

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

Implementing a Standardized Outpatient Seizure Action Plan for Patients with Seizures and Epilepsy

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

Section	Items
A. Introduction	1-6. Current date, title, time frame, key individuals, participants, funding
B. Plan	7-10. Patient population, general goal, IOM quality dimensions, ACGME/ABMS competencies 11-13. Measures, baseline performance, specific aims 14-17. Baseline data review, underlying (root) causes, interventions, who will implement
C. Do	18. Intervention implementation date
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H. Readjust plan	29-32. Post-adjustment data review, underlying causes, further adjustments, who will implement
I. Reflections & plans	33-37. Barriers, lessons, best practices, spread, sustain
J. Participation for MOC	38-40. Participation in key activities, other options, other requirements
K. Sharing results	41. Plans for report, presentation, publication
L. Organization affiliation	42. Part of UMHS, AAVA, other affiliation with UMHS

QI Project Report for Part IV MOC Eligibility

Implementing a Standardized Outpatient Seizure Action Plan for Patients with Seizures and Epilepsy

A. Introduction

1. **Date** (*this version of the-report*): 3/24/2017

2. **Title of QI effort/project** (*also insert at top of front page*): Implementing a Standardized Outpatient Seizure Action Plan for Patients with Seizures and Epilepsy

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*): March 30, 2016

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*): March 1, 2017

4. Key individuals

a. **QI project leader** [*also responsible for confirming individual's participation in the project*]

Name: Erin Fedak Romanowski, DO

Title: Quality Improvement Division Lead, Division of Pediatric Neurology

Organizational unit: Division of Pediatric Neurology, Department of Pediatrics

Phone number: 734-936-4179

Email address: fedake@med.umich.edu

Mailing address: 12-733 CS Mott Children's Hospital, 1540 E. Hospital Dr., SPC 4279, Ann Arbor, MI 48109-4279

b. **Clinical leader who oversees project leader regarding the project** [*responsible for overseeing/"sponsoring" the project within the specific clinical setting*]

Name: Steven Leber, MD, PhD

Title: Division Director, Division of Pediatric Neurology

Organizational unit: Division of Pediatric Neurology, Department of Pediatrics

Phone number: 734-936-4179

Email address: leber@med.umich.edu

Mailing address: 12-733 CS Mott Children's Hospital, 1540 E. Hospital Dr., SPC 4279, Ann Arbor, MI 48109-4279

5. Participants

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

Profession	Number (<i>fill in</i>)
Practicing Physicians	11
Residents/Fellows	10
Physicians' Assistants	0
Nurses (APNP, NP, RN, LPN)	2
Other Licensed Allied Health (e.g., PT/OT, pharmacists, dieticians, social workers)	0

b. Approximately how many physicians (by specialty/subspecialty and by training level) and physicians’ assistants participated for MOC?

Profession	Specialty/Subspecialty (fill in)	Number (fill in)
Practicing Physicians	Child Neurology	11
Fellows	Epilepsy	2
Residents		0
Physicians’ Assistants	(Not applicable)	0

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

- Internal institutional funds (e.g., regular pay/work, specially allocated)
- Grant/gift from pharmaceutical or medical device manufacturer
- Grant/gift from other source (e.g., government, insurance company)
- Subscription payments by participants
- Other source (describe):

The Multi-Specialty Part IV MOC Program requires that QI efforts include at least two linked cycles of data-guided improvement. Some projects may have only two cycles while others may have additional cycles – particularly those involving rapid cycle improvement. The items below provide some flexibility in describing project methods and activities. If the items do not allow you to reasonably describe the steps of your specific project, please contact the UMHS Part IV MOC Program Office.

B. Plan

7. Patient population. What patient population does this project address (e.g., age, medical condition, where seen/treated): This project includes all pediatric neurology patients (0-18 years old) seen in the CS Mott Pediatric Neurology Outpatient Clinic with seizures and/or epilepsy. These patients were identified by specifically identified appropriate ICD-10 codes.

