QI Project Application/Report for Part IV MOC Eligibility

Instructions

Complete the project application/report to apply for UMHS approval for participating physicians to be eligible to receive Part IV MOC credit through the Multi-Specialty Part IV MOC Pilot program. Questions are in bold font and answers should be in regular font (generally immediately below the questions). To check boxes electronically, either put an "X" in front of a box or copy and paste "☒" over the blank box.

Only a final application describing the completed project is required. However, submitting an earlier version helps assure that planned activities will meet Part IV requirements. Actions regarding the application depend on the stage of the project, as described below. As stages are accomplished, you may submit updates of the application with the description of planned activities replaced by descriptions of actual activities performed.

Preliminary approval. Plans are developed for the expected activities, but little actual work has been performed. (Complete at least items 1-11, 13a, 16-18a, 19a, 20a, 21, 22a, 23a, 27-33.)

Part IV credit approval. Baseline data have been collected and the intervention performed, with completion of both steps documented on an application (or application update). The project has demonstrated its operational feasibility and the likelihood that subsequent data collections and adjustment will be performed. (Complete at least items 1-18a, 19a, 20a, 21, 22a, 23a, 27-33.)

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

For further information and to submit completed applications, contact either:
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Application/Report Outline

Section	Items	
A. Introduction	1-6.	Current date, title, time frame, project leader, specialties/subspecialties involved, funding
B. Plan	7-10.	General goal, patient population, IOM quality dimensions addressed, experimental design
	11-12.	Baseline measures of performance, specific performance objectives
	13.	Data review and identifying underlying (root) causes
C. Do	14-16.	Intervention(s), who is involved, initiated when
D. Check	17-18.	Post-intervention performance measurement, data collection, performance level
E. Adjust – Replan	19.	Review, continuing/new underlying causes,
F. Redo	20.	Second intervention
G. Recheck	21-22.	Post-adjustment performance measurement, data collection, performance level
H. Readjust plan	23.	Review, continuing/new underlying causes to address
I. Future plans	24-26.	Subsequent PDCA cycles, standardize processes, "spread" to other areas
J. Physician involvement	27-31.	Physician's role, requirements, reports, reflections, participation, number
K. Project Organization	32-34.	Part of larger initiative, organizational structure, resources, oversight, Part IV opportunity

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A. Introduction

1. Date *(this version of the application):* 10/07/2013

2. Title of QI project: Improving Rates of Dilated Retinal Examination for Patients with Diabetes

3. Time frame

a. At what stage is the project?

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

b. Time period

(1) Date physicians begin participating (may be in design phase): 01/2012
(**2) End date**: ☒ actual 06/30/2013 ☐ expected _____

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

a. Name: Jennifer Wyckoff, MD
b. Title: Clinical Assistant Professor
c. Institutional/organizational unit/affiliation: MEND Division, Department of Internal Medicine
d. Phone number: 734-647-6513
e. Email address: jwyckoff@umich.edu
f**. Mailing address**: Domino's Farms (Lobby C, Suite 1300) 24 Frank Lloyd Wright Drive PO Box 451 Ann Arbor, MI 48106

5. What specialties and/or subspecialties are involved in this project?
Endocrinology

6. Will the funding and resources for the project come only from internal UMHS sources?

☒ Yes, only internal UMHS sources
☐ No, funding and/or resources will come in part from sources outside UMHS, which are: _____

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

B. Plan

7. General goal

a. Problem/need. What is the "gap" in quality that resulted in the development of this project? Why is this project being undertaken?

For patients with diabetes, dilated retinal examinations can detect early microvascular complications that can eventually result in blindness if not treated. National recommendations are for patients with diabetes to have a dilated retinal examination at least every two years. However,

only 59% of the patients with diabetes seen in the MEND clinic in 2011 had a documented dilated retinal exam performed in 2010-2011.

b. Project goal. What outcome regarding the problem should result from this project?
We are hoping to improve the rate to 71%, which is the goal set for the institution.

8. Patient population. What patient population does this project address.
All patients with diabetes followed by the MEND division at the University of Michigan who do not have a primary care physician within the U of M who have been seen by a MEND physician at least once in the last 13 months and at least twice in the last two years.

