

## 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
<b>A. Introduction</b>	1-6. Current date, title, time frame, project leader, specialties/subspecialties involved, funding
<b>B. Plan</b>	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
<b>C. Do</b>	14-16. Intervention(s), who is involved, initiated when
<b>D. Check</b>	17-18. Post-intervention performance measurement, data collection, performance level
<b>E. Adjust – Replan</b>	19. Review, continuing/new underlying causes,
<b>F. Redo</b>	20. Second intervention
<b>G. Recheck</b>	21-22. Post-adjustment performance measurement, data collection, performance level
<b>H. Readjust plan</b>	23. Review, continuing/new underlying causes to address
<b>I. Future plans</b>	24-26. Subsequent PDCA cycles, standardize processes, "spread" to other areas
<b>J. Physician involvement</b>	27-31. Physician's role, requirements, reports, reflections, participation, number
<b>K. Project Organization</b>	32-34. Part of larger initiative, organizational structure, resources, oversight, Part IV opportunity

## QI Project Application/Report for Part IV MOC Eligibility

### A. Introduction

1. **Date** (*this version of the application*): December 11, 2013
  
2. **Title of QI project:** Improvement in Patient Engagement in a Multidisciplinary Weight Management Program for Pediatrics
  
3. **Time frame**
  - a. **At what stage is the project?**
    - Design is complete, but not yet initiated
    - Initiated and now underway
    - X  Completed (*UMHS Part IV program began 1/1/11*)
  
  - b. **Time period**
    - (1) **Date physicians begin participating (may be in design phase):** 3/1/2011
    - (2) **End date:**  actual 3/31/2013  expected \_\_\_\_\_
  
4. **QI project leader [responsible for attesting to the participation of physicians in the project]:**
  - a. **Name:** Susan J. Woolford, MD, MPH
  - b. **Title:** Medical Director Pediatric Comprehensive Weight Management Center
  - c. **Institutional/organizational unit/affiliation:** University of Michigan
  - d. **Phone number:** 734 615 8214
  - e. **Email address:** swoolfor@med.umich.edu
  - f. **Mailing address:** 300 North Ingalls Rm 6D20 Ann Arbor, MI 418109
  
5. **What specialties and/or subspecialties are involved in this project?** General Pediatrics
  
6. **Will the funding and resources for the project come only from internal UMHS sources?**
  - X  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?**

Multidisciplinary weight management programs for pediatrics suffer from significant problems with patient engagement and attrition, which lead to poor patient outcomes and decreased revenue. There is a significant need to identify means to improve these measures in order to address the challenging problem of obesity in the clinical setting.
  
  - b. **Project goal. What outcome regarding the problem should result from this project?**

As a result of this project, fewer patients who join the pediatric multidisciplinary weight management program should drop out (defined as missing 3 consecutive sessions) – measured over a 3 month period for cycle 1 and for 6 months during cycle 2.

**8. Patient population. What patient population does this project address.**

Obese patients between 7 and 11 years old and their parents who are enrolled in the MPOWER Jr program.

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

- |  |                                     |   |
|--|-------------------------------------|---|
| <input type="checkbox"/> Safety          | <input type="checkbox"/> Equity     | <input type="checkbox"/> Timeliness             |
| X <input type="checkbox"/> Effectiveness | <input type="checkbox"/> Efficiency | X <input type="checkbox"/> Patient-Centeredness |

**10. What is the experimental design for the project?**

- X 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?**  
 Percent of patients who dropped out of the program (the denominator is the number of patients who joined the program and the number that dropped out of the program is the numerator)
- b. Are the measures nationally endorsed? If not, why were they chosen?**  
 No. At present there are not nationally endorsed measures for multidisciplinary treatment of childhood obesity. However, this is one of the measures used by the Children's Hospital Association Focus on a Fitter Future focus group on obesity for the purposes on bench marking.
- c. What is the source of data for the measure (e.g., medical records, billings, patient surveys)?**  
 Medical records. (Patient interviews were used in the assessment of underlying causes of the problem.)
- d. What methods were used to collect the data (e.g., abstraction, data analyst)?**  
 Chart abstraction.
- e. How reliable are the data being collected for the purpose of this project?**  
 The data were obtained in a reliable manner.
- f. How are data to be analyzed over time, e.g., simple comparison of means, statistical test(s)?**  
 Simple comparison of means and qualitative data are analyzed using the constant comparative methods of grounded theory.
- g. To whom are data reported?**  
 Data were reported to Dr. Woolford and to the Department of Pediatrics
- h. For what time period is the sample collected for baseline data?**  
 Baseline data were collected over the period of 4 months (March 1<sup>st</sup> 2011 to June 31<sup>st</sup> 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.)**  
 For the baseline dropout rate, please see Table 1 at the end of the application
- b. Specific aim: What is the target for performance on the measure(s) and the timeframe for achieving the target?**

Our aim was to decrease the dropout rate from 67% to 50% over the course of the 6 month cycle 2 period.

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

As part of the Children's Hospital Association Focus on a Fitter Future Focus Group (a national workgroup of pediatric comprehensive weight management clinics and programs), we are able to utilize data from other programs for the purposes of benchmarking.

**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.**

This process incorporated a pediatric psychologist, dietitian, social worker, exercise physiologist, and physicians who met weekly from 7/1/2011 to 8/31/2011 to discuss these issues and to determine the best interventions.

**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 primary underlying root causes for the problem were:

- 1) Lack of Resources – Patients had limited resources and had difficulty purchasing the foods required to prepare the healthy meals recommended
- 2) Passive Program Structure – The program sessions were mainly didactic and were not sufficiently interactive.

