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Digital Practice

Enhancing Identification and
Management of Patients With
Diabetes and Hypertension



Updated to align with CMS' Quality Payment Program guidelines

Overview

Recently, the Centers for Medicare & Medicaid Services (CMS) finalized ruling that redesigns care delivery and payment reform for healthcare providers. With the release of the Medicare Access & Chip Reauthorization Act (MACRA) and the Quality Payment Program (QPP), significant emphasis is being placed on improving the health of your patients through enhanced quality reporting by rewarding “high-value, patient centered care.”

This digital practice guide was developed by MPRO with support from the Michigan Department of Health and Human Services (MDHHS) and Centers for Disease Control and Prevention (CDC).

The goal of this guide is to educate healthcare providers, their staff and interested parties about ways they can improve care for their patients with diabetes and hypertension through the use of an electronic health record (EHR) and health information technology (HIT). As more and more practices implement an EHR into their daily workflow, it is important that users understand the quality improvement features available to them when caring for their patients, for example those with diabetes. Studies have shown that people with type 2 diabetes have higher rates of hypertension along with cardiovascular disease. Approximately 65 percent of those with diabetes perish from heart disease and stroke (National Diabetes Education Program). Through the use of evidence-based interventions and advanced HIT functionality, healthcare providers can help patients to jointly manage HbA1C values and hypertension related comorbidities.

The guide includes information on the following subjects:

Care Management Using Your EHR

Describes quality improvement tools available through EHRs and registries that can help providers coordinate and manage care for chronic disease populations.

Quality Improvement

Overview of the major quality reporting incentive programs and the Plan, Do, Study, Act (PDSA) change theory to help providers implement workflow and care coordination improvements.

Hypertension

Provides condition-specific workflow and care improvement information for patients with hypertension. Learn how to improve data collection for hypertension-focused quality reporting measures.

Diabetes

Provides condition-specific workflow and care improvement information for patients with diabetes. Learn how to improve data collection for diabetes-focused quality reporting measures.

It is our continued hope that by the end of this guide, readers will have a greater understanding and working knowledge of HIT tools and quality reporting measures to improve care for patients with diabetes and hypertension. Together, we can optimize the use of HIT to provide more affordable and higher quality care to people and communities.

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Throughout this guide, MIPS measures will be highlighted using the following icon:



Associated MIPS Improvement Activities

Throughout this guide, boxes like this one are included to suggest relevant measures that will count toward credit in the “Improvement Activities” Quality Payment Program category.

MPRO is a quality improvement organization and part of Lake Superior Quality Innovation Network (QIN). Implement the following Improvement Activities related to working with a quality improvement organization to contribute to this MIPS performance category:

- “Use of toolsets or other resources to close healthcare disparities across communities” (IA_PM_6)
- Utilize CMS, QIN, NCC, QIO tools for improving health status
- “Additional improvements in access as a result of QIN/QIO technical assistance” (IA_EPA_4)
- Improve access to services (e.g., investment of on-site diabetes educator)
- “Engagement of community for health status improvement” (IA_PM_5)
- Collaborate with QIOs

Please contact the QPP Helpdesk with any questions at 1-866-288-8292 or QPP@cms.hhs.gov.

Chapter 1

Care Management Using Your EHR

The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 has brought about exponential growth in the rate of EHR adoption in office-based provider practices. In 2013, 48 percent of office-based physicians nationwide reported having met the requirements of a basic EHR system, up from 11 percent in 2001. In Michigan, adoption rates rank close to the national average at 47.8 percent.

As more healthcare organizations adopt and successfully use EHR systems, there are additional opportunities to leverage health information technologies (HIT) for care management optimization, particularly for patients with chronic conditions. Many features built into EHRs can assist providers and office staff to identify and care for these patients. For example, providers can create their own clinical decision support rules to serve as reminders when patients are due for certain tests such as hemoglobin A1c testing. These alerts prevent patients from “slipping through the cracks” which results in better care, healthier people and lower costs. Reminders, patient lists and alerts are just some of the tools available to providers using an EHR that can maximize time spent with patients.

During office visits, patients often have three types of needs:

- The immediate problem – e.g. sinus infection
- Unmet chronic care needs – e.g. overdue hemoglobin A1c testing
- Unmet preventive needs – e.g. annual eye exam

When a patient comes to the office, providers typically prioritize the tip of the iceberg (immediate need) and may have limited time to review the patient’s medical history to identify unmet chronic and preventive care needs. The care management features of an EHR can help synthesize, identify and alert the provider to issues lurking “under the water.” This chapter includes examples of care management tools that you can use at your practice to help you see all of your patient’s needs.

Michiganhealthit.org

Michiganhealthit.org is the home of the Michigan Medicaid EHR Incentive program. This website offers a variety of HIT resources and information for healthcare professionals and hospitals including program eligibility criteria, guidance on Medicaid EHR Incentive Program Meaningful Use (MU) requirements, and qualifying registries for public health reporting. Information is also available for payers and associations as well as patients and families to learn more about patient portals and health IT basics and benefits.

EHR Templates

Using EHR templates for care management can help providers to keep track of all that they do with their patients. Templates can be customized to fit the needs of patients, for example those with diabetes, hypertension and other chronic conditions. Templates help to save time and coordinate care by organizing necessary assessments and information for certain patient populations. Providers can be reassured that they will address every item for each of their patients using the customized templates.

Contact your EHR vendor for more information on how to build templates in your system and which customizations will carry over across software updates.

