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

Improving Pneumococcal Vaccine Assessment and Counseling for At-Risk Patients in the Pediatric Hematology/Oncology Clinics

Instructions

Determine eligibility. Before starting to complete this report, go to the UMHS MOC website [ocpd.med.umich.edu], 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 UMHS 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 1-20.) Staff from the UMHS 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

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</tr>
</tbody>
</table>
QI Project Report for Part IV MOC Eligibility

A. Introduction

1. Date (this version of the report): 11/7/2016

2. Title of QI effort/project (also insert at top of front page): Improving Pneumococcal Vaccine Assessment and Counseling for At-Risk Patients in the Pediatric Hematology/Oncology 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 #14c): 11/18/2015
   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 #29c): 10/19/2016

4. Key individuals
   a. QI project leader [also responsible for confirming individual’s participation in the project]
      Name: Kelly Walkovich
      Title: Assistant Professor, Pediatric Hematology/Oncology
      Organizational unit: Department of Pediatrics
      Phone number: 734 232 1909
      Email address: kwalkovi@med.umich.edu
      Mailing address: MPB 4202, 1500 E. Medical Center Dr., Ann Arbor, MI 48109
   b. Clinical leader to whom the project leader reports regarding the project [responsible for overseeing/“sponsoring” the project within the specific clinical setting]
      Name: Rajen Mody
      Title: Professor, Pediatric Hematology/Oncology
      Organizational unit: Department of Pediatrics
      Phone number: 734 615 7790
      Email address: rmody@med.umich.edu
      Mailing address: MPB 4202, 1500 E. Medical Center Dr., Ann Arbor, MI 48109

5. Participants
   a. Approximately how many health care providers (by training level for physicians) participated in this QI effort (whether or not for MOC):

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number (fill in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing Physicians</td>
<td>20</td>
</tr>
<tr>
<td>Residents/Fellows</td>
<td>10</td>
</tr>
<tr>
<td>Physicians’ Assistants</td>
<td>0</td>
</tr>
<tr>
<td>Nurses (APNP, NP, RN, LPN)</td>
<td>7</td>
</tr>
<tr>
<td>Other Licensed Allied Health (e.g.,</td>
<td>1</td>
</tr>
<tr>
<td>PT/OT, pharmacists, dieticians, social workers)</td>
<td></td>
</tr>
</tbody>
</table>
b. Approximately how many physicians (by specialty/subspecialty and by training level) and physicians' assistants participated for MOC?

<table>
<thead>
<tr>
<th>Profession</th>
<th>Specialty/Subspecialty (fill in)</th>
<th>Number (fill in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing Physicians</td>
<td>Pediatric Hematology/Oncology</td>
<td>~18</td>
</tr>
<tr>
<td></td>
<td>Pediatric ID</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Medical Genetics</td>
<td>1</td>
</tr>
<tr>
<td>Fellows</td>
<td>Pediatric Hematology/Oncology</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Allergy/Immunology</td>
<td>4</td>
</tr>
<tr>
<td>Residents</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Physicians’ Assistants</td>
<td>(Not applicable)</td>
<td>0</td>
</tr>
</tbody>
</table>

6. How was the QI effort funded? (Check all that apply.)

☐ Internal institutional funds
☐ Grant/gift from pharmaceutical or medical device manufacturer
☐ Grant/gift from other source (e.g., government, insurance company)
☐ Subscription payments by participants
☒ Other (describe): No funds were utilized in this counseling/documentation based QI project.

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 ≥ 2 years and < 65 years of age evaluated in the Pediatric Hematology/Oncology Clinics were the target population for this QI project.