**C. Do**

**14. Intervention(s).**

**a. Describe the interventions implemented as part of the project.**

- 1) Partnership with Food Gathers to provide samples for patients to use
- 2) Partnership with Washtenaw County Health Department to provide tokens to the Farmers Market
- 3) Increased number of hands-on activities incorporated into the program

**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.)**

- 1) To address the lack of resources, the following interventions were implemented:
  - A partnership with Food Gathers to provide samples for patients to use to prepare the meals recommended as part of the program. With recommendations tailored to the foods available through Food Gathers.
  - A partnership with Washtenaw County Health Department to provide tokens to the Farmers Market which subsidized the cost of healthy foods.
- 2) To make the sessions more interactive, an increased number of hands-on activities were incorporated into the program.

**15. Who is involved in carrying out the intervention(s) and what are their roles?**

The multidisciplinary weight management team members (as listed above) were involved in revising the program structure, developing and presenting new modules, and forming partnerships with community agencies.

**16. The intervention will be/was initiated when? (For multiple interventions, initiation date for each.)**

The intervention was initiated 9/1/2011.

**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)?**

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

**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: Sept 1, 2011 to February 28, 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.)

For the post intervention dropout rate, please see Table 1

**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.**

This process incorporated a pediatric psychologist, dietitian, social worker, exercise physiologist, and physicians who met weekly from 3/1/2012 to 5/30/2012 to discuss these issues and to determine the best adjustments to the intervention.

**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.)

Inadequate engagement of older children enrolled in the program - we found that parents of the older children wanted to have their children more actively targeted during the sessions.

**F. Redo**

**20. Second intervention.**

**a. The second intervention will be/was initiated when?** (For multiple interventions, initiation date for each.)

June 1, 2012

**b. If the second intervention has occurred, what interventions were implemented?**

Program content and structure were changed to allow patients to participate along with their parents in sessions with the providers (rather than just the group sessions with their peers).

**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.)

Previously parents met with providers without their child present to discuss their progress over the course of the week. For this intervention to address the concern about the engagement of older

children in the program we changed that process so that children (10 – 11 years) old could attend these sessions, if their parents wanted them to, and we changed the content of the session to be appropriate for the child to be involved.

## 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)?**

X  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: June 1, 2012 to November 30, 2012

**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.)**

## 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.**

This process incorporated a pediatric psychologist, dietitian, social worker, exercise physiologist, and physicians who met weekly from 12/1/2012 to 3/1/2013 to discuss these issues and to determine the best approach moving forward.

**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.)**

No further causes for change were noted that could reasonably be addressed. Thus we implemented the interventions as described and continue to monitor for dropout annually.

*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?**

No subsequent PDCA cycles are planned though we engage in ongoing monitoring or the dropout rates but no plans for changes are being considered currently.

**25. How will the project sustain processes to maintain improvements?**

As part of our regular monitoring of the program we have ongoing quality checks to ensure that we can identify changes that might require interventions.

**26. Do other parts of the organization(s) 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?**

While similar problems are not faced within the organization, they are very prevalent among the programs participating in the CHA Focus on a Fitter Future focus group on obesity. Thus, findings from our project have been shared to this group.

## **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: Led the collection, review and interpretation of baseline data and the planning of the intervention (data collection from March 1, 2011 to June 31, 2011 and data review and analysis from July 1, 2011 to August 31, 2011).
- b. Implementing intervention: Oversaw the implementation of the intervention (September 1, 2011 – February 29, 2012) that addressed increased access to resources through the establishment of partnerships with community agencies and the development and implementation of more interactive program sessions.
- c. Interpreting post-intervention data and planning changes: Participated in the review of the data and planning of intervention changes that occurred March 1, 2012 to May 31, 2012.
- d. Implementing further intervention/adjustments: Oversaw the implementation of the Cycle 2 adjustment intervention that occurred June 1, 2012 – November 30, 2012.
- e. Interpreting post-adjustment data and planning changes: Participated in the review and analysis of the data and planning for the future that occurred December 1, 2012 – March 1, 2013).

**28. How are reflections of individual physicians about the project utilized to improve the overall project?**

Reflections were incorporated in the planning phases.

**29. How does the project ensure meaningful participation by physicians who subsequently request credit for Part IV MOC participation?**

Leading out in this project meets the requirement for Part IV MOC participation.

**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?**

General Pediatrics (one physician participated to date)

## 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?

Department of Pediatrics

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

No     Yes – the initiative is: Pediatric Comprehensive Weight Management

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?

Name:

Title:

Institutional/organizational unit/affiliation:

Phone number:

Email address:

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

Administrator Department of Pediatrics: Jamie Dimond

Administrator for Section of Pediatric Surgery: Phyllis Blackman

### 33. To what oversight person or group will project-level reports be submitted for review?

Department Chair: Dr. Valerie Castle

Director of Pediatric Clinical Programs: Ilene Phillips

**Table 1: Dropout rate from the MPOWER Jr Program**

	<b>Number that Enrolled</b>	<b>Number that dropped out</b>	<b>Percent dropout</b>
Baseline Data Collection (March 1, 2011 – June 31, 2011)	12	8	67%
<i>Review and analysis of baseline data (July 1, 2011 – August 31, 2011)</i>			
Cycle 1 Intervention and Data Collection (September 1, 2011 – Feb 28, 2012)	24	13	55%
<i>Post-Intervention analysis of the data (March 1, 2012 – May 31, 2012)</i>			
Cycle 2 Adjustment Intervention (June 1, 2012 – Nov 30, 2012)	24	11	46%
<i>Post-Intervention analysis of the data (December 1, 2012 – March 1, 2013)</i>			