The eligible population consists of UMHS adult (18 to 75 years old) and pediatric (12 to18 years old) patients who meet the following criteria:

Eligibility	• At least one admission or ER visit with a diagnosis of diabetes in the past 3 years, or • Two or more outpatient visits within three years with a diagnosis of diabetes, or • An entry of diabetes in the diagnosis section of the Problem Summary List (PSL) in CareWeb
Clinical Validation	Confirmatory documentation of one of the following in CareWeb: 1. Use of anti-diabetic medication, or 2. Diagnosis of diabetes (on clinical note only), or 3. Use of diabetic supply (strips/lancets/glucometer), or 4. An A1c > 6.4%, or Two or more glucose results ≥ 200 mg/dL.
Exclusionary Criteria	Patients with a diagnosis for gestational or steroid-induced diabetes in the PSL Patients seen at least twice in the past two years by Primary Care (Family Medicine, General Medicine, General Pediatrics, Geriatrcis, or Adult Medicine/Pediatrics).
Established UMHS Patient Criteria	All patients must have been seen in an ambulatory care setting at least twice in the past two years by MEND, with one of those visits completed in the past 13 months.

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

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

10. What is the experimental design for the project?

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

11. Baseline measures of performance:

a. What measures of quality are used? If rate or %, what are the denominator and numerator?
The denominator is the number of eligible patients who received their diabetes management solely through the MEND clinic. The numerator is the number of those patients who had a claim/bill at U of M for a retinal examination by an optometrist or ophthalmologist, or had an entry for a retinal or diabetic eye exam in PSL, or had an entry in Cielo in the past two years.

b. Are the measures nationally endorsed? If not, why were they chosen?
Yes (e.g., HEDIS, CMS Meaningful Use)

c. What is the source of data for the measure (e.g., medical records, billings, patient surveys)?
Electronic medical records and electronic claims records.

d. What methods were used to collect the data (e.g., abstraction, data analyst)?
Data analysts in the Quality Management Program of the Faculty Group Practice collect and analyze the data electronically, producing reports on UMHS All Payer Adult Diabetes Performance Measures that are used by the Diabetes Quality Improvement Committee and other UMHS personnel.

e. How reliable are the data being collected for the purpose of this project?
Generally very reliable. To the extent that errors are present, they reflect failures to document information in the electronic medical record. However, improving documentation is part of the overall goal.

f. How are data to be analyzed over time, e.g., simple comparison of means, statistical test(s)?
A simple comparison of proportions.

g. To whom are data reported?
The data are reported to the clinical leadership and reviewed at Clinical Faculty meetings semiannually.

h. For what time period is the sample collected for baseline data?
July 2010 – June 2011

12. Specific performance objectives

a. What is the overall performance level(s) at baseline? *(E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)*

Data Collection Period	N of Eligible Patients in Period	N with Dilated Exam in Last 2 Years	% with Dilated Exam in Last 2 Years
Baseline 7/1/10 – 6/30/11	2037	1243	61%

b. Specific aim: What is the target for performance on the measure(s) and the timeframe for achieving the target?
We would like to achieve a goal of 71% of MEND patients with diabetes having a documented eye exam within a year.

c. How were the performance targets determined, e.g., regional or national benchmarks?
The UMHS goal of 71% was set to align with the 90th percentile HEDIS criteria.

13. Data review and identifying underlying (root) causes.

a. Who will be/was involved in reviewing the baseline data, identifying underlying (root) causes of the problem(s), and considering possible interventions ("countermeasures") to address the causes? Briefly describe who is involved, how *(e.g., in a meeting of clinic staff)***, and when.**
Diabetes quality data are reviewed periodically at Clinical Faculty meetings. Possible underlying root causes are discussed, and possible interventions are considered. Clinical Faculty meetings occur monthly. Quality data is reviewed approximately twice a year and for this intervention were discussed at faculty meetings on 10/14/2011 (where baseline data were reviewed) and on 1/20/2012 (where the initiation of a panel manager intervention was discussed). Interventions were planned at the clinic-leadership level with faculty input.

b. What are the primary underlying/root causes for the problem(s) that the project can address? *(Causes may be aspects of people, processes, information infrastructure, equipment, environment, etc. List each primary cause separately. How the intervention(s) address each primary underlying cause will be explained in #14.c.)*
The hypothesis is that the underlying root cause for rates of diabetic eye exams in MEND patients with diabetes is a combination of:
a) poor patient adherence to recommendations and
b) poor documentation of eye exams that are actually performed by UMHS
c) Lack of communication from non UMHS PCP to MEND about eye exam completion outside of UMHS medical record system.

