email address: tmrice@med.umich.edu
Mailing address: 1500 East Medical Center Dr., UH South Unit 4, Room F4323, SPC 5220, Ann Arbor, MI 48109

b. Clinical leader who oversees project leader regarding the project *[responsible for overseeing/"sponsoring" the project within the specific clinical setting]*
Name: Rommel Sagana MD
Title: Associate Professor of Internal Medicine, Medical School
Organizational unit: Division of Pulmonary and Critical Care Medicine, Internal Medicine Department
Phone number: 734-763-907
Email address: rommel@med.umich.edu
Mailing address: UMH Int Med Pulm & Critical Care, 1500 E Medical Ctr Dr 3916 Taubman Center, Ann Arbor MI 48109-5360

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

Participating for MOC	Primary Specialty Pulm	Subspecialty	Number
Practicing physicians	41		
Residents/Fellows	16		
Physicians' Assistants	(N/A)	(N/A)	

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)***:**

Patients >40 years of age seen by Pulmonology providers at the University of Michigan Taubman Center outpatient clinic. The target patients for intervention are the subset of the population not meeting the current performance measure for Chronic Obstructive Pulmonary Disease (COPD) Assessment Test (CAT) completion.

Patient Criteria:

- Established Patient: Patients must be alive and seen at least twice in a Michigan Medicine ambulatory care setting (Primary Care or Pulmonology), with at least one visit in the last 365 days.
- Patient is on the MiChart (electronic medical record) COPD Clinical Quality Registry

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)?

All patients with COPD should complete the COPD Assessment Test (CAT) at every visit, but at a minimum once per year. The CAT is a validated questionnaire tool for assessing the impact of COPD on wellbeing and daily life. The CAT is a very well recognized symptom instrument for COPD. The Global Initiative for Chronic Obstructive Lung Disease international (GOLD) COPD guidelines and the University of Michigan Health System (UMHS) COPD guidelines both recommend use of CAT for symptoms assessment and therapeutic decision making. It is frequently incorporated into clinical trials, and is recognized by the Food and Drug Administration (FDA) as a clinical endpoint. GOLD, UMHS, and the COPD foundation all recommend it's use in disease staging.

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

In August 2019, it was not known what percentage of this patient population in the COPD Clinical Quality Registry had completed the CAT at least once annually. No measure existed to track this. Although the CAT was available in MiChart, there was no standard process for assigning or completing the questionnaire. Patients without a CAT assessment cannot be properly staged and it is more difficult to monitor symptom assessment and therapeutic decision making.

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.)*

The goal for this project is to have 10% of patients in the population (described in #7 above) to complete a CAT questionnaire at least every 12 months. This is the 90th percentile goal for the project.

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 . . .)***:**

Percent of patients who complete the CAT questionnaire at least once annually.

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

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

Number of patients in the patient population as described in #7.

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

Number of patients who have the CAT Questionnaire completed at least once annually.

- **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 <u>baseline</u> data on the measure(s)?

September 1-30, 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.*

Measure	Baseline 8/1/19-8/31/19
Percent of patients who complete the CAT questionnaire at least once annually.	1%

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 aim is to increase the percent of COPD patients completing the CAT questionnaire from a baseline of 1% in September 2019 to 10% (the 90th percentile) by December 31, 2020.

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

The goals were determined by the Michigan Medicine Quality Analytics group, University of Michigan Medical Group (UMMG) Quality Office, and the COPD Quality Committee using actual baseline data to determine reasonable targets. This method was utilized because there are no national guidelines on CAT completion rates that could be referenced in the COPD population.