8. General goal

a. Problem/need. What is the problem (“gap”) in quality that resulted in the development of this project? Why is it important to address this problem? Streptococcus pneumonia infections are the leading cause of serious bacterial infections worldwide, e.g. bacteremia, pneumonia and meningitis. Additionally, Streptococcus pneumoniae infections also account for numerous otitis and sinusitis infections. Prior to the standardization of infant pneumococcal vaccines in the United States, S. pneumoniae caused ~17,000 cases of invasive disease each year among children less than five years of age, including 700 cases of meningitis and 200 deaths. Appropriate pneumococcal vaccination for all patients, but particularly at-risk patients, is crucial to mitigating significant morbidity and mortality to pneumococcal disease. At-risk patients are plentiful within the Pediatric Hematology/Oncology Clinic including those who are asplenic, functionally asplenic, have an immunodeficiency and/or are receiving immunosuppressive agents.

The starting adherence to pneumococcal vaccination counseling is <5% in our Pediatric Hematology/Oncology clinics, which is substantially below the goal of > 90% of at-risk patients being immunized against Streptococcus pneumoniae set by the CDC. Enhancing pneumococcal vaccination counseling is an important step in ensuring improved patient care.
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 #13.)

The project goal is to improve assessment of pneumococcal vaccination status and counseling in at-risk patients.

9. Which Institute of Medicine Quality Dimensions are addressed? [Check all that apply.]
(Click on the link to access the Institute of Medicine Quality Dimensions)

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

10. Which ACGME/ABMS core competencies are addressed? (Check all that apply.)
(Click on the link to access the ACGME/ABMS core competencies)

☒ Patient Care and Procedural Skills
☒ Medical Knowledge
☒ Practice-Based Learning and Improvement
☒ Interpersonal and Communication Skills
☐ Professionalism
☐ Systems-Based Practice

11. 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: Percent of eligible patients with documented Pneumococcal vaccine assessment and counseling (#eligible patients with documented Pneumococcal vaccine assessment and counseling/#eligible patients)

• Measure components – for a rate, percent, or mean, describe the:
  Denominator (e.g., for percent, often the number of patients eligible for the measure):
  Number of eligible patients (i.e. patients ≥ 2 years and < 65 years of age evaluated in the Pediatric Hematology/Oncology)

  Numerator (e.g., for percent, often the number of those in the denominator who also meet the performance expectation):
  Number of eligible patients with documented Pneumococcal vaccine assessment and counseling. (Assessment and counseling performed means that either: (1) pneumococcal vaccine is documented as having been performed or (2) Pneumococcal vaccine is documented as not yet performed and patient/patient’s family has been counseled about the need for the vaccine.)

• The source of the measure is:
  ☒ Internal to our organization and it was chosen because (describe rationale): The Pediatric Hematology/Oncology Division adapted the CDC recommendations

• This is a measure of:
  ☒ Process – activities of delivering health care to patients
  ☐ Outcome – health state of a patient resulting from health care

12. Baseline performance

a. What were the beginning and end dates for the time period for baseline data on the measure(s)? 9/1/2015-9/30/2015
b. **What was (were) the 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.)

<table>
<thead>
<tr>
<th>Clinic Segment</th>
<th>BASELINE % Eligible Patients w/Pneumo. Vaccine Documentation</th>
<th>INTERVENTION 1 % Eligible Patients w/Pneumo. Vaccine Documentation</th>
<th>INTERVENTION 2 % Eligible Patients w/Pneumo. Vaccine Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immuno-Heme</td>
<td>0% (0/75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oncology</td>
<td>0% (0/240)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. **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 specific aim of this QI project is to document Pneumococcal vaccination status and counseling from 0% to ≥ 90% of at-risk patients by the end of the second cycle of improvement (4/30/16).

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

      The performance target of ≥ 90% was selected based on the national recommendation/goal from the CDC that more than 90% of patients be vaccinated against Pneumococcal species.