C. Do

14. Intervention(s).

a. Describe the interventions implemented as part of the project.
A list of individual physicians' patients that did not have a documented eye exam within the last two years was generated by the QMP. A panel manager was assigned to review this list with the individual physician. That physician indicated which of his patients would be appropriate for the panel manager to contact the patient to check whether a dilated retinal eye exam had been performed elsewhere and:
- if so, update documentation regarding eye exams performed
- if not, remind and arrange for them to get an eye exam. The panel manager then contacted the physician for referrals to ophthalmology as needed.

b. How are underlying/root causes *(see #13.b)* **addressed by the intervention(s)?** *(List each cause, whether it is addressed, and if so, how it is addressed.)*
a) poor patient adherence to recommendations – the reminder and referral
b) poor documentation of eye exams that are actually performed – obtaining and documenting the information. Panel manager will obtain the data and enter into the medical record.

15. Who is involved in carrying out the intervention(s) and what are their roles?
QMP data analysts – generate list of relevant patients with no documentation of eye exam in last 2 years
Panel manager – review list of patients with physician, call identified patients, document exams performed elsewhere, and contact physician for referrals to ophthalmology
Physician – review list of patients, make referrals to ophthalmology, encourage and support panel manager. Record eye exams on clinical actionable report (through 8/14/12) and subsequently through use of BPA's (approximately May 2013).

16. The intervention will be/was initiated when? (For multiple interventions, initiation date for each.)
The initial panel manager intervention was started in March, 2012.

D. Check

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

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

We continue to rely on the QMP-generated data, however, the clinical electronic health record was converted to EPIC in August, 2012, which has required re-validation of our data collection methods. The population and measures, however, have not changed, just the data source.

18. Performance following the intervention.

a. The collection of the sample of performance data following the intervention either:
Will occur for the period:
Has occurred for the period: July 2011 – June 2012

b. If the data collection has occurred, what is post-intervention performance level? *(E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)*

Data Collection Period	N of Eligible Patients in Period	N with Dilated Exam in Last 2 Years	% with Dilated Exam in Last 2 Years
Baseline 7/1/10 – 6/30/11	2037	1243	61%
Post-intervention 7/1/11 - 6/30/12	2326	1396	60%

E. Adjust – Replan

19. Review of post-intervention data and identifying continuing/new underlying causes.

a. Who will be/was involved in reviewing the post-intervention data, identifying underlying (root) causes of the continuing/new problem(s), and considering possible adjustments to interventions ("countermeasures") to address the causes? Briefly describe who is involved, how *(e.g., in a meeting of clinic staff)***, and when.** Data continue to be reviewed at Faculty Meetings periodically. On 2/15/2013, an update on the project's status and a restart to the panel manager program was discussed.

b. What are the primary underlying/root causes for the continuing/new problem(s) that the project can address? *(Causes may be aspects of people, processes, information infrastructure, equipment, environment, etc. List each primary cause separately. How the intervention(s) address each primary underlying cause will be explained in #20.c.)*
In August of 2012, the institution migrated to a new electronic health record, and the intervention had to be suspended due to inability to generate the lists ("Gap reports") of patients needing intervention for the panel manager and inability to generate the data for analysis in the new system. The "Gap reports" functionality was eventually restored.

The underlying causes resulting in 60% compliance described previously have not changed:
a) poor patient adherence to recommendations and
b) poor documentation of eye exams that are actually performed.
Also the data being collected is for a 12-month period and the intervention was actually active for only the last 3 months of the time period, so any effect would be difficult to identify.

