

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

### Improving blood pressure control in patients with Chronic Kidney Disease

#### 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
<b>A. Introduction</b>	1-6. Current date, title, time frame, key individuals, participants, funding
<b>B. Plan</b>	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
<b>C. Do</b>	18. Intervention implementation date
<b>D. Check</b>	19-20. Post-intervention performance
<b>E. Adjust – Replan</b>	21-24. Post-intervention data review, underlying causes, adjustments, who will implement
<b>F. Redo</b>	25. Adjustment implementation date
<b>G. Recheck</b>	26-28. Post-adjustment performance, summary of individual performance
<b>H. Readjust plan</b>	29-32. Post-adjustment data review, underlying causes, further adjustments, who will implement
<b>I. Reflections &amp; plans</b>	33-37. Barriers, lessons, best practices, spread, sustain
<b>J. Participation for MOC</b>	38-40. Participation in key activities, other options, other requirements
<b>K. Sharing results</b>	41. Plans for report, presentation, publication
<b>L. Organization affiliation</b>	42. Part of UMHS, AAVA, other affiliation with UMHS

## QI Project Report for Part IV MOC Eligibility

### A. Introduction

1. **Date** (*this version of the report*): 4/30/18

2. **Title of QI effort/project** (*also insert at top of front page*): Improving blood pressure control in patients with Chronic Kidney Disease

### 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*): January 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*): October 2017

### 4. Key individuals

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

**Name:** Jonathan Segal, MD  
**Title:** Associate Professor, Internal Medicine  
**Organizational unit:** Internal Medicine Department – Nephrology Division  
**Phone number:** 734-615-3994  
**Email address:** jhsegal@umich.edu  
**Mailing address:** 310 Simpson Building, 102 Observatory Street  
 Ann Arbor, MI 48103 SPC 5725

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

**Name:** Patrick Gipson, MD  
**Title:** Assistant Professor, Internal Medicine  
**Organizational unit:** Internal Medicine Department – Nephrology Division  
**Phone number:** 734-936-6489  
**Email address:** pgipson@umich.edu  
**Mailing address:** 3914 Taubman Center  
 Box 5364

### 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	20
Residents/Fellows	10
Physicians' Assistants	1
Nurses (APNP, NP, RN, LPN)	2
Other Licensed Allied Health (e.g., PT/OT, pharmacists, dieticians, social workers)	5

**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	Internal Medicine/Nephrology`	20
Fellows	Internal Medicine/Nephrology	10
Residents	n/a	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):**

Patients aged 18-85 seen by Nephrologists at the University of Michigan Taubman Medical Center outpatient clinics. Patients are on Chronic Kidney Disease Registry (criteria listed below) and are managed by Nephrology only (patient does not see Primary Care provider at Michigan Medicine). The target patients for intervention are the subset of the clinics population not meeting the current performance measure for blood pressure control, as measured by the “Most Recent Blood Pressure” measurement on the UMMG (University of Michigan Medical Group) HTN Registry.

Registry Criteria:

- Established UMHS patient criteria: All patients must be alive and have been seen in an ambulatory care setting at least twice in the past two years by Nephrology, with one of those visits completed in the past 395 days.
- Eligibility criteria: Patients 18-85 years of age with most recent outpatient estimated glomerular filtration rate (eGFR) < 45 mL/min (Stages 3B,4,5) in the past two years.
- Exclusion criteria: Patients with kidney transplant or dialysis.
- Blood Pressure Control Criteria: The proportion of patients, 18 - 85 years of age, whose most recent blood pressure noted in an ambulatory care setting was < 140/90 in the past year.

**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)?

Uncontrolled hypertension is important for the Nephrology population for a variety of reasons. Hypertension is a risk factor for developing Chronic Kidney Disease (CKD) and is the second

leading cause of ESRD in the U.S. Kidney disease from any cause can, in turn, exacerbate uncontrolled hypertension. Lowering blood pressure is important in slowing the progression of kidney disease and reducing cardiovascular morbidity and mortality.