Clinical Decision Support Rules (CDS)

In order to become certified, EHR vendors must incorporate CDS rules within their EHR products. CDS is a process designed to assist health care professionals with clinical decision making by augmenting the EHR with a medical knowledge base. The EHR system pulls data entered on individual patients to generate patient specific interventions, assessments, recommendations or other forms of guidance based on evidence-based practice recommendations programmed into the system.

CDS rules do not have to be complex to have a significant impact. For example, simple dose-range alerts for medications (such as diuretics or insulin), drug-drug interaction alerts and drug-allergy alerts are conceptually straightforward but can prevent critical human errors. A more intricate example of CDS is a system that tracks lab trends over time and alerts the provider when lab values are trending to an unsafe level – i.e. elevated A1c or lipids.

One of the major barriers with CDS rules is the potential for “alert fatigue.” To maximize usefulness of CDS alerts, providers must resist the temptation to dismiss important messages. Addressing alerted care needs during the visit will satisfy rule criteria and clear related alerts.

Diabetes CDS rules

1. Preventive testing – retinal eye exams, foot exams, hemoglobin A1C, urine protein, lipid panels.
2. Treatment for patients with uncontrolled diabetes – lifestyle change counseling, self-monitoring of glucose, medication therapy.

Hypertension CDS rules

1. Preventive testing – elevated blood pressure readings.
2. Treatment for high blood pressure – recording blood pressure for those identified as having hypertension.

What CDS rules does your EHR system have? Try to find a rule that will help monitor follow-up or preventive care for your patients with diabetes & hypertension.

Generating Patient Lists

One of the most underutilized tools within the EHR is the ability to generate patient lists. In the past, providers would have to search through endless charts to get a comprehensive list of certain patient populations. Creating a condition specific patient list which providers can then use to target patients based on condition and follow-up needs promotes timely maintenance of preventive care and chronic disease management. For patients with diabetes, providers can generate patient lists based on A1C testing and results, diagnosis of diabetes/prediabetes, referral to evidence-based lifestyle change programming (i.e., the Diabetes Prevention Program, or DPP), etc.. Lists can be used to monitor patients who have a current diagnosis of diabetes or hypertension as well as those who are at risk of developing these conditions. For example, a provider may generate a list of their patients who have had two or more high blood pressure readings that do NOT have a diagnosis of hypertension. Using this list, they will be able to plan and provide follow up care to address potentially uncontrolled/undiagnosed hypertension.

Associated MIPS Improvement Activity

“Regular review practices in place on targeted patient population needs” (IA_PM_11)

- Access reports showing patient population characteristics
- Identify vulnerable patients/groups
- Use to guide how clinical treatment needs to be tailored

Clinical Summaries

When patients have a chronic condition and/or co-morbidities, they may struggle to keep track of office visits, medications, treatment instructions etc. One of the greatest challenges to providers is communicating information about managing conditions so that patients can act accordingly when they go home. Another tool that clinicians can use during the office visit is a clinical summary. Clinical summaries are an excellent way to provide written instructions to patients to ensure that they have all of the information they need to successfully manage their disease(s). EHRs are designed to allow providers to include many different types of information in these summaries. Take a look at the table below for a list of potential information to include.

Clinical summaries should include:	
<input type="checkbox"/> Patient name	<input type="checkbox"/> Referrals to other providers
<input type="checkbox"/> Provider's name and office contact information	<input type="checkbox"/> Future scheduled tests
<input type="checkbox"/> Date and location of the visit	<input type="checkbox"/> Demographic information maintained within certified electronic health record technology (CEHRT) (sex, race, ethnicity, date of birth, preferred language)
<input type="checkbox"/> Reason for the office visit	
<input type="checkbox"/> Current problem list	<input type="checkbox"/> Smoking status
<input type="checkbox"/> Current medication list	<input type="checkbox"/> Care plan field(s), including goals and instructions
<input type="checkbox"/> Current medication allergy list	<input type="checkbox"/> Recommended patient decision aids (if applicable to the visit)
<input type="checkbox"/> Procedures performed during the visit	<input type="checkbox"/> Laboratory test results
<input type="checkbox"/> Immunizations or medications administered during the visit	<input type="checkbox"/> List of diagnostic tests pending
<input type="checkbox"/> Vital signs taken during the visit (or other recent vital signs)	<input type="checkbox"/> Clinical instructions
<input type="checkbox"/> Future appointments	

Patient Reminders

As preventive care is a major focus in today's healthcare environment, EHRs include functionalities to help providers easily identify patients who are due for preventive screenings, procedures and follow up. Custom reports can be generated in the EHR using clinically relevant information so that clinical staff can then send reminders to patients who are due for clinical services via mail, phone, secure messaging, etc. It is important for practices to integrate patient reminders into regular office workflow to ensure that patients receive recommended clinical services and to ultimately promote positive health outcomes.

Hypertension

Send reminders to patients to:

- Confirm upcoming appointments
- Follow up after missed appointments
- Promote home blood pressure monitoring and medication adherence.

Diabetes

Send reminders to patients to:

- Confirm upcoming appointments
- Follow up after missed appointments
- Promote blood sugar monitoring and medication adherence
- Recommend regular eye exams and foot checks

Transition of Care (TOC) Summary

In addition to meeting MIPS/QPP requirements, providing a transition of care summary is important because it improves care coordination and care plan consistency. The TOC summary ensures that the referred provider has a complete care plan and list of the medications for the patient. Without the summary, providers may repeat tests that were previously performed or lack the information needed to begin treating a new patient in the most effective and safe manner. A transition of care summary can assist providers to make well-informed decisions about how to treat a patient.

