

POPULATION HEALTH ALLIANCE

Toolkit

January 2025

Primary Care Medication Management: Whole Person Focused, Value Based, Connected and Powered for the 21st Century

{PHA Members-Only Benefit,Not For Distribution}

Primary Care Medication Management: Whole Person Focused, Value Based, Connected and Powered for the 21st Century

Authors: Doron Schneider, Principal High-Reliability Healthcare, LLC; Michael Barr, Senior Director, Population Health Improvement, Population Health Alliance; Rose Maljanian, Chairman of the Board and Chair Emeritus, Population Health Alliance, Chairman & CEO HealthCAWS.

On behalf of the Population Health Alliance Advancing Primary Care Workgroup:

Chair: Doron Schneider, MD, MBA, FACP, Principal, High-Reliability Healthcare, LLC*

Workgroup:

Rose Maljanian Chairman of the Board and Chair Emeritus Population Health Alliance Chairman & CEO HealthCAWS	Michael Colli Chief Medical Officer Keystone Health
Michael Barr Senior Director Population Health Improvement Population Health Alliance	Ray Fabius Co-Founder/President HealthNext
Shilpa Agarwal Chief of Staff Vitality Group	Sita Kapoor Founder and Chief Product Officer HealthEC
Andrew Barna Director, Administrative Services Office of Population Health Johns Hopkins Medicine	Dexter Shurney President, Well-Being Institute Blue Zones

* Dr. Schneider is the former Vice President of Population Health at Tandigm Health.

Primary Care Medication Management: Whole Person Focused, Value Based, Connected and Powered for the 21st Century

Population Health Alliance (PHA) is pleased to present this Primary Care Medication Management compendium. It is intended to be a practice (and system) self-assessment of readiness to manage patients and populations, ensure optimal medication management in primary care, and advance the quadruple aim of better health, patient experience, optimal cost, and improved work-life for healthcare professionals.

Medications are a key tool in primary care. As such, improving medication management should be viewed as a target for continuous improvement. This compendium has a wide range of tactics and processes intended to stimulate discussion and allow for appropriate sequencing and planning of improvement activities.

While many items on this self-assessment directly relate to medication management, others are more general population health management processes and tactics that positively impact safe, high quality, and reliable primary care medication use.

This compendium is intended to be a living document. While multiple examples of emerging technologies, quality measures, and other tactics are listed and presented for consideration, as technology, information systems, health policy, and the regulatory landscape evolve, so will this document.

PHA, through its multiple channels, including live national meetings, regular webinars, and ongoing workgroups, can serve as a conduit to allow organizations to share lessons learned from self-reflection and improvement activities.

For information on how to use this tool, please email Dr. Michael Barr at mbarr@populationhealthalliance.org.

Disclaimer: This tool is meant to serve as a guide to advance medication practices in your organization and is not a substitute for organizational policy or clinical judgment at the point of care.

Legend:

Effort (S,M,L): Intended to enable practice to consider the resources necessary to implement the solution or tactic. Resources are inclusive of personel, financial, technical etc. (S = Small, M= Medium, L=Large)

Implementation (F/P/M): These categories are to be used in the self-assessment of the current state. Each section has questions to consider when deciding on current level of implementation. (Fully implemented fully aware; P = partially implemented or unreliable/with variation; N = not implemented or utilized)

Focus In Now / Focus on Later / Parking Lot: After reflection on the current state of implementation, select the option most appropriate for your practice. Place an X in the "Focus on Now" column for items to be immediately addressed, a specific date in the "Focus on Later" column to revisit at an agreed to future time or an X in the Parking Lot for future discussion.

Owner: Place the name of the accountable party who will lead improvement efforts.

Note: *To enable easier navigability, each tactic is hyperlinked to the specific section in the document.*