8. General purpose.

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

(1) What should be occurring and why should it occur (benefits of doing this)?

Epilepsy is a common chronic disease in childhood, affecting approximately 1% of children in the United States. Epilepsy in children has been shown to result in significant parent and patient anxiety, emergency department visits and hospital admissions. Although a seizure action plan is likely discussed informally at most pediatric neurology clinic visits, discussing and providing a formal plan may help further provide parents and patients with knowledge and a plan regarding their disorder. A discussed, written plan documenting their child’s maintenance medications as well as rescue medications for breakthrough seizures may help to alleviate anxiety, excessive emergency department visits, and telephone calls, and may improve knowledge about the disorder. The Epilepsy Foundation and American Academy of Pediatrics recommend seizure action plans for patients with seizures. Most schools require a document from the child’s physician regarding what to do in the event a seizure occurs in a child with a history of seizures or epilepsy.

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

Pediatric neurology providers at the University of Michigan were surveyed prior to the start of this project to obtain baseline data. Of responders, no pediatric neurology provider was using a standardized action plan. A few noted providing their own non-standardized plan to their patients. A non-standardized plan may cause variability amongst providers. There is lack of consistency when providing emergency care plans to schools and parents. This also provides a

substantial amount of work for clinic nursing staff when asked to provide action plans to schools without a standardized plan in place.

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.)

Improve the rate of patients with seizures and/or epilepsy who receive a standardized seizure action plan in the Pediatric Neurology Outpatient Clinic at Mott Children's Hospital.

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

<http://www.nationalacademies.org/hmd/~media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf>)

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

10. Which ACGME/ABMS core competencies are addressed? (Check all that apply.)

<http://www.abms.org/board-certification/a-trusted-credential/based-on-core-competencies/>)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Patient Care and Procedural Skills | <input type="checkbox"/> Medical Knowledge |
| <input checked="" type="checkbox"/> Practice-Based Learning and Improvement | <input checked="" type="checkbox"/> Interpersonal and Communication Skills |
| <input type="checkbox"/> Professionalism | <input checked="" type="checkbox"/> 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** (e.g., Percent of . . . , Mean of . . . , Frequency of . . .):
Percent of patients with seizures and/or epilepsy who have received a standardized seizure action plan in the Pediatric Neurology Outpatient Clinic at Mott Children's Hospital
- **Measure components – describe the:**
 - Denominator (e.g., for percent, often the number of patients eligible for the measure):
The number of patients with seizures and/or epilepsy seen in the Pediatric Neurology Outpatient Clinic at Mott Children's Hospital
 - Numerator (e.g., for percent, often the number of those in the denominator who also meet the performance expectation):
The number of patients with seizures and/or epilepsy seen in the Pediatric Neurology Outpatient Clinic at Mott Children's Hospital who received a standardized seizure action plan.
- **The source of the measure is:**
 - An external organization/agency, which is (name the source):
The Epilepsy Foundation and American Academy of Pediatrics both advocate for school and home seizure action plans.
 - Internal to our organization and it was chosen because (describe rationale):
A formal standardized plan did not exist. The Pediatric Neurology Division created a standardized seizure action plan which would address all issues felt to be applicable to our patients in school and at home, including general information specific to their child's seizure type(s), epilepsy syndrome, and patient specific care plan.
- **This is a measure of:**
 - Process – activities of delivering health care to patients
 - Outcome – health state of a patient resulting from health care

(If more than two measures are tracked across the two cycles, copy and paste the section for a measure and describe the additional measures.)

12. Baseline performance

a. What were the beginning and end dates for the time period for baseline data on the measure(s)?