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

Currently, only 66% of the patients managed by Nephrology only have their most recent blood pressure in control (as defined by HEDIS criteria, <140/90).

**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.)

This project is designed to increase the number of patients who have blood pressure under control so that we achieve at least 72% in control (the UMMG 75th percentile).

**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 type="checkbox"/> Safety     |
| <input type="checkbox"/> Efficiency               | <input 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 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 blood pressure in control (<140/90)

- **Measure components** – describe the:

Denominator (e.g., for percent, often the number of patients eligible for the measure): Total number of patients in the population (described in #7).

Numerator (e.g., for percent, often the number of those in the denominator who also meet the performance expectation): Number of patients whose most recent blood pressure noted in an ambulatory care setting was < 140/90 in the past year

- **The source of the measure is:**

- |  |
|--|
| <input checked="" type="checkbox"/> An external organization/agency, which is (name the source): HEDIS |
| <input type="checkbox"/> Internal to our organization and it was chosen because (describe rationale):  |

- **This is a measure of:**

- |  |
|--|
| <input type="checkbox"/> Process – activities of delivering health care to patients                |
| <input checked="" type="checkbox"/> 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)?**

January 2016 through November 2016

- 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.*

Performance level at baseline was 66% of patients achieving target.

See data table and chart at end of report.

**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].”*

Increase the percent of CKD patients who have blood pressure under control from 65% to 72% by January 2017.

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

The target was determined in reference to the University of Michigan Medical Group 75% percentile for all clinics caring for CKD patients with hypertension.

**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)*

- Michigan Medicine Medical Group - Hypertension/CKD Quality Committee
- Taubman Nephrology ACU – Medical Director, ACU Manager, ACU Call Center Supervisor, Registered Nurses, Medical Assistants, all faculty and fellows who see general Nephrology patients at Taubman clinic
- Division of Nephrology – Division Administrator, Administrative Assistant
- Department of Internal Medicine - Department Performance Improvement Consultant

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

Scheduled meetings: weekly faculty and fellows conferences, monthly faculty meetings, weekly ACU clinic lead meetings, daily staff huddles, Hypertension/CKD Quality Committee meetings.

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

January 18, 2017 – Faculty noon conference

January 26, 2017 – Clinic staff huddle; Faculty meeting

January 24, 2017 - Fellows noon conference

**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:

<b>Common Causes</b>	<b>Common Relevant Interventions</b>
<i>Individuals: Are not aware of, don't understand.</i>	<i>Education about evidence and importance of goal.</i>
<i>Individuals: Believe performance is OK.</i>	<i>Feedback of performance data.</i>
<i>Individuals: Cannot remember.</i>	<i>Checklists, reminders.</i>
<i>Team: Individuals vary in how work is done.</i>	<i>Develop standard work processes.</i>
<i>Workload: Not enough time.</i>	<i>Reallocate roles and work, review work priorities.</i>
<i>Suppliers: Problems with provided information/materials.</i>	<i>Work with suppliers to address problems there.</i>

<b>15. What were the primary underlying/root causes for the <u>problem(s)</u> at <u>baseline</u> that the project can address?</b>	<b>16. What intervention(s) addressed this cause?</b>	<b>17. Who was involved in carrying out each intervention? (List the professions/roles involved.)</b>
Variability in how BP is measured in clinic (Patients not resting for 5 minutes before taking, recheck of elevated BP not consistently documented in medical record, sometimes orthostatic readings are done/not done).	Developed standard flowchart and protocol for medical assistants and nurses to follow for in clinic blood pressure measurement. Encouraged providers to proactively identify patients for BP Tru measurement in between visits and at next visit.	Physicians Medical Assistants Nurses Clinic manager
Patient is a candidate for home BP monitoring, but (a) does not have home monitor or (b) is checking home blood pressure readings, but results are not adequately documented. In the second scenario, providers may make treatment decisions based on home blood pressure readings, but in-clinic readings may not reflect that process.	Identify patients upon initial outreach phone call and at clinic visit. Connect to nurse for instructions on how to obtain monitor and report readings through MiChart patient portal entered flowsheet or other means.	Physicians Patient Services Assistant (clerical) Nurses
Patient has not had recent BP reading: a) since last visit with Neph; b) since treatment was initiated/modified. Follow up intervals in our specialty clinic can often be 4-6 months or longer, so that opportunities to document change in blood pressure readings are few.	Contact patients to request more current measurement via 1) separate in clinic BP visit with nurse; 2) extra time for BP Tru measurement at next upcoming visit; 3) at local primary care office; 4) home monitoring reporting	Patient Services Assistant (clerical) Nurses

