

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

### Universal Adolescent Depression Screening at HME

#### 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
<b>A. Introduction</b>	1-6. Current date, title, time frame, key individuals, participants, funding
<b>B. Plan</b>	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
<b>C. Do</b>	16. Intervention implementation date
<b>D. Check</b>	17-18. Post-intervention performance
<b>E. Adjust – Replan</b>	19-22. Post-intervention data review, underlying causes, adjustments, who will implement
<b>F. Redo</b>	23. Adjustment implementation date
<b>G. Recheck</b>	24-26. Post-adjustment performance, summary of individual performance
<b>H. Readjust plan</b>	27-30. Post-adjustment data review, underlying causes, further adjustments, who will implement
<b>I. Participation for MOC</b>	31-33. Participation in key activities, other options, other requirements
<b>J. Sharing results</b>	34. Plans for report, presentation, publication
<b>K. Organization affiliation</b>	35. Part of UMHS, AAVA, other affiliation with UMHS

## QI Project Report for Part IV MOC Eligibility

### A. Introduction

1. **Date:** 06-11-2019

2. **Title of QI effort/project:** Universal Adolescent Depression Screening at Health Maintenance Examination (HME)

3. **Time frame**

- a. **MOC participation beginning date – date that health care providers seeking MOC began participating in the documented QI project:** 3/23/2018
- b. **MOC participation end date – date that health care providers seeking MOC completed participating in the documented QI project:** 1/15/2019

4. **Key individuals**

a. **QI project leader**

**Name:** Kelly Orringer, MD

**Title:** Division Director, General Pediatrics

**Organizational unit:** Pediatrics

**Phone number:** 734-232-2600

**Email address:** [korringer@umich.edu](mailto:korringer@umich.edu)

**Mailing address:** Division of General Pediatrics, NIB 6E12, Ann Arbor MI 48109

b. **Clinical leader who oversees project leader regarding the project**

**Name:** Terrill Bravender MD MPH

**Title:** Director of Quality Programs, Department of Pediatrics

**Organizational unit:** Pediatrics

**Phone number:** 734-936-9777

**Email address:** [tdbrave@umich.edu](mailto:tdbrave@umich.edu)

**Mailing address:** Division of Adolescent Medicine, MPB D2215, Ann Arbor, MI 48109

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	Pediatrics		30
	Med/Peds		9
Residents/Fellows	Pediatrics		1
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:** 12 – 20 year old patients being seen for annual health maintenance examinations at the following University of Michigan clinics: Gen Pediatric clinics (Brighton, Briarwood, Canton, East AA, Howell, Northville, West AA, Saline and Ypsilanti) and Medicine/pediatric clinics (Canton, East AA)

### 8. General purpose.

#### a. Problem with patient care (“gap” between desired state and current state)

The AAP recommends annual depression screening with a validated tool. Most Michigan Medicine practices have teens complete the Rapid Assessment for Adolescent Preventive Services© (RAAPS) screen at HME, but this encompasses only 2 questions related to depression (PHQ-2). The current recommendation is to use a more comprehensive screening tool. The PHQ-9(A) is valid and reliable in adolescents.

We currently are using this tool only in adolescents who, from the RAAPS or further questioning, elicit clinical suspicion. We feel we are likely missing a significant numbers of teens who could benefit from further discussion, screening, and follow up as well as more intensive mental health treatment.

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

Improve depression screening in adolescents

### 9. Describe the measure(s) of performance:

#### Measure 1

- **Name of measure:** Percent of patients with documented PHQ-9 depression screening at Health Maintenance Examination.

- **Measure components**

Denominator: Number of health maintenance examinations reviewed

Numerator: Number of health maintenance examinations with a documented PHQ-9 depression screen.

- **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)?**

9/1/2017 – 11/30/2017

- b. **What was (were) the performance level(s) at baseline?**

50% patients had documentation in the Electronic Medical Record (EMR) of PHQ9 administration.

**11. Specific performance aim(s)/objective(s)**

- a. **What is the specific aim of the QI effort?**

Increase use of PHQ-9 screening from 50% at baseline to 70% or higher in 12-20 year old patients presenting for annual HME in our clinics by 12/31/2018.

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

The American Academy of Pediatrics recommends universal screening during health maintenance examinations. Each participant did their own chart review, then the data were aggregated by clinic site. Given our baseline was 50%, we felt that reaching 70% screening target in 6 months was a reasonable target.

**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?**

- a. **Who was involved?** Physician participants, administrative staff, medical assistants, and nursing staff
- b. **How?** During a Division Meeting
- c. **When?** February 2018

**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:**

<b>Common Causes</b>	<b>Common Relevant Interventions</b>
<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? ( <i>List the professions/roles involved.</i> )
Clinic workflow did not consistently include PHQ-9 administration and follow up on elevated screening result.	Development of a site-specific, standard workflow for PHQ-9 administration and follow up.	Physicians and residents; clinic administrative, nursing and MA staff.
Clinicians at the site were not always aware of resources available for managing depression in their adolescent patient population.	Educated providers on what resources are available in the clinic (e.g., social work psychology, psychiatry), in the community and online that would be helpful. Resources shared within each clinic and across sites.	Project leaders; expert resources; providers and clinic staff.

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?  
February 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)?

04/2018 – 05/2018

- b. What was (were) the overall performance level(s) post-intervention?

04/2018: 88%

05/2018: 92%

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

Yes, overall the intervention achieved target. However, across the clinics April rates ranged from 80-100% while May ranged from 60-100%. All but one clinic stayed at or above 80%.