A survey was provided prior to the start of project implementation in March 2016. Providers were asked to provide information about their practice in providing a standardized or non-standardized seizure action plan to patients with seizures and/or epilepsy in the last year.

b. What was (were) the performance level(s) at baseline? *Display in a data table, bar graph, or run chart (line graph). Can show baseline data only here or refer to a display of data for all time periods attached at end of report. Show baseline time period, measure names, number of observations for each measure, and performance level for each measure.*

Measure	Baseline
Use a standardized seizure action plan	0%
Sometimes use a non-standardized seizure action plan	30%
Never use a non-standardized seizure action plan	70%

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].”*

Our goal was to improve the percentage of patients with seizures and/or epilepsy who received a standardized seizure action plan from 0% to 50% between May and December, 2016.

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

The performance target of 50% was defined by our internal group of pediatric neurologists. There are no national benchmarks currently.

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)*

Pediatric neurology physicians, nurse practitioners, fellows, residents and office nurses

b. How? *(e.g., in a meeting of clinic staff)*

Division meetings were held to review baseline data and to plan cycle 1 intervention

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

March 30, 2016, with follow-up via email communication

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> in section 2a. As background, some summary examples of common causes and interventions to address them are:

Common Causes	Common Relevant Interventions
<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>

15. What were the primary underlying/root causes for the <u>problem(s)</u> at <u>baseline</u> that the project can address?	16. What intervention(s) addressed this cause?	17. Who was involved in carrying out each intervention? (List the professions/roles involved.)
Health care providers were not aware of the need for a standardized seizure action plan and felt their current practice (discussion of seizure care without a formal standardized plan) was acceptable.	Education was provided to the division (all pediatric neurology providers) regarding the recommendations provided by the Epilepsy Foundation (EF), American Academy of Pediatrics (AAP) and our internal pediatric neurologists who specialize in epilepsy regarding the value of a standardized seizure action plan. The high burden of phone calls the nurses were receiving to create seizure action plans for schools was also discussed	Pediatric neurologists specializing in epilepsy discussed the recommendations by the EF, AAP and provided expertise to the rest of the pediatric neurology division. Neurology office nurses provided insight to the pediatric neurology division regarding workflow when seizure action plans are requested by schools.
A standardized seizure action plan was not available at our institution	A standardized seizure action plan was created.	Pediatric neurologists, fellows, residents, neurology office nurses, neurology clinic staff provided input into the content of the seizure action plan
Health care providers had difficulty remembering to provide a seizure action plan at the end of a clinic visit	Reminders were posted in the clinic staffing room and in patient clinic rooms next to provider workstations. Email reminders were also sent.	Pediatric neurologists, fellows, residents, neurology office nurses, neurology clinic staff posted reminders and reminded colleagues
There was not enough time to spend on discussing and creating a standardized seizure action plan in a clinic visit	A standardized electronic form was incorporated into the patient's clinic discharge instructions to create quick and easy workflow in the clinic setting	Pediatric neurologists, fellows, residents provided input regarding the logistics of using such a form electronically in clinic.

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 first intervention, which implemented providing a standardized seizure action plan in the clinic discharge instructions, began on May 16, 2016.

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)?

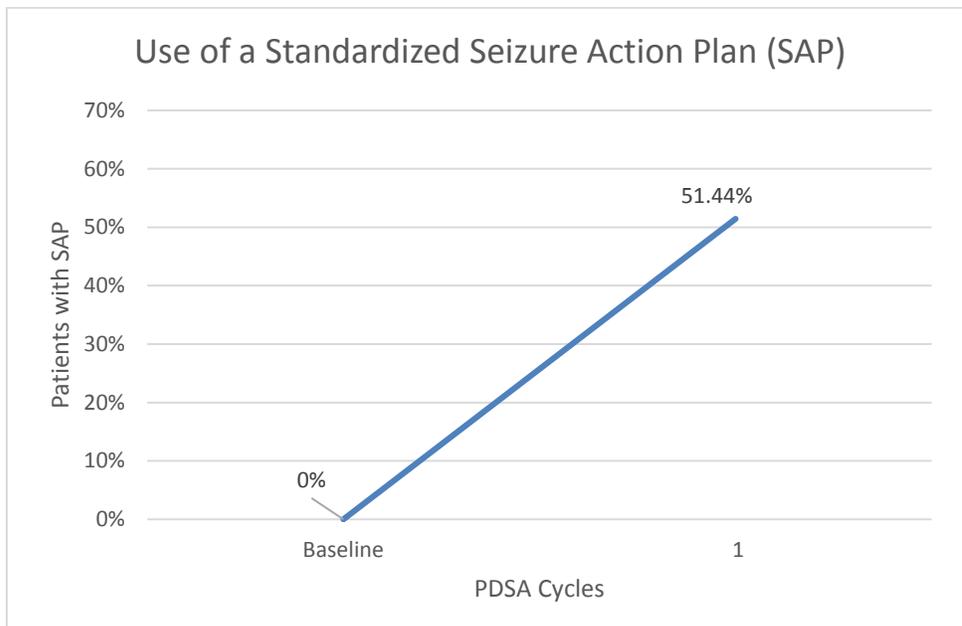
Yes No – If no, describe how the population or measures differ:

20. Post-intervention performance

a. What were the beginning and end dates for the time period for post-intervention data on the measure(s)?

May 16- August 16, 2016

b. What was (were) the overall performance level(s) post-intervention? *Add post-intervention data to the data table, bar graph, or run chart (line graph) that displays baseline data. Can show baseline and post-intervention data incrementally here or refer to a display of data for all time periods attached at end of report. Show baseline and post-intervention time periods and measure names and for each time period and measure show number of observations and performance level.*



Between May 16- August 16, 2016, 809 patients were seen with seizures and/or epilepsy according to specified ICD-10 codes. Of these 809 patients, 413 received a standardized seizure action plan, improving the rate of use from 0% to 51.44%.

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

Yes. The intervention increased performance slightly beyond our goal of 50% (51.44%)

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.)

a. Who was involved? *(e.g., by profession or role)*

Same as #14? Different than #14 *(describe):*

b. How? *(e.g., in a meeting of clinic staff)*

Same as #14? Different than #14 *(describe):*

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

September 7, 2016, with follow-up via email communication

Use the following table to outline the next plan that was developed: #22 the primary causes, #23 the adjustments(s)/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 <u>problem(s)</u> following the <u>intervention(s)</u> 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? <i>(List the professions/roles involved.)</i>
Providers reported that the created electronic form was not user-friendly and time intensive	Collaboration with electronic medical record (MiChart) personnel to create a new, more user-friendly form which was incorporated into the electronic medical record and saved automatically in the patient's chart.	Project lead and resident met with MiChart personnel to create a specialty form. Other pediatric neurologists, fellows, residents, neurology office nurses were then trained how to use this
Providers reported there was not enough time in clinic to provide a standardized seizure action plan in a clinic visit	The newly created user-friendly form filtered the seizure action plan automatically into a letter for the family and primary care physician to reduce workload on the physician and nurses.	Project lead and resident met with MiChart personnel to create a specialty form. Other pediatric neurologists, fellows, residents, neurology office nurses were then trained how to use this
Some providers continued to report difficulty remembering to provide a seizure action plan at the end of a clinic visit	Reminders were placed in the clinic staffing room and in patient clinic rooms next to provider workstations. Email reminders were also sent	Pediatric neurologists, fellows, residents, neurology office nurses, neurology clinic staff posted reminders and reminded colleagues
Data were difficult to analyze from cycle 1, as the seizure action plans were not easy	The newly created smart form in MiChart allowed data to be easily pulled into a report in the	Project lead met with MiChart personnel to learn a new mechanism of data

to track in the electronic medical record.	electronic medical record, reducing the time required to pull and analyze data.	analysis which was then shared with the division.
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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.)

The second intervention, which implemented a new, user-friendly form created through the electronic medical record (MiChart) began on September 12, 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)?