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.)

February 1, 2017

## 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)?**

February 1, 2017-April 30, 2017

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.*

See data table and chart at end of report.

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

No, baseline performance was 66%; post intervention performance decreased to 63%. The target of 72% of patients having blood pressure in control was not met.

## 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)

May 20, 2017

**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) following the 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? (List the professions/roles involved.)
BP Tru machine provides more accurate readings, but takes longer and disrupts clinic flow if used for every patient.	Determine which patients could benefit the most from a BP Tru measurement based on their prior blood pressure readings. Added additional machine to clinic (for a total of 2).	Medical assistants Physicians Nurses
Very few patients (2/26) were interested in scheduling a stand along visit for blood pressure measurement. Often due to distance patient lives from clinic.	Continue to offer the stand alone visit as an option, but focus efforts on scheduling BP Tru measurement visit in conjunction with next clinic visit.	Medical assistants Physicians Nurses Patient Services Assistant
Patients who scheduled a separate visit and then no showed were not followed.	Develop process for handling no show visits with nurse and add to workflow.	Physicians Nurses
Patients with home monitors were not reporting.	Communicated MiChart dot phrase with home monitor portal reporting instructions to clinic nurses. Tell patients to bring monitors to clinic visit for calibration.	Physicians Nurses
Patients who could benefit from home monitoring had financial barriers to obtaining a monitor.	Added referral to social work to the workflow to assist patients with financial barriers.	Physicians Nurses Social workers

**F. Redo**

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

June 1, 2017

**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)?**

June 1, 2017 – August 31, 2017

**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.*

See data table and chart at end of report.

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

No, the post adjustment performance was 65%, an improvement over the post intervention performance of 63%. The target of 72% of patients having blood pressure in control, however, was not met.

**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 Target Rate	# Reaching Target Rate	If Multiple Target Rates, # Reaching All Target Rates (If only one rate, enter NA.)
Practicing Physicians					
Residents/ Fellows					
Physicians’ Assistants					
Nurses (APNP, NP, RN, LPN)					
Other Licensed Allied Health					

**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)* September 15, 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? <i>(List the professions/roles involved.)</i>
Most patients do not want to do anything different. There was not much interest in scheduling an additional visit.	Engage patients in discussions about hypertension at clinic visit. Enhance current patient education sheet with information about recommended home monitors and BP products, how to check BP accurately, etc. Use Pharm D to help manage hypertension in patients via e-visit or phone management.	Physicians Nurses Medical Assistants Pharmacist
BP Tru takes more time and can disrupt clinic flow when MAs decide day of visit to use it.	Dedicate a room for BP measurement that patients can go to after clinic visit (at provider discretion) for another BP reading.	Medical Assistants Clinic Management
Patients listed on registry as BP not in control have no future visit scheduled with Nephrology (termed “lost to follow up”.) No process in place for patients who cancel a return visit, but do not re-schedule at the same time.	Develop process for identifying and intervening on patients who have no future visit scheduled. Add measure to dashboard for ongoing interventions.	Physicians Patient Services Assistant Medical Assistants Nurses
There were some successes at enrolling patients in home	Communicate existing process and dot phrase for enrolling	Physicians Nurses