14. **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)  Physicians (attendings and fellows), nurse practitioners, medical assistants, nurses and other health care staff within the pediatric hematology/oncology outpatient ACU were involved in reviewing the baseline data.

   b. **How?**  (e.g., in a meeting of clinic staff)  Review of the baseline data occurred during a PHO Staff Meeting on 10/23/2015. Opportunities for additional face-to-face discussion occurred during our weekly patient review meetings. Email communication was encouraged as a venue for follow up questions, input and discussion after each of the various in-person meetings.

   c. **When?**  (e.g., date(s) when baseline data were reviewed and discussed)

      Baseline data was reviewed and discussed on 10/23/2015

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**Use the following table to outline the plan that was developed: #15 the primary causes, #16 the intervention(s) that addressed each cause, and #17 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](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:

<table>
<thead>
<tr>
<th>Common Causes</th>
<th>Common Relevant Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals: Are not aware of, don’t understand.</td>
<td>Education about evidence and importance of goal.</td>
</tr>
<tr>
<td>Individuals: Believe performance is OK.</td>
<td>Feedback of performance data.</td>
</tr>
<tr>
<td>Individuals: Cannot remember.</td>
<td>Checklists, reminders.</td>
</tr>
<tr>
<td>Team: Individuals vary in how work is done.</td>
<td>Develop standard work processes.</td>
</tr>
</tbody>
</table>
**Part IV Maintenance of Certification Program**

| Workload: Not enough time. | Reallocation roles and work, review work priorities. |
| Suppliers: Problems with provided information/materials. | Work with suppliers to address problems there. |

15. What were the primary underlying/root causes for the problem(s) at baseline that the project can address?

Health care providers not aware of the PCV13 and PPSV23 vaccination recommendations for at-risk patients.

16. What intervention(s) addressed this cause?

Educated providers and other health care team members about the importance of the pneumococcal vaccination and recommendations for administration in at-risk patients.

17. Who was involved in carrying out each intervention? (List the professions/roles involved.)

Physicians, NPs, nurses, medical assistants and other health care staff.

Health care providers not aware of how to identify at-risk patients.

Developed a tool/algorithm to assist providers in rapidly identifying at-risk patients.

Physicians, NPs and nurses.

Prescribing providers do not have readily available access to the patient’s primary vaccination records.

Established a work-flow within the clinic that involved the medical assistants obtaining the primary vaccine records for review with the prescribing provider.

Physicians, NPs, nurses, medical assistants and other health care staff.

**Note:** If additional causes were identified that are to be addressed, insert additional rows.

**C. Do**

18. By what date was (were) the intervention(s) initiated? (If multiple interventions, date by when all were initiated.) The above interventions were initiated on 12/1/2015.

**D. Check**

19. Post-intervention performance measurement. Are the population and measures the same as those for the collection of baseline data (see items 10 and 11)?

☒ Yes ☐ No – If no, describe how the population or measures differ:

20. Post-intervention performance

a. What were the beginning and end dates for the time period for post-intervention data on the measure(s)? 12/1/2015-1/31/2016

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

<table>
<thead>
<tr>
<th>Clinic Segment</th>
<th>BASELINE % Eligible Patients w/Pneumo. Vaccine Documentation (9/1-30/15)</th>
<th>INTERVENTION 1 % Eligible Patients w/Pneumo. Vaccine Documentation (12/1/15 – 1/31/16)</th>
<th>INTERVENTION 2 % Eligible Patients w/Pneumo. Vaccine Documentation (3/1/16 – 4/30/16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immuno-Heme</td>
<td>0% (0/75)</td>
<td>53% (65/122)</td>
<td></td>
</tr>
</tbody>
</table>
### Part IV Maintenance of Certification Program

| Oncology | 0% (0/240) | 36% (41/113) |

c. Did the intervention(s) produce the expected improvement toward meeting the project’s specific aim (item 13.a)?

No. The interventions increased performance with heightened pneumococcal vaccination documentation counseling, but did not fully meet the goal of greater than or equal to 90%.

### E. Adjust – Replan

21. 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.)