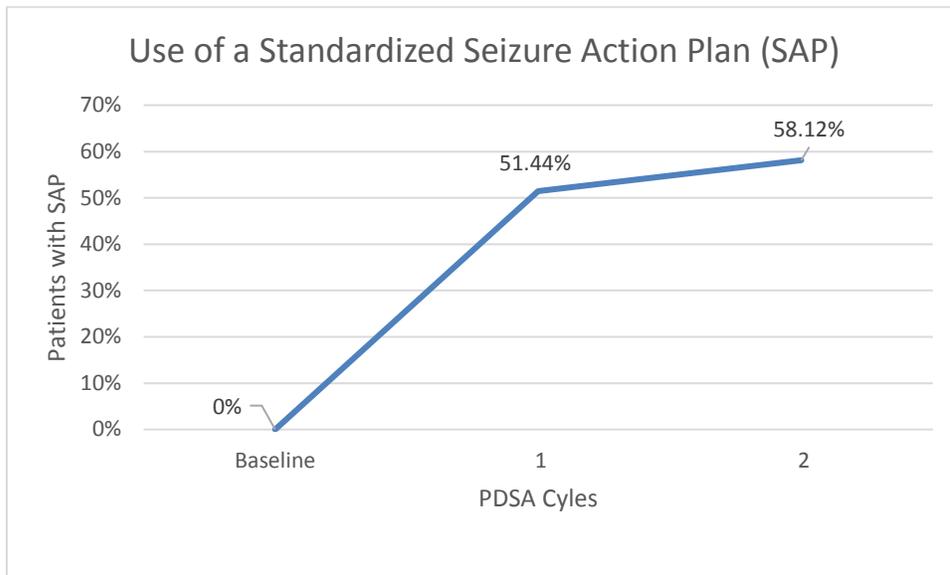
Yes No – If no, describe how the population or measures differ:

27. Post-adjustment performance

a. What were the beginning and end dates for the time period for post-adjustment data on the measure(s)?

September 12, 2016-December 12, 2016

b. What was (were) the overall performance level(s) post-adjustment? Add post-adjustment data to the data table, bar graph, or run chart (line graph) that displays baseline and post-intervention data. Can show here or refer to a display of data for all time periods attached at end of report. Show time periods and measure names and for each time period and measure show the number of observations and performance level.



Between September 12- December 12, 2016, 788 patients were seen with seizures and/or epilepsy according to specified ICD-10 codes. Of these 788 patients, 458 received a standardized seizure action plan, improving the rate of use from 0% to 51.44% in the first cycle to 58.15% in the second cycle.

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

Yes, our goal was further improved by another 7% after creating a more user-friendly form in the electronic medical record.

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

b. If easily possible, for each listed group of health care providers:

- **Participants with data available:**
 - **Indicate the number participating** (if none, enter “0” and do not complete rest of row)
 - **if any are participating, are data on performance of individuals available?** (If “No”, do not complete rest of row.)
- **if data on performance are available, then enter the number of participants in three categories regarding reaching target rates (i.e. the specific aims for measures).**
(If you do not have this information or it is not easily available, leave the table blank.)

Profession	Participants with Data Available		Number of These Participants Reaching Targets		
	# Participating in QI Effort (from #5.a)	Data on Performance of Individuals Available? (Enter Yes or No)	# Not Reaching Any Target Rate	# Reaching at Least One Target Rate	If Multiple Target Rates, # Reaching All Target Rates (If only one rate, enter NA.)
Practicing Physicians	11	Yes	3	8	NA
Residents/ Fellows	10	Yes	2	6	NA
Physicians’ Assistants	0	Yes			NA
Nurses (APNP, NP, RN, LPN)	2	Yes	2	0	NA
Other Licensed Allied Health	0	N/A			NA

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):

c. When? (e.g., date(s) when post-adjustment data were reviewed and discussed)

March 1, 2017

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.