### 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?

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)

06/2018

**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.)
Residents either not having forms distributed to all their adolescent patient, or not getting them back and entered into EMR..	Check in staff assigned to distribute forms, with reminder in appointment note. MAs tasked to put a check on the form once entered into EMR.	Clinic manager, clinic staff
Hard to find time in busy day to ensure PHQ-9 is completed 100% of time, especially during busy sports physical season.	Ongoing education on importance of depression screening, Made workflow as easy and streamlined as possible.	Providers, clinic managers, clinic staff
Patients or parents not willing to fill out form.	Encouraged teens and their parents or guardians to complete forms.	Providers, clinic staff
Clerical and MA staff turnover.	Retraining new staff to follow process.	Clinic manager
Difficult remembering to administer at 12 year HME.	Continue to train on the standard age to administer PHQ-9.	Clinic manager, providers, clinic staff

*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?**

06/2018

**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 post-adjustment data on the measure(s)?**

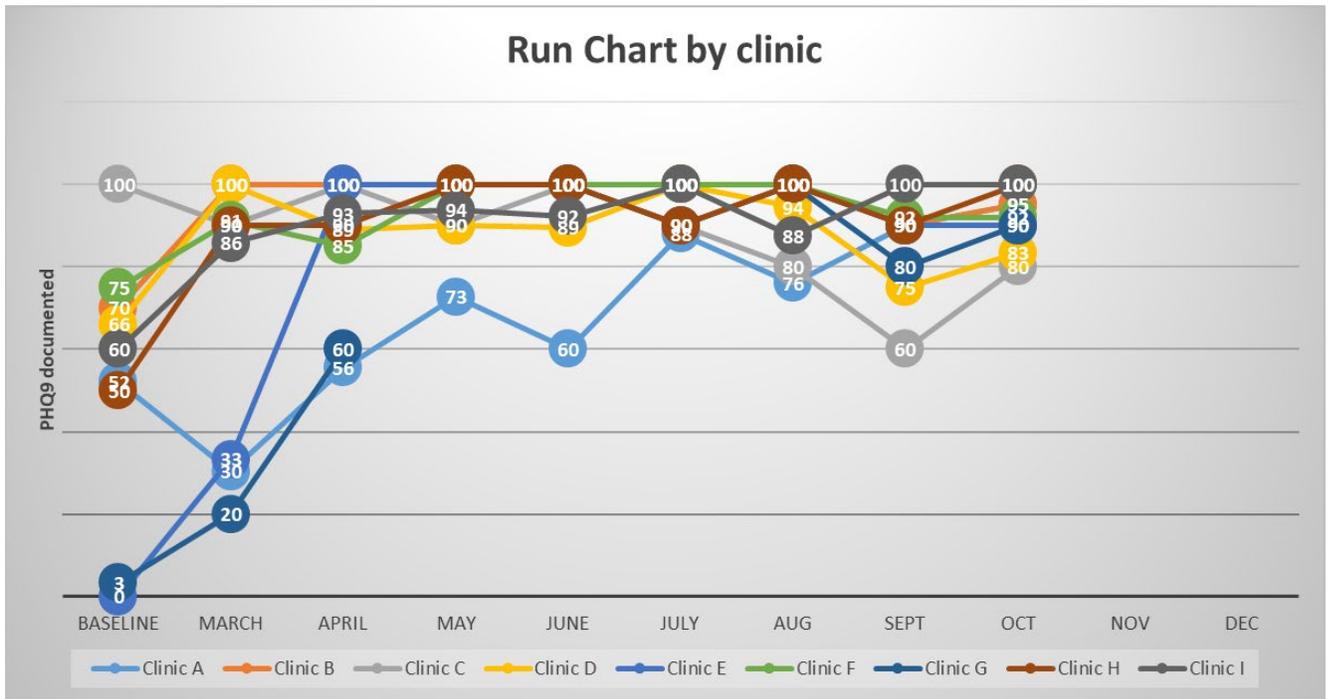
06/15/2018 – 08/31/2018

**b. What was (were) the overall performance level(s) post-adjustment?**

06/2018: 90%

07/2018: 95%

08/2018: 92%



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

. Yes, overall the results showed maintenance of screening rates above our goal rate.

**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?**

**a. Who was involved?**

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

**b. How?**

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

**c. When?**

09/2018

**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 <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? ( <i>List the professions/roles involved.</i> )
Some patients still refuse to fill out the screening tool for various reasons.	Continued encouraging teens and their parents or guardians to fill out the form.	Physicians, MA staff
Some parents/guardians refused to allow teens to complete the form.	Separated teens from their parents to allow for improved and confidential form completion.	Physicians, MA staff
Some developmentally delayed patients were unable to complete the form.		
High MA turnover and lack of training of new staff in the workflow resulted in some patients not being screened.	Retrained new MAs explicitly about the intake flow for completing the PHQ-9.	Physicians, MA staff, clinic managers
Physicians sometimes not returning form, to MA, resulting in form not being entered into EMR.	Physicians and MA staff reminded about the established work flow (give form to patients at intake, and collect the form and enter it into the EMR prior to giving paperwork to physician).	Physicians, MA staff, clinic 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:*

Currently identifying how to address the following challenges:

How to manage the rare elevated screen in an adolescent under 18 who did not want their parent notified.

Keeping it confidential when filling it out – where is best place in each clinic to give the form/tablet to teen while still getting all rooming tasks done efficiently?

Adolescents who need an interpreter

Adolescents with developmental delay or autistic spectrum disorder

Remembering to give form to MA to enter it if not entered before MD goes into room

Whether to screen at HME when known depression being followed by other clinician

## 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):**
- **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):**