TOC summaries must include:

- Patient name
- Referring or transitioning provider's name and office contact information
- Procedures
- Encounter diagnosis
- Immunizations
- Laboratory test results
- Vital signs
- Smoking status
- Functional status, including activities of daily living, cognitive and disability status
- Demographic information
- Care plan field, including goals and instructions
- Care team including the primary care provider of record and any additional known care team members beyond the referring or receiving providers.
- Reason for referral
- Current problem list
- Current medication list
- Current medication allergy list

Associated MIPS Improvement Activity

"Implementation of additional activity as a result of TA for improving care coordination" (IA_CC_3)

- Implement >1 recommended activity from QIN-QIO with technical assistance to improve care coordination

Connect With a Health Information Exchange (HIE)

With increasing numbers of providers utilizing EHRs, the opportunity to easily share patient data between providers is becoming more available and necessary. HIEs enable this exchange of information. According to HealthIT.gov, additional benefits of HIEs include:

- Provides a vehicle for improving quality and safety of patient care by reducing medication and medical errors
- Increases efficiency by eliminating unnecessary paperwork
- Provides caregivers with clinical decision support tools for more effective care and treatment
- Eliminates redundant or unnecessary testing
- Improves public health reporting and monitoring
- Creates a potential loop for feedback between health-related research and actual practice
- Provides a basic level of interoperability among electronic health records (EHRs) maintained by individual physicians and organizations
- Reduces health related costs

Getting Started with HIE

Talk with your EHR vendor about electronic health information exchange functionalities may be incorporated into your system. Ask questions like:

- Do you have HIE capabilities within your EHR?
- What form(s) of exchange does your EHR support?
- What are the startup, maintenance and monthly costs of including HIE within our practice's EHR?

Patient Portal

Many providers are utilizing patient portals to improve coordination and communication with their patients. Providers participating in MIPS/QPP are required to use a portal as a tool for patients to securely view, download and transmit their health records and visit summaries. Additionally, portal use can promote patient engagement and save time and costs for practices that are returning high volumes of phone calls or printing and mailing materials.

Why use a portal?

- Interactive continuum of care between patient and practice.
- Flexible communication between providers and patients.
- Patients can request a billing statement or pay their bill online.
- Reduce bottlenecks at check-in. Patients can update their info through the portal prior to their visit.
- **Example:** The portal is a proactive way to send normal results and reduce time spent calling patients.
- **Example:** Send reminders for appointments and medication recalls to specific groups of patients.

Workflow

Workflow is the who, what, where, when and how things (clinical & administrative) get done in the office or organization. Workflow is the sequence of tasks that get completed by various people and can be completed both sequentially and/or simultaneously.

Examples of Workflow

- Appointment system – who schedules? When do you call to confirm appointment?
- Ordering medications/prescription refills
- Billing & coding
- Confirming insurance status
- Making referrals
- Answering phones and messages within the patient portal

Understanding workflow steps will help to:

1. Create time and resource efficient processes
2. Better prepare and train staff
3. Create accountability for data collection
4. Plan ahead for future changes

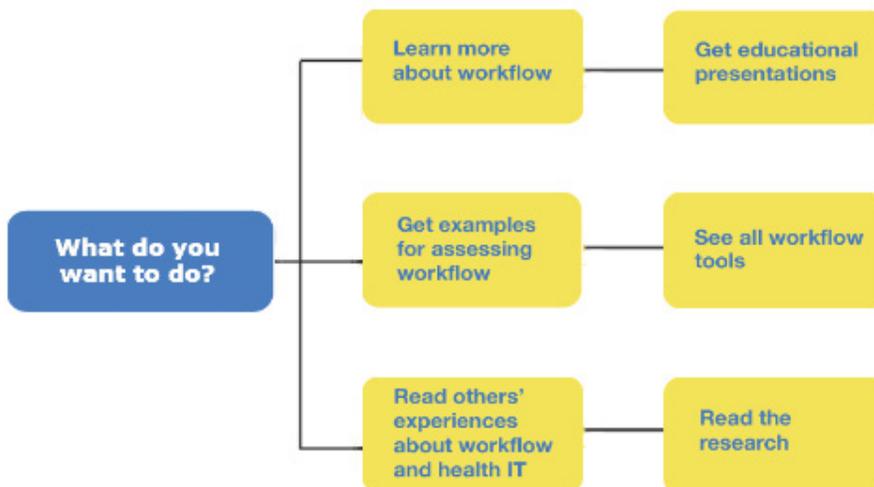
Why Is Workflow Important?

Every time a practice makes a change, there will be alterations to clinical and practice management workflows. Knowing how tasks are completed and who is responsible helps organizations to sustain and improve processes when change occurs. For example during EHR implementation, drastic changes may be made in regards to how staff completes medication orders. The provider no longer has to write out the prescription on a pad and give it to the patient. When e-prescribing using an EHR, the provider will now login and order the medication directly to the pharmacy. At some point during the visit, the office staff must confirm with the patient where to send the prescription so that the patient can pick it up at the appropriate pharmacy. Mapping out workflow processes can help ensure task efficiency and accountability.

Like in the e-prescribing example above, there are now more opportunities for healthcare organizations to incorporate health information technology (HIT) into daily workflow. The Agency for Healthcare Research and Quality (AHRQ) developed a toolkit to assist in planning, designing and implementing HIT, specifically in ambulatory care settings. Access the toolkit here: [AHRQ Workflow Assessment for Health IT Toolkit](#).