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)*

Taubman Clinic:
- Administrative Manager
- Faculty physicians and fellows
- Nurses
- Medical Assistants
- Front desk / clerical

UMMG Quality Office
- Project manager
- Application Coordinator
- Chief Quality Officer

Internal Medicine Department
- Quality Program Manager

b. How? *(e.g., in a meeting of clinic staff)*
Physician/Faculty meeting with follow up emails

c. **When?** *(e.g., date(s) when baseline data were reviewed and discussed)*
Meeting on 10/16/19

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 problem(s) at baseline 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.)*
CAT questionnaire had to be assigned manually	Programmed MiChart (EHR) to auto-assign to patients when their appointment was scheduled	Pulmonary physicians and fellows Medical assistants (MAs) Clerical staff Admin manager HITS (Health Information Technology Services) MiChart application coordinator
MAs not aware of the need to have patient complete the CAT at the visit	MA education	Pulmonary physicians and fellows Medical assistants
There was no way to track progress	Created quality measure that is updated monthly and shared with the COPD committee monthly with % of patients who completed CAT in last year.	Pulmonary physicians and fellows Medical assistants

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.)*

April 1, 2020

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)?

7/1/20 – 7/31/20

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 8/1/19-8/31/19	Post intervention 7/1/20-7/31/20
Percent of patients who complete the CAT questionnaire at least once annually.	1%	33%

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

Yes, we exceeded our target of 10%. The ability to measure the completion rate and auto assign the CAT helped. The percent of patients who completed the CAT questionnaire at least once annually increased from 1% in September 2019 to 33% by July 31, 2020.

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)*

Data were available on 8/5/20 and reviewed at a faculty meeting on 9/2/20.

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 <u>problem(s)</u> <u>following the 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.)*
CAT questionnaire not assigned to the appropriate patient population	- Clarified that all visit types should receive the CAT if the patient has COPD on the problem list in the electronic medical record. - Updated MiChart programming to auto-assign to the appropriate patients.	Pulmonary faculty physicians and fellows Medical assistants Clerical staff Admin manager
CAT questionnaire not completed by patients before visit	- Patient has option to complete the CAT in the portal prior to their visit - If they don't do that, a paper copy will be given to them at check in and the MA enters the information into the electronic medical record. - The MA will complete the CAT with the patient if needed. If the MA runs out of time, the physician can finish it with patient.	Medical assistants Clerical staff Admin manager Pulmonary faculty physicians and fellows
Providers unaware if CAT was completed by patient at exam	- MA adds sticker to patient folder to alert physician to look to see whether CAT was completed. - Provider can see scores in several areas of the electronic medical record: Plan tab, Rooming tab, the recently updated Synopsis, New Templates and/or utilizing the dot phrase.	Pulmonary faculty physicians and fellows Medical assistants Clerical staff Admin manager
Variation among providers with using CAT and new workflow tools (50% not acting on scores)	- Create a clinician education flyer that shares all of the ways in which they can view/use the MiChart functionality. - The physicians will perform another round of At-the-Elbow Training - Tip sheet was provided - Created standard note types and re-configured Synopsis tab in the electronic medical record.	Pulmonary faculty physicians and fellows Medical assistants Clerical staff Admin manager

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 initiate*d.)

9/30/20

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)?

10/1/20 – 11/30/20

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 8/1/19-8/31/19	Post Intervention 7/1/20-7/31/20	Post Adjustment 10/1/20-11/30/20
Percent of patients who complete the CAT questionnaire at least once annually.	1%	33%	51%

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

Yes, the adjustments allowed for sustainment of performance and scores are continuing to improve.

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)*

The data was available on 1/6/21 and reviewed with faculty on 2/15/21.

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.)*
Video visits changed the workflow for completing the CAT	Discussed workflow changes needed for video visits. If MA pre-calls patient, they can complete. Patient can complete on their own in portal. MD can complete with patient during visit.	Pulmonary physicians and fellows Medical assistants Clerical staff Admin manager

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:*

The Pulmonary division will continue to work on this measure throughout calendar year 2021. Efforts will be expanded to additional Pulmonary ambulatory sites. An alert in the medical record to remind Medical Assistants and Physicians to complete the CAT at least annually is planned.

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?

☒ Yes ☐ No Presentation (verbal or poster) at a regional or national meeting?

☐ 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):* Pulmonary and Critical Care Medicine and UMMG Quality Office
- **Is the activity part of a larger UMHS institutional or departmental initiative?**

☐ No ☒ Yes – the initiative is *(name or describe)*: UMMG Quality Focus Measures

☐ **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):*