<table>
<thead>
<tr>
<th>a. Who was involved? (e.g., by profession or role)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒ Same as #14?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. How? (e.g., in a meeting of clinic staff)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☒ Same as #14?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. When? (e.g., date(s) when post-intervention data were reviewed and discussed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/17/2016</td>
</tr>
</tbody>
</table>

Use the following table to outline the next plan that was developed: #22 the primary causes, #23 the adjustments/second intervention(s) that addressed each cause, and #24 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.

| 22. What were the primary underlying/root causes for the problem(s) following the intervention(s) that the project can address? |
| 23. What adjustments/second intervention(s) addressed this cause? |
| 24. Who was involved in carrying out each adjustment/second intervention? (List the professions/roles involved.) |

| Lack of standardized documentation regarding the pneumococcal vaccination that all providers could utilize. | Created a MiChart dot phrase with the pertinent information to assist in the documentation. | Physicians and NPs. |

| Providers had an inconsistent understanding of when to administer pneumococcal vaccination in the chemotherapy setting. | Provided direct face-to-face education and created a 1-page summary document for guidance in ALL and solid tumor patients. | Physicians, NPs, nurses, medical assistant and other health care workers. |

| Providers reported difficulty in finding adequate time to discuss the importance of | Engaged the clinic nurses in the education of families and the importance of the pneumococcal | Physicians, NPs, nurses. |
the pneumococcal vaccine in the setting of a bustling clinic.

vaccine.

Note: If additional causes were identified that are to be addressed, insert additional rows.

F. Redo

25. By what date was (were) the adjustment(s)/second intervention(s) initiated?  (If multiple interventions, date by when all were initiated.) 3/1/2016

G. Recheck

26. Post-adjustment performance measurement. Are the population and measures the same as indicated for the collection of post-intervention data (item #21)?

☒ Yes ☐ No – If no, describe how the population or measures differ:

27. Post-adjustment performance

a. What were the beginning and end dates for the time period for post-adjustment data on the measure(s)? 3/1/2016-4/30/2016

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

<table>
<thead>
<tr>
<th>Clinic Segment</th>
<th>BASELINE % Eligible Patients w/Pneumo. Vaccine Documentation (9/1-30/15)</th>
<th>INTERVENTION 1 % Eligible Patients w/Pneumo. Vaccine Documentation (12/1/15 – 1/31/16)</th>
<th>INTERVENTION 2 % Eligible Patients w/Pneumo. Vaccine Documentation (3/1/16 – 4/30/16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immuno-Heme</td>
<td>0% (0/75)</td>
<td>53% (65/122)</td>
<td>35% (67/191)</td>
</tr>
<tr>
<td>Oncology</td>
<td>0% (0/240)</td>
<td>36% (41/113)</td>
<td>49% (56/114)</td>
</tr>
</tbody>
</table>

c. Did the adjustment(s) produce the expected improvement toward meeting the project’s specific aim (item 13.a)?

No. While improvement certainly occurred, we unfortunately did not meet our goal of 90%. While performance improved for oncology patients, performance declined somewhat for Immuno-Heme patients.

28. Summary of individual performance

a. Were data collected at the level of individual providers so that an individual’s performance on target measures could be calculated and reported?

☐ Yes ☒ No – go to item 29

H. Readjust

29. 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 #21? ☐ Different than #21 *(describe):*

b. **How?** *(e.g., in a meeting of clinic staff)*
   - ☒ Same as #21? ☐ Different than #21 *(describe):* Of note, the project was discussed again in a faculty meeting but additional ideas/concerns were solicited through email and individual face-to-face discussions.

c. **When?** *(e.g., date(s) when post-adjustment data were reviewed and discussed)* 10/19/2016. Of note, this date was delayed from the end of the intervention period secondary to a large transition in faculty/staff.

*Use the following table to outline the next plan that was developed: #30 the primary causes, #31 the adjustments(s)/second intervention(s) that addressed each cause, and #32 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.*