Workflow Assessment for Health IT Toolkit

A key to successful implementation of **health information technology (health IT)** is to recognize its impact on both clinical and administrative **workflow**. Once implemented, health IT can provide information to help you reorganize and improve your workflow. This toolkit is designed for people and organizations interested or involved in the planning, design, implementation, and use of health IT in ambulatory care.



Chapter 2

Quality Improvement

Quality improvement (QI) as it relates to healthcare is the process of improving the effectiveness, efficiency and safety of the healthcare delivery system. QI in healthcare focuses on making systematic changes to see measurable improvements in healthcare services and health status of targeted patient groups. The following chapter outlines five examples of performance reporting and models that can be used to drive quality improvement in practice:

1. National Quality Forum (NQF)
2. MACRA/MIPS
3. Healthcare Effectiveness Data & Information Set (HEDIS)
4. Patient Centered Medical Home (PCMH)
5. Plan, Do, Study, Act (PDSA)

National Quality Forum (NQF)

The NQF is a not-for-profit, nonpartisan, membership-based organization that works to catalyze improvements in healthcare. NQF creates evidence-based quality measures that are the gold standard for healthcare quality. NQF measures are among those incorporated into CMS' Quality Payment Program performance categories. Throughout this guide, you will see several NQF measures highlighted that pertain to hypertension and diabetes. Use tips and suggestions throughout this guide to improve NQF measures and support participation in quality reporting programs.

For more information on the National Quality Forum, visit www.qualityforum.org.

MACRA/MIPS

The Centers for Medicare & Medicaid Services' (CMS) [Quality Payment Program \(QPP\)](#) includes multiple payment systems and models. This Digital Practice Guide highlights how hypertension and diabetes management can be areas of focus in one of these systems: the [Merit-based Incentive Payment System](#), or MIPS.

MIPS includes four performance categories:



This Digital Practice Guide includes information on [Quality Measures](#) related to hypertension and diabetes management (see Chapters 3 and 4), relevant [Improvement Activities](#) (summarized on corresponding pages), and [Promoting Interoperability](#) (formerly Advancing Care Information, or ACI):

The Promoting Interoperability (PI) performance category replaces the Medicare EHR Incentive Program known as Meaningful Use (MU) and contributes to the overall MIPS score. Eligible clinicians and groups may submit data using two possible measure sets (Promoting Interoperability Objectives and Measures, OR Promoting Interoperability Transition Objectives and Measures) based on their Certified Electronic Health Record Technology (CEHRT) edition. Meeting Base, Performance, and Bonus scores for objectives and measures in this performance category contributes to the final MIPS score.

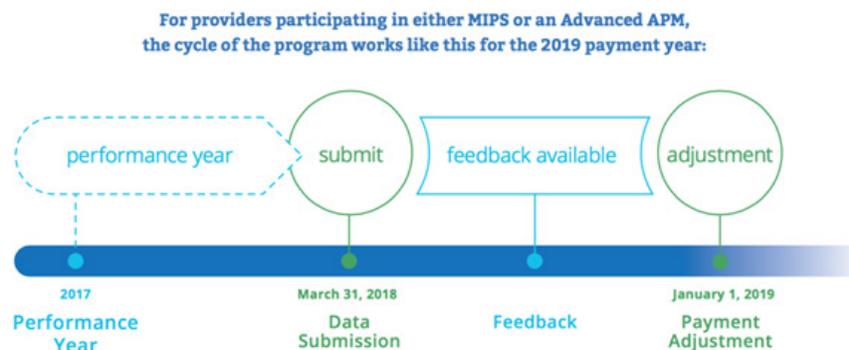
Incorporating Promoting Interoperability objectives into practice is anticipated to:

- Improve clinical outcomes
- Improve population health outcomes
- Increase system interoperability and flexibility
- Empower patients and reduce burden on healthcare professionals
- Contribute to more robust health system data

Several Promoting Interoperability Objectives and Measures relate to daily clinical management of patients with hypertension and diabetes. Browse these and other measures on the [CMS QPP website](#).

Payment Adjustments

Eligible clinicians and groups participating in MIPS can earn performance-based payment adjustments to their Medicare payment up to five percent.



Source: <https://www.cms.gov/Medicare/Quality-Payment-Program/Resource-Library/Advancing-Care-Information-Performance-Category-Fact-Sheet.pdf>

Adjustment Timeline

The MIPS Performance Year (PY) begins on Jan. 1 and ends on Dec. 31 of each year. Data collected during each calendar year must be reported by March 31 of the following year by program participants. There is a two-year lag time from a given performance year to when the payment adjustment occurs to the TIN/NPI Medicare reimbursement. The graphic above is an example of this timeline for payment adjustment in 2019.

Healthcare Effectiveness Data and Information Set (HEDIS)

HEDIS is another key program in healthcare performance measurement and evaluation, used by more than 90 percent of the nation's health plans and many leading employers and regulators. HEDIS is a set of standardized measures that specifies how organizations collect, audit and report performance information across the most critical clinical areas, as well as important dimensions of customer satisfaction and patient experience. HEDIS is developed and maintained by the [National Committee for Quality Assurance \(NCQA\)](#) and allows consumers to compare health plan performance to other plans at regional and national levels.

There are 81 HEDIS measures that are divided into domains of care:

1. Effectiveness of Care
2. Access/Availability of Care
3. Experience of Care
4. Utilization and Risk Adjusted Utilization
5. Relative Resource Use
6. Health Plan Descriptive Information
7. Measures Collected Using Electronic
8. Clinical Data Systems

HEDIS data is useful for evaluating current performance and setting quality improvement goals. Learn more about HEDIS Measures of Care [here](#).