F. Redo

20. Second intervention.
a. The second intervention will be/was initiated when? (For multiple interventions, initiation date for each.) In February 2013, the panel manager resumed her efforts using the new "Gap report" in the new EMR.

b. If the second intervention has occurred, what interventions were implemented?
The procedures for the initial intervention were implemented using the new MiChart electronic medical record. A list of individual physicians' patients that did not have a documented eye exam within the last two years was generated by the QMP. A panel manager was assigned to review this list with the individual physician. That physician indicated which of his patients would be appropriate for the panel manager to contact the patient to check whether a dilated retinal eye exam had been performed elsewhere and:

- if so, update documentation regarding eye exams performed
- if not, remind and arrange for them to get an eye exam. The panel manager then contacted the physician for referrals to ophthalmology as needed.

The intervention was essentially the same, but the tools used for the intervention were entirely new. One exception is that starting in January 2013, internal eye exams began to be documented by the ophthalmologists as well.

c. How are continuing/new underlying/root causes *(see #19.b)* **addressed by the intervention(s)?** *(List each cause, whether it is addressed, and if so, how it is addressed.)*
a) poor patient adherence to recommendations – the reminder and referral
b) poor documentation of eye exams that are actually performed – Internal eye exams are now being documented by the ophthalmology team and we continue to work on obtaining and documenting the information from outside eye exams. External eye exams are documented by the following method: Medical record/correspondence informing the MEND physician of the eye exam and findings are sent. These notes are reviewed by the physician, and sent to HIM for imaging into the medical record. The HM status is updated in Mi-Chart by medical assistant to record the eye exam in a manner that the system recognizes and credits the completion of the exam.

G. Recheck

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

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

22. Performance following the second intervention.

a. The collection of the sample of performance data following the intervention(s) either:
Will occur for the period:
Has occurred for the period: 7/1/12 - 6/30/13

b. If the data collection has occurred, what is the performance level? *(E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)*

Data Collection Period	N of Eligible Patients in Period	N with Dilated Exam in Last 2 Years	% with Dilated Exam in Last 2 Years
Baseline 7/1/10 – 6/30/11	2037	1243	61%
Post-intervention 7/1/11 - 6/30/12	2326	1396	60%
Post-Adjustment 7/1/12-6/30/13	2482	1534	62%

H. Readjust

23. Review of post-second intervention data and identifying continuing/new underlying causes.

a. Who will be/was involved in reviewing the data, identifying underlying (root) causes of the continuing/new problem(s), and considering additional possible adjustments to interventions ("countermeasures") to address the causes? Briefly describe who is involved, how *(e.g., in a meeting of clinic staff)***, and when.** Data continue to be reviewed at Faculty Meetings periodically. This data will be discussed at the 10/11/2013 Faculty meeting.

b. What are the primary underlying/root causes for the continuing/new problem(s) that the project can address? *(Causes may be aspects of people, processes, information infrastructure, equipment, environment, etc. List each primary cause separately.)*

a) Poor patient adherence to recommendations – Reminder phone calls and referrals do help prompt patients to be more adherent. However, there are many other barriers including both real and perceived insurance coverage gaps and other financial, travel and work concerns.
b) Poor documentation of eye exams that are actually performed at outside institutions – obtaining and documenting the information is a continuous process.
c) Data reporting cycle does not coincide well with intervention. The data collected was over periods of a year at a time. The interventions were meant to be as well, but they started, were interrupted and then restarted due to changes in the electronic health record, ultimately resulting in shorter interventions that were originally intended.

If no additional cycles of adjustment are to be documented for the project for Part IV credit, go to item #24.
If a few additional cycles of adjustments, data collection, and review are to be documented as part of the project to be documented, document items #20 – #23 for each subsequent cycle. Copy the set of items #20 – #23 and paste them following the last item #23 and provide the information. When the project to be documented for Part IV credit has no additional adjustment cycles, go to item #24.
If several more cycles are included in the project for Part IV credit, contact the UM Part IV MOC Program to determine how the project can be documented most practically.