30. What were the primary underlying/root causes for the <u>problem(s)</u> following the <u>adjustment(s)</u> that the project can address?	31. What further adjustments/ intervention(s) might address this cause?	32. Who would be involved in carrying out each further adjustment/intervention? (List the professions/roles involved.)
Some providers were less likely to participate	Provide individual data and feedback, which raises awareness to lack of participation. This could have been done on a more regular basis	Project lead and providers.
New residents and recently hired nurse practitioners who rotate through the clinic were not aware of the seizure action plan	Include the new seizure action plan instructions in the packet of information already provided to new clinic rotators	Project lead, resident program director, division director
Some providers were not aware of the newly created, more user-friendly form in the second cycle	Make sure all providers who did not attend the QI meeting were aware by face-to-face instruction as opposed to email	Project lead, providers who missed QI meetings
Providers continued to forget to participate	Best practice alerts in the electronic medical record could be considered. Reminder signs were placed in clinic. More frequent progress reports could have been supplied	Project lead

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. We will continue to use the seizure action plan on a regular basis in our clinics but will not perform further PDCA cycles as we met our goal.
- Further cycles will occur, but will not be documented for MOC. *If checked, summarize plans:*
- 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.

Initially, some providers were hesitant to participate due to concerns regarding time constraints in clinic. The first seizure action plan created for cycle 1 was felt by many to be tedious to fill out, and not user friendly. The first form then had to be pasted into a letter if the family or school desired this to be in letter format which created another step in workflow. The first seizure action plan was also difficult to find in the patient's chart for future use and for data analysis. For the second cycle, the project lead met with personnel from MiChart (the University's electronic medical record) to create a user friendly, more efficient "smart form" which could be easily saved, retrieved and updated in the patient's chart. This form could then be automatically converted into a letter format with no editing required by the provider, and could be electronically faxed automatically to the patient's primary care provider, or to the family's home. The creation of this form saved providers time in clinic, while allowing them the ability to provide this letter or form to the family with little to no extra effort.

34. Describe any key lessons that were learned as a result of the QI effort.

Prior to initiating a new clinical practice which requires analysis, it would be important to know exactly how the data can be obtained and analyzed. The cycle 1 data of this project was difficult to analyze and access, requiring tedious chart review. Meeting with electronic medical record staff was extremely helpful in troubleshooting and it would be important to identify a contact person before project implementation next time.

It is important not to assume that all providers are aware of changes in clinical practice if the only communication has been email. There were a few providers unable to be present at a planning meeting who were then not aware of changes for cycle 2 despite email notifications, thereby decreasing their participation due to lack of awareness. More than one face-to-face meeting may be required to ensure all participating parties are aware of changes. More frequent reminders and providing data analysis more frequently throughout a cycle will likely also improve compliance and participation.

35. Describe any best practices that came out of the QI effort.

Providers now routinely provide seizure action plans to patients with seizures and epilepsy. Those with the highest participation included epilepsy specialists and residents, the group of providers who see the most patients with seizures. Families, primary care physicians and our office nurses have expressed positive feedback to receiving the forms. Parents subjectively have reported a better understanding of their children's diagnoses, and what to do in an emergency. Office nurses have subjectively noted a decrease in the number of seizure action plans they are being asked to create themselves for schools, allowing a shift in workflow to other patient care issues.

36. Describe any plans for spreading improvements, best practices, and key lessons.

We plan to share the seizure action plan smart form with our inpatient teams. We would like patients to receive a seizure action plan upon discharge from the hospital or emergency department in the future when appropriate.

37. Describe any plans for sustaining the changes that were made.

We plan to continue to use the seizure action plan in clinic, and extend the use of this form to our inpatient teams. Instructions for use have been created and sent to new resident rotators, newly hired providers, and posted in clinic staffing rooms for further reference. Our nurses also use these forms for schools now, as they are able to be sent electronically, are more user friendly, and can be saved and updated anytime in the patient's medical record. This allows for a standardized form to be used by all providers at our institution, which eliminates confusion from families, schools and other providers. We also plan to extend this form to be used in upcoming telemedicine clinics across the state.

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:*

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.

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? Possibly- TBD

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*):

• 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*):