Patient-Centered Medical Home (PCMH)

A PCMH is a team-based model of care that begins with the primary care provider and coordinates care across multiple specialties to improve and maximize health outcomes. **The Agency for Healthcare Research and Quality (AHRQ) [defines PCMH](#) as encompassing five attributes:**

1. Comprehensive, team-based care.
2. A patient-centered orientation toward the whole person that requires understanding the patient's and family's culture, needs, values and preferences.
3. Coordinated care across the broader health care system.
4. Continuous access to care, with shorter waits to get appointments, enhanced hours and alternative methods of communication.
5. A systems-based approach to quality and safety including continuous quality improvement and performance reporting.

PCMH Designation will automatically earn the practice full credit for the QPP Improvement Activities Category. Alignment between these two programs indicates that CMS recognizes the PCMH model for coordinated, patient centered and preventive care for chronic conditions as a driver of healthcare quality improvement.

Plan Do Study Act (PDSA)

Included in the [Institute for Healthcare Improvement \(IHI\)](#) Model for Improvement (developed by [Associates in Process Improvement](#)) is framework for a four-step change management cycle called PDSA. Use the following outline to test changes on a small scale to understand what works to drive quality improvement.

Plan

Understand current data and plan your intervention.

- State the objective of the change and create a plan for data collection.
- Make predictions about what will happen and why.
- Develop a plan to test change (who, what, where, when, how).

Do

Implement your planned change and collect relevant data.

- Carry out the test.
- Document problems and unexpected observations.
- Begin analysis of the data.

Study

Set aside time to analyze the data and study the results.

- Complete the analysis of the data.
- Compare the data to your predictions.
- Summarize and reflect on what was learned.

Act

Adjust the intervention based on what you learned from testing the change and analyzing the data.

- Determine what modifications should be made.
- Prepare a plan for the next test.

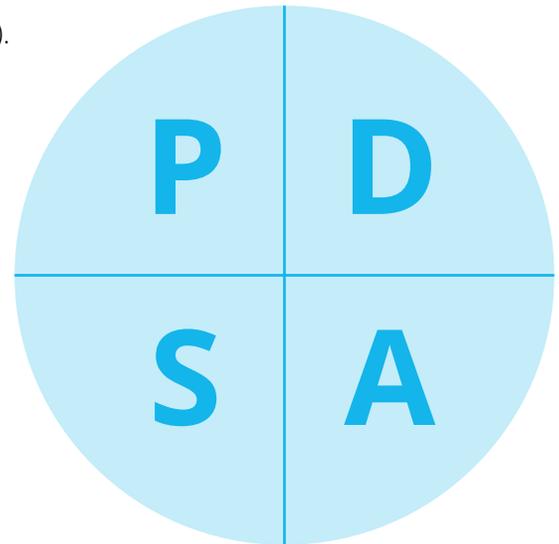
Example of PDSA for Hypertension: Improve the Rates of Blood Pressure Control (NQF 0018)

Plan

- Objective: Within one year, the practice will improve blood pressure control by 5 percent.
- Intervention to test: Identify patients diagnosed with hypertension who had blood pressure levels of 140/90 mmHg or higher during their last office visit. Call these patients to schedule follow-up office visits to discuss blood pressure management.

Do

- The practice generates baseline and monthly reports on the quality measure of interest (NQF 0018, CMS165v6), identifies patients with blood pressures >140/90 mmHg at their most recent visit, and calls these patients to schedule follow-up visits.
- During the follow-up visit, designated staff provide patient education on lifestyle modifications, medication adherence, and self-management strategies for blood pressure control.
- Begin analyzing the data.



Study

- Practice monitors their data for improvement, considering questions like:
 - Are patients with uncontrolled high blood pressure attending scheduled follow up visits?
 - Do patients understand strategies to control their blood pressure?
 - Is their follow up reading <140/90 mmHg?
- Practice compares monthly changes in data to baseline and staff discuss what they notice while carrying out the intervention, considering questions like:
 - Did recalling patients for a follow-up visit and providing education improve blood pressure control?

Act:

- Based on rate of improvement, will you continue with the plan or modify and try again?

Example of PDSA for Diabetes: Hemoglobin A1c (HbA1c) Poor Control (>9%) (NQF 0059)

Plan

- Objective: Within one year, the practice will improve the proportion of patients with A1c levels greater than 9 percent by 5 percent.
- Intervention to test: Identify patients diagnosed with diabetes whose most recent A1c was greater than 9 percent. Refer these patients to a local six-week Diabetes Personal Action Toward Health (D-PATH) workshop to promote self-management.

Do

- The practice generates baseline and monthly reports on the quality measure of interest (NQF 0059, CMS122v6), identifies patients with an A1c >9 percent during their most recent visit, and adds a note to their charts to discuss diabetes self-management education at their next visit.
- Designated staff member talks with identified patients about the benefits of participating in a D-PATH workshop at the next visit. Interested patients are referred to programming.
- Begin analyzing the data.

Study

- Practice monitors their data for improvement, considering questions like:
 - Are patients with A1c >9 percent attending scheduled follow up visits?
 - Do patients understand education available to support diabetes self-management?
 - Do referred patients have a follow up A1c reading of <9 percent?
- Practice compares monthly changes in data to baseline and staff discuss what they notice while carrying out the intervention, considering questions like:
 - Did recalling patients for a follow-up visit and referring to diabetes self-management education improve A1c control?

Act

- Based on rate of improvement will you continue with the plan or modify and try again?