<p>monitoring reporting through the portal, but mostly during clinic and not over the phone.</p>	<p>patients in home monitoring reporting through the portal, and add to faculty "favorites" in MiChart. Encourage nurses and physicians to engage patients in discussions about home monitoring while in clinic. Add measure to dashboard for ongoing tracking and intervention. Add to faculty meetings as annual topic for ongoing education.</p>	<p>Medical Assistants Quality Analytics</p>

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:*  
 Enhance education sheet for patients.  
 Explore use of Pharm D to manage patient hypertension.  
 Request additional space in clinic for BP Tru measurement after visit.  
 Add new measures to quality dashboard.  
 Communicate and educate faculty on annual basis about tools available to engage patients.
- 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.**

- Room availability limited the staff's ability to utilize the BP Tru machines as much as they could have. Room availability is a longer term issue that is being considered across the 3<sup>rd</sup> floor of Taubman for all clinics.
- Not all patients were able to be contacted. Several attempts were made.
- Some patients are lost to follow up (no future visit scheduled). Tracking measures to monitor this and processes to address will be considered for the future.
- Patients not reporting home monitoring results through portal. An effort will be made to engage patients in clinic. Standard dot phrases were communicated to providers and nurses. A measure for tracking will be added to the dashboard.
- Only one BP Tru machine in clinic. A second machine was added.

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

- It's important to understand patient behavior related to BP management (ex, due to the distance that patients live from the clinic, many did not want an extra visit just for BP measure, enrolled in home monitoring but not reporting results, no future visit scheduled, etc.)
- The three-month cycle time for intervention in this project was too short. Given that many patients in a specialty clinic are seen at infrequent intervals such as every 6 months, improvement may not be captured until the next QI cycle. While some changes should produce immediate results (e.g., better measurement technique), others such as home blood pressure monitoring and subsequent medication changes may not be evident until the next follow up visit.

- We were unaware of the number of patients with uncontrolled hypertension who are lost to follow up from our clinic. Implementing a process to identify these patients and schedule return visits is a priority for our division and a direct result of this QI effort.

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

Standard workflow for measurement and follow up of BP at clinic visit.

Enhanced education sheet for patients.

Engagement of social work to assist patients with financial barriers to obtaining a home BP monitor.

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

Opportunity exists to share key lessons and best practices through the Hypertension QI committee, although no specific plans to disseminate this information are currently in place.

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

Adding topics to the faculty meetings for ongoing education around BP measurement with BP Tru and home monitoring.

Ongoing tracking of several key metrics through dashboard enhancements.

## 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?  
 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):** Internal Medicine Department, Nephrology Division, Taubman Center Nephrology Clinic

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

- No     Yes – the initiative is *(name or describe)*: Improving blood pressure control for targeted patient populations

**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):*

		Pts in Control	Total Pts	% in control	
				Actual	Goal
Baseline	Jan-16	614	932	66%	72%
	Feb-16	639	945	68%	72%
	Mar-16	636	965	66%	72%
	Apr-16	651	983	66%	72%
	May-16	628	969	65%	72%
	Jun-16	658	1002	66%	72%
	Jul-16	660	977	68%	72%
	Aug-16	676	984	69%	72%
	Sep-16	645	965	67%	72%
	Oct-16	604	961	63%	72%
	Nov-16	606	946	64%	72%
	Dec-16	610	942	65%	72%
	Intervention 1	Jan-17	569	919	62%
Feb-17		560	927	60%	72%
Mar-17		591	929	64%	72%
Apr-17		606	947	64%	72%
Intervention 2	May-17	590	935	63%	72%
	Jun-17	619	969	64%	72%
	Jul-17	644	973	66%	72%
	Aug-17				72%
	Sep-17				72%
Oct-17				72%	
Nov-17				72%	

  

66%	Baseline Mean
63%	Post Intervention Mean
65%	Post Adjustment Mean

  

**Patients with Most recent blood pressure in control (<140/90)**  
Nephrology-managed only; Taubman Nephrology

	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
Actual	66%	68%	66%	66%	65%	66%	68%	69%	67%	63%	64%	65%	62%	60%	64%	64%	63%	64%	66%				
Goal	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%