I. Future Plans

24. How many subsequent PDCA cycles are to occur, but will not be documented as part of the "project" for which Part IV credit is designated? This is planned as an ongoing project. It has been an invaluable learning experience as we transitioned from one electronic health record to another. It has also highlighted that reminders are not an adequate intervention alone, as there are often a variety of barriers- logistical, financial, transportation etc. that must be overcome, and we look forward to addressing some of these barriers in future projects. In addition, the issue with available data not having a frequent enough cycle is in process of correction. Future PDSA cycles will have the opportunity to have data that is no more than 2 months old if not more recent (REAL TIME)

25. How will the project standardize processes to maintain improvements? Despite the lack of clear success, we feel that with both improvements in the data cycle reporting (shorter cycles) and year-long intervention we will eventually show improvement over time. So, this process is currently being put in place across the institution's primary care and endocrine locations. There is a coordinator

who trains panel managers and these processes and this data are reviewed at the Diabetes Quality Improvement Committee or its data subcommittee every month.

26. Do other parts of UMHS face a similar problem? If so, how will the project be conducted so that improvement processes can be communicated to others for "spread" across applicable areas? Yes, this and other diabetes quality projects are discussed at the Diabetes Quality committee meetings which occur every other month. This committee is part of a larger Institution wide Population Management program at the U of M.

J. Physician Involvement

Note: To receive Part IV MOC a physician must both:

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

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

27. Physician's role. What are the minimum requirements for physicians to be actively involved in this QI effort?

a. Interpreting baseline data and planning intervention:
Physicians review composite and their individual performance data periodically and provide insight into the causes of problems and suggestions on how to make improvements.

b. Implementing intervention:
Physicians are involved in the planning of interventions and work actively with the panel managers to identify appropriate patients for intervention.

c. Interpreting post-intervention data and planning changes:
Physicians review composite and their individual performance data periodically and provide insight into the causes of problems and suggestions on how to make improvements.

d. Implementing further intervention/adjustments:
Physicians are involved in the planning of interventions and work actively with the panel managers to identify appropriate patients for intervention.

e. Interpreting post-adjustment data and planning changes:
Physicians review composite and their individual performance data periodically and provide insight into the causes of problems and suggestions on how to make improvements.

28. How are reflections of individual physicians about the project utilized to improve the overall project? This project was meant to help physicians provide better care for their patients by dedicating a panel manager to helping with reminder calls. Individual physicians requested such help and have provided invaluable feedback into the process. By reviewing the process and the data at faculty meetings, their insights have shaped the program's approach to the patent reminders.

29. How does the project ensure meaningful participation by physicians who subsequently request credit for Part IV MOC participation? Physicians must review their lists with the panel manager to be included in the project. They must sign referrals and orders, etc.

30. What are the specialties and subspecialties of the physician anticipated to participate in the project and the approximate number of physicians in each specialty/subspecialty?

Endocrinology and 3

K. Project Organizational Role and Structure

31. UMHS QI/Part IV MOC oversight – this project occurs within:

☒ **University of Michigan Health System**

- **Overseen by what UMHS Unit/Group?** MEND

- **Is the activity part of a larger UMHS institutional or departmental initiative?**

  ☐ No x ☐ Yes – the initiative is: But this initiative is based on similar initiatives occurring in primary care and utilizes data produced by the Diabetes Quality Committee.

☐ **Veterans Administration Ann Arbor Healthcare System**

- **Overseen by what AAVA Unit/Group?**

- **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:**

- **The type of affiliation with UMHS is:**

  ☐ **Accountable Care Organization type** *(specify which):*

  ☐ **BCBSM funded, UMHS lead Collaborative Quality Initiative** *(specify which):*

  ☐ **Other** *(specify):*

- **Who is the individual at UMHS responsible for oversight of the QI project regarding Part IV requirements?** Van Harrison, PhD

32. What is the organizational structure of the project? ***[Include who is involved, their general roles, and reporting/oversight relationships.]***

QMP data analysts – generate list of relevant patients with no documentation of eye exam in last 2 years. They report to the Quality Management Program.

Panel manager – review list of patients with physician, call identified patients, document exams performed elsewhere, and contact physician for referrals to ophthalmology. The panel manager is employed by the MEND Division.

Physician – review list of patients, make referrals to ophthalmology, encourage and support panel manager. The physicians are part of the MEND division.

33. To what oversight person or group will project-level reports be submitted for review? Jennifer Wyckoff, MD