Associated MIPS Improvement Activity

Implement the following Improvement Activity related to using formal quality improvement methods to contribute to this MIPS performance category:

- "Implementation of formal quality improvement methods, practice changes or other practice improvement processes" (IA_PSPA_19) - Adopt formal model for QI, train staff in QI methods, and identify and test practice changes

Chapter 3

Hypertension

About 75 million US adults have hypertension--or 1 of every 3 people-- and over half (54 percent) of those with hypertension do not have their blood pressure under control. Hypertension can lead to many serious conditions such as heart attack, stroke, heart failure and kidney disease. While deaths from heart disease and stroke have decreased in recent decades, heart disease remains the first and stroke remains the fifth leading cause of death in Michigan residents and people across the U.S. The following chapter provides condition-specific care improvement strategies for the identification and management of patients with hypertension.

Overview

What Impacts a Patient's Blood Pressure?

Patient factors (we can't always control)

- "White Coat Syndrome"
- Nervousness, stress, anger, illness, pain, long waiting time
- Demographics: age, sex, race and ethnicity
- Lifestyle: diet, exercise, substance use (smoking, alcohol use, etc.)
- Certain over the counter (OTC) medications

Measurement factors (we can control)

- Air in the BP cuff before measuring
- Correct BP cuff size
 - Too large underestimates BP
 - Too small overestimates BP
- Correct patient positioning
- Unevenly wrapped cuff
- Deflating cuff too quickly
- Inflating the cuff too high, or not high enough
- Auscultatory gap (when pulse disappears then reappears while deflating the cuff)
- Looking at the gauge at an angle

Blood Pressure Technique

As healthcare providers measure blood pressure as part of their daily duties, it is recommended that competency is reviewed annually to maintain correct and consistent technique.

When preparing to measure blood pressure, ensure:

- The patient is seated with back supported, legs and ankles uncrossed, and feet supported.
- The patient's arm is removed from shirt sleeves (if possible) and supported at heart level.
- The room is quiet and the patient is seated at rest (ideally for 5 minutes) before measurement
- An appropriately-sized blood pressure cuff is selected. See the table below for recommended cuff size based on arm circumference (American Heart Association).
- After the patient is properly positioned and prepared, measure blood pressure according to practice protocol for manual or automated technique.

Arm Circumference	Cuff	Size
22-26 cm	Small adult	12 x 22 cm
27-34 cm	Adult	16 x 30 cm
35-44 cm	Large adult	16 x 36 cm
45-52 cm	Adult thigh	16 x 42 cm

Blood Pressure Guidelines

In 2017, the American College of Cardiology and American Heart Association Task Force on Clinical Practice Guidelines released an updated 2017 Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults. The updated guideline follows after the longstanding JNC 7 Guideline, now classifying hypertension as blood pressure readings of 130/80 mmHg or higher and includes new treatment recommendations for lifestyle changes and medication use.

See the table below for a comparison of JNC 7 Hypertension Guidelines compared to the 2017 Guideline.

Blood Pressure Thresholds	
JNC 7 (Joint National Committee)	2017 Guideline (American College of Cardiology & American Heart Association)
Normal <120 mmHg / and <80 mmHg	Normal <120 mmHg / and <80 mmHg
Prehypertension 120-139 mmHg / or 80-89 mmHg	Elevated 120-129 mmHg / and <80 mmHg
Stage 1 Hypertension 140-159 / or 90-99 mmHg	Hypertension stage 1 130-139 mmHg / or 80-89 mmHg
Stage 2 Hypertension ≥160 / or ≥100 mmHg	Hypertension stage 2 ≥140 mmHg / or ≥90 mmHg
	Hypertensive urgency >180 mmHg / and/or >120 mmHg
	Hypertensive emergency >180 mmHg / and/or >120 mmHg + target organ damage

For more information on this updated guideline, visit the [Target:BP\(TM\) website](#).

Lifestyle Change for People With Hypertension

While medications play a large role in hypertension management, lifestyle change can also help patients to lower and control their blood pressure. EHR can be used to track the impact of lifestyle modifications on blood pressure by documenting patients' physical activity or progress toward healthy eating and generating CDS alerts to remind providers to revisit BMI if it is still out of range. In addition to physical activity and healthy eating, providers may counsel patients on the importance of taking medications as directed and not skipping, changing, or stopping medications without talking with their provider. Help patients to make SMART goals, document progress in the EHR and use the clinical summary to help reiterate the goals you have discussed.

SMART Goals

Specific: Make sure your goals have clarity

Measurable: Make sure you identify appropriate metrics for your goals

Achievable: Make sure your goals are challenging but realistic

Relevant: Make sure your goals are consistent with your other goals and overall objective

Time-bound: Make sure you develop a timeline to keep your goals on track

Are patients unsure of where to start with lifestyle change? This online self-test from the Michigan Department of Health and Human Services can help to identify areas where health change is needed:

[Lifestyle Quiz](#)

Examples of lifestyle changes can include:

- Diet - maintain a healthy BMI, follow the DASH diet and lower sodium intake
- Exercise - engage in at least 2 hours and 30 minutes per week of moderate-intensity physical activity (spread over at least three days/week)*
- Tobacco cessation - this includes second hand smoke
- Stress management
- Limiting daily alcohol intake

* A pre-exercise provider evaluation is recommended



Use this Power of Lifestyle Modifications poster as a handout or posted in exam rooms to inform patients on how small changes can make a big difference in their blood pressure.