<table>
<thead>
<tr>
<th>30. What were the primary underlying/root causes for the problem(s) following the adjustment(s) that the project can address?</th>
<th>31. What further adjustments/intervention(s) might address this cause?</th>
<th>32. Who would be involved in carrying out each further adjustment/intervention? (List the professions/roles involved.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple new providers and changed/covering providers were unsure of the indications for pneumococcal vaccination.</td>
<td>Re-educate providers regarding the indications for pneumococcal vaccination. Also, created and posted flyers to serve as reminders for newer staff.</td>
<td>Physicians, NPs, nurses, medical assistants and other health care professionals.</td>
</tr>
<tr>
<td>Providers had too large of a workload to find adequate time to discuss the importance of the pneumococcal vaccines.</td>
<td>Additional providers have been hired, including faculty and NPs, to assist with the outpatient clinic load, allowing for more discussion.</td>
<td>Physicians, NPs, nurses, medical assistants and other health care professionals.</td>
</tr>
<tr>
<td>Providers were inconsistent in their documentation of counseling with regards to the pneumococcal vaccination.</td>
<td>Re-educated providers regarding the Mi-Chart dot phrases and posted reminder flyers in the clinic area.</td>
<td>Physicians, NPs, nurses, medical assistants and other health care professionals.</td>
</tr>
<tr>
<td>Providers had difficulty with follow up Pneumococcal vaccinations and reminders.</td>
<td>Adjustments to the Mi-Chart dot phrases and clinic notes with reminder phrases added in to help keep track of the next Pneumococcal vaccinations that are due.</td>
<td>Physicians, NPs, nurses, medical assistants and other health care professionals.</td>
</tr>
</tbody>
</table>
Note: If additional causes were identified that are to be addressed, insert additional rows.

33. 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: An additional education session is anticipated after further review of the literature is complete since many of our faculty have additional questions regarding Pneumococcal vaccine and also other vaccines in the heme/onc population.

   ☐ Further cycles will occur and are to be documented for MOC. If checked, contact the UM Part IV MOC Program to determine how the project’s additional cycles can be documented most practically.

I. Reflections and Future Actions

33. Describe any barriers to change (i.e. problems in implementing interventions listed in #16 and #23) that were encountered during this QI effort and how they were addressed. The main difficulties encountered in this QI project were how to successful educated a changing (and busy) provider base. To address this challenge, we provided formal education sessions and answered individual questions as needed either in our weekly meetings or on-the-spot.

34. Describe any key lessons that were learned as a result of the QI effort. A key lessons learned during this project was the importance of standardized documentation to ensure that all providers were able to easily provide accurate and consistent information to our at-risk population. Additionally, the value of one-page summary “cheat sheets” to help with the complex pneumococcal administration was a crucial part to the success in following through with the appropriate administration.

35. Describe any best practices that came out of the QI effort. The development of one page “cheat sheets” to help educate rotating providers consistently provide optimize care was a key lesson learned during this project that could easily be applied to other patient care avenues (e.g. fever plans).

36. Describe any plans for spreading improvements, best practices, and key lessons. Following this QI project, the division has been galvanized to review the best practice recommendations for all vaccinations in our at-risk population. Moreover, one of our fellows and faculty members have elected to pursue a more in-depth study to optimize the timing of vaccination in our general oncology patients. Additionally, we are considering extending our QI project to our colleagues in the MidWest Immuno-Heme Consortium who also treat a large number of at-risk patients.

37. Describe any plans for sustaining the changes that were made. The summary recommendation sheets continue to be posted in the active clinic work areas as a constant prompt for providers to remember to include pneumococcal vaccination in their clinic visit discussion.

J. Minimum Participation for MOC

38. 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 #39.

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 #14.
   – Implementing interventions described in item #16.
   – Reviewing and interpreting post-intervention data, considering underlying causes, and planning intervention as described in item #21.
   – Implementing adjustments/second interventions described in item #23.
   – Reviewing and interpreting post-adjustment data, considering underlying causes, and planning intervention as described in item #29.
☑ Yes ☐ No If “Yes,” individuals are eligible for MOC unless other requirements also apply and must be met – see item # 40.

39. 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 40.

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 # 40. If “No,” continue to #39c.

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 # 40.

40. 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: Participants were required to assist in the collection of the data regarding their patients.

K. Sharing Results

41. Are you planning to present this QI project and its results in a:
☑ Yes ☐ No Formal report to clinical leaders?
☐ Yes ☑ No Presentation (verbal or poster) at a regional or national meeting?
☐ Yes ☑ No Manuscript for publication?

L. Project Organizational Role and Structure

42. 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): Pediatric Hematology/Oncology
- 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):