Million Hearts

With the goal of preventing one million cardiovascular events in five years, the U.S. Department of Health and Human Services established the Million Hearts® initiative which continues to be co-led by the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare and Medicaid Services (CMS). Visit the [Million Hearts® initiative website](#) for helpful resources including toolkits, guides, videos and treatment protocols to support quality cardiac care in practice.

Find tools and protocol [here](#).

Find patient-facing resources [here](#).

Hypertension-focused NQF Measures

One way to improve care of hypertensive populations is to track and analyze quality reporting measures. The National Quality Forum (NQF) has created several hypertension focused measures for providers to choose from. By tracking specific data, providers can monitor their performance internally as well as report their data to several quality incentive reporting programs. Below are some selected quality reporting measures that focus on improving care for people with hypertension.

For the official specifications from the National Quality Forum website, go to: <http://www.qualityforum.org/QPS>.

Quality Measures

[Controlling High Blood Pressure](#)

[Preventive Care and Screening | Tobacco Use: Screening and Cessation](#)

[Hypertension | Improvement in Blood Pressure](#)

[Ischemic Vascular Disease \(IVD\) | Use of Aspirin or Another Antiplatelet](#)

[Statin Therapy for the Prevention and Treatment of Cardiovascular Disease](#)



Associated MIPS Improvement Activity

Implement the following Improvement Activity related to tobacco use screening and management to contribute to this MIPS performance category:

- "Tobacco use" (IA_BMH_2) - Conduct tobacco use screening and cessation interventions for patients with co-occurring conditions of behavioral/mental health and at risk for tobacco dependence

Chapter 4

Diabetes

Diabetes is a serious and costly chronic disease that affects approximately one million Michigan adults. It is one of the leading causes of death and disability and a major cause of debilitating chronic conditions like heart disease, stroke, kidney failure, blindness and lower-limb amputation. One in 10 U.S. adults has been diagnosed with diabetes and one out of four U.S. adults do not know that they have diabetes. Of those diagnosed, higher rates have been found in older age groups, males, African Americans and Hispanic populations. The following chapter provides condition-specific care improvement strategies for the identification and management of patients with type 2 diabetes.

Standards of Care

Every January, the American Diabetes Association (ADA) releases clinical guidelines that provide clinicians, patients, researchers, and other interested individuals with the components to diabetes care, general treatment goals and tools to evaluate the quality of care. The recommendations are centered around evidence-based interventions known or believed to favorably affect health outcomes of patients with diabetes.

View the most recent [Standards of Medical Care in Diabetes guidelines](#).

The following section outlines key aspects of effective diabetes care based on the ADA's 2014 "Clinical Practice Recommendations."*

**The authors have determined the 2016 changes did not impact the information highlighted and published in the module and therefore have not altered the text. Please see the link to the 2016 publication for further information.*

Associated MIPS Improvement Activity

Implement the following Improvement Activity related to diabetes identification to contribute to this MIPS performance category:

- "Diabetes Screening" (IA_BMH_1) - Diabetes screening for patients with schizophrenia/bipolar disease using antipsychotic medications

Screening

HbA1c tests are recommended at least twice a year for patients who are meeting treatment goals and who have stable glycemic control and quarterly for patients whose therapy has changed or who are not meeting glycemic goals.

Normal A1c is 4-6 percent. For people with diabetes, the goal should be less than 7 percent or as recommended.

Criteria for Diagnosis of Diabetes

Diabetes can be diagnosed with multiple tests according to the following criteria.

Diagnosis thresholds

- **A1c ≥ 6.5 percent** - The test should be performed in a laboratory using a method that is NGSP certified and standardized to the DCCT assay.*
- **Fasting plasma glucose (FPG) ≥ 126 mg/dL** - Fasting is defined as no caloric intake for at least eight h*.
- **Two-hour plasma glucose ≥ 200 mg/dL** during an oral glucose tolerance test (OGTT). The test should be performed as described by the World Health Organization, using a glucose load containing the equivalent of 75 g anhydrous glucose dissolved in water*.
- In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a **random plasma glucose ≥ 200 mg/dL**.

**In the absence of unequivocal hyperglycemia, results should be confirmed by repeat testing.*

Criteria for Diagnosis of Prediabetes

Prediabetes is a condition where blood sugar levels are elevated though not high enough to indicate a diagnosis of diabetes. Patients with prediabetes are at increased risk of developing type 2 diabetes. Clinical prediabetes indicators include*:

- A1c 5.7 - 6.4 percent
- Impaired Fasting Glucose: FPG 100 mg/dL to 125 mg/dL
- Impaired Glucose Tolerance: Two hour plasma glucose in the 75g OGTT 140 mg/dL to 199 mg/dL

*For all three tests, risk is continuous, extending below the lower limit of the range and becoming disproportionately greater at higher ends of the range.

Diabetes risk assessments are available in multiple versions (including samples below) to assess patients' personal risk factors for developing type 2 diabetes.

- [Prediabetes Screening Test \(CDC\)](#)
- [Are you at risk for type 2 diabetes? \(ADA\)](#)
- [Do you have prediabetes? \(ADA/AMA/CDC\)](#)

Lifestyle Change for People With Diabetes

While medications play a large role in diabetes management, self-management and behavior change is a key element of diabetes treatment.

Examples of patient lifestyle change goals can include:

- Individualized medical nutrition therapy (MNT) to address meal planning and food choices.
- Attendance at a diabetes self-management education program (DSME) with ongoing diabetes self-management support (DSMS).
- Engage in at least 150 min/week of moderate-intensity physical activity (spread over at least three days/week)*.

**A pre-exercise provider evaluation is recommended.*

Lifestyle Change for People With Prediabetes

People with prediabetes have an increased risk of developing type 2 diabetes and a higher risk for heart disease and stroke. However, type 2 diabetes can be prevented or delayed with modest weight loss and physical activity.

Examples of patient lifestyle change goals include:

- Screening within a health care setting or taking a paper prediabetes risk test.
- 5 percent - 7 percent weight loss.
- Engaging in at least 150 minutes of moderate - intensity physical activity (spread over at least three days/week).
- Enroll in a local Diabetes Prevention Course. Visit the [CDC's National Diabetes Prevention Program website](#) for more information and to locate local programming.
 - Find local Diabetes Prevention Programming in Michigan [here](#).

Associated MIPS Improvement Activity

Implement the following Improvement Activity related to glycemic management to contribute to this MIPS performance category:

- "Glycemic management services" (IA_PM_4) - Document individualized glycemic treatment goals that take into account patient-specific factors (i.e., age, comorbidities, risk for hypoglycemia) and reassess at least annually

Diabetes-focused NQF Measures

One way to improve care of diabetic populations is to track and analyze quality reporting measures. The National Quality Forum (NQF) has created several diabetes focused measures for providers to choose from. By tracking specific data, providers can monitor their performance internally as well as report their data to several quality incentive reporting programs. Below are some selected quality reporting measures that focus on improving care for people with diabetes.

For the official specifications from the National Quality Forum website, go to:
<http://www.qualityforum.org/QPS>

Quality Measures

[Diabetes Foot Exam](#)

[Diabetes Eye Exam](#)

[Hemoglobin A1c Poor Control](#)

[Body Mass Index \(BMI\) Screening](#)

[Preventive Care and Screening for High BP and Follow-Up Documented](#)



Diabetes Self-Management Education (DSME)

What Is DSME?

Diabetes Self-Management Education (DSME) is an evidence-based self-management program designed to enhance a patient's ability to manage their diabetes. DSME program components include:

- Skills Mastery – such as blood glucose monitoring and insulin injections
- Modeling – interaction with peers who have diabetes or care for someone with diabetes
- Action Planning with Social Support – sharing success stories and solutions and setting up personal action plans

The Self-Management Resource Center's Diabetes Self-Management Program is one option for DSME. There are multiple types of DSME available in Michigan, one of which is Diabetes Personal Action Toward Health (PATH). Diabetes PATH is led by trained leaders and can be offered in both English and Spanish. Workshops meet for six weeks, for two and a half hours each week. Diabetes PATH workshops are free or at very low cost to participants. Sessions are held in a variety of locations including community centers and provider offices/ waiting rooms. For more information on how to set up a DSME workshop in your office or to find a workshop near you, [click here](#).

Associated MIPS Improvement Activities

Implement the following Improvement Activities related to self-management training for patients to contribute to this MIPS performance category:

- "Engagement with QIN-QIO to implement self-management training programs" (IA_BE_3) - contact your QIN-QIO to learn more about self-management training programs for patients (i.e., diabetes self-management education)
- "Implementation of condition-specific chronic disease self-management support programs" (IA_BE_20) - Provide or link patients to condition-specific self-management

What Are the Benefits of DSME?

As a provider, it can be difficult to teach patients everything they need to know about managing diabetes in short office visits. Diabetes PATH helps patients create personal action plans and learn symptom management techniques to implement positive lifestyle changes.

How Do You Refer Patients to Diabetes PATH?

The Michigan Department of Health and Human Services (MDHHS) diabetes section maintains a centralized website listing all scheduled Diabetes PATH workshops throughout the state. You can refer your patients to the www.mihealthyprograms.org website to access a list of upcoming PATH workshops and the registration contact information for the workshop.

- Find provider and consumer-facing informational PATH videos [here](#).
- Visit the [Michigan Diabetes Prevention page](#) for more information on prediabetes and programming coverage in Michigan.

R_x Diabetes Personal Action Toward Health (PATH) Workshops

Date: _____

Patient's Name: _____

To help you better manage your diabetes, our office highly recommends that you attend a **FREE** Diabetes PATH workshop.

PATH workshops can help you feel better, take control of your health and do the things you want to do. Workshops include six different sessions; each session covers a new topic. You will learn techniques to help:

- Promote healthy eating habits and medication control
- Gain control of blood glucose, blood pressure and cholesterol levels
- Learn exercises to maintain strength and endurance
- Communicate better with your doctor
- Find ongoing support and community resources

X _____
Health care provider signature

Ready to start managing your diabetes?

Date: _____ Time: _____

Instructor: _____

Location: _____

To find workshops near you, please visit MiHealthyPrograms.org or call 517-335-1236.



Diabetes Self-Management Education



About Diabetes self-management education (DSME) is a free program that helps people with diabetes take better care of their health.

Workshops help participants understand diabetes and its risks, as well as the importance of diet, exercise, keeping regular physician exams, receiving annual foot and eye exams managing medications and more. DSME teaches participants how to live healthier in a fun, non-threatening community-based environment. DSME does not conflict with other programs or treatment and participants are referred to their physicians for all medical questions.

Class Breakdown

One class =

Six sessions

2.5 hours each

One day a week for 6 weeks

Curriculum

Subjects covered include:

- Techniques to deal with the symptoms of chronic disease, fatigue, pain, depression and stress
- Appropriate exercise for maintaining and improving strength and endurance
- Healthy eating
- Appropriate use of medication
- Making action plans
- Working effectively with health care providers
- Problem Solving

To host a class, become a trainer or learn more...

Please contact Mark Loush at mloush@mpro.org or 248-465-1375.

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