Number	Effort	Implementation F / P / N* *(Circle One)*	Process / Tactic	Focus on Now	Focus On Later (MM/YY)	Parking Lot	Owner
Whole Person Care: Longitudinal, Continuous, Proactive Care							
1.1	S	F / P / N	Prospective Health Status Assessments and Annual Wellness Exams				
1.2	M	F / P / N	Risk and Optimal Continuity and Frequency of Care				
1.3	S	F / P / N	Screening for behavioral health comorbidities				
1.4	M	F / P / N	Screening for social factors that impact health				
1.5	S	F / P / N	Medical Nutrition Therapy				
Real Time Patient Care: Medication Reconciliation, Medication Adherence, Evidence Based Prescribing							
2.1	M	F / P / N	Medication Reconciliation				
2.2	L	F / P / N	Med Adherence Related Patient Outreach				
2.3	S	F / P / N	Visit Processes: Tactics to Reduce Primary Non-Adherence				
2.4	L	F / P / N	Post Visit Calls: Tactics to Reduce Primary Non Adherence				
2.5	S	F / P / N	Medication Non-Adherence Screening (Questionnaires)				
2.6	S	F / P / N	Pill Boxes				
2.7	M	F / P / N	Medication List Management				
2.8	S	F / P / N	Medication Prescribing: 90 day Presriptions with refills				
2.9	S	F / P / N	Point of Care Medication Dispensing				
2.10	L	F / P / N	Regimen simplification				

#	Effort	Implementation F / P / N* *(Circle One)*	Process / Tactic	Focus on Now	Focus On Later (MM/YY)	Parking Lot	Owner
Working with Pharmacists and Pharmacies							
3.1	L	F / P / N	Pharmacists and Collaborative Practice Agreements				
3.2	M	F / P / N	Medication Synchronization				
3.3	M	F / P / N	CMM and MTM				
3.4	S	F / P / N	Medication Fills: Blister packaging				
3.5	S	F / P / N	Preferred pharmacies				
3.6	S	F / P / N	Mail order pharmacies				
Enabling Technology							
4.1	S	F / P / N	Drug Interaction Checking				
4.2	S	F / P / N	Patient portals and Open Notes				
4.3	M	F / P / N	Interruptive EMR "Pop Up" Alerts				
4.4	M	F / P / N	Order Sets				
4.5	M	F / P / N	Connect to Local Hospital EMRs				
4.6	S	F / P / N	Connect to Regional Health Information Exchanges				
4.7	M	F / P / N	HIPAA Compliant Texting: PCP/Specialist Interactions				
4.8	L	F / P / N	E Consults				
4.9	L	F / P / N	Artificial Intelligence Assisted Prescribing				
4.10	M	F / P / N	Remote patient monitoring				
4.11	M	F / P / N	Point of Care Access to Reference Material for Decision Support				
4.12	L	F / P / N	Real Time Formulary Checking				

#	Effort	Implementation F / P / N* *(Circle One)*	Process / Tactic	Focus on Now	Focus On Later (MM/YY)	Parking Lot	Owner
4.13	L	F / P / N	Pharmacy Claims-based Fill History Presented at the Point of Care				
4.14	L	F / P / N	Medication Optimization:Targeting				
4.15	L	F / P / N	Real time EMR/Population Health Platform Based Monitoring				
4.16	L	F / P / N	Genetic testing for drug optimization				
Novel Medication Related Quality Measures							
5.1	M	F / P / N	Concurrent use of Benzodiazepines and Opiates (2025 MY STARS				
5.2	M	F / P / N	Poly Tx Multi-Anticholinergics (2025 MY STARS				

Tactics Categorized By Effort

Small Effort	Medium Effort	Large Effort
• Connect to Local Hospital EMRs • Drug Interaction Checking • Mail order pharmacies • Medical Nutrition Therapy • Medication Fills: Blister packaging • Medication Non-Adherence Screening (Questionnaires) • Medication Prescribing: 90 day Presriptions with refills • Patient portals and Open Notes • Pill Boxes • Preferred pharmacies • Prospective Health Status Assessments and Annual Wellness Exams • Regimen simplification • Screening for behavioral health comorbidities • Visit Processes: Tactics to Reduce Primary Non-Adherence	• CMM and MTM • Concurrent use of Benzodiazepines and Opiates (2025 MY STARS • Connect to Regional Health Information Exchanges • HIPAA Compliant Texting: PCP/Specialist Interactions • Interruptive EMR "Pop Up" Alerts • Medication List Management • Medication Reconciliation • Medication Synchronization • Order Sets • Point of Care Access to Reference Material for Decision Support • Poly Tx Multi- Anticholinergics (2025 MY STARS) • Remote patient monitoring • Risk and Optimal Continuity and Frequency of Care • Screening for social factors that impact health	• Artificial Intelligence Assisted Prescribing • E Consults • Genetic testing for drug optimization^ • Med Adherence Related Patient Outreach • Medication Optimization – Targeting • Pharmacists and Collaborative Practice Agreements • Pharmacy Claims-based Fill History Presented at the Point of Care • Point of Care Medication Dispensing • Post Visit Calls: Tactics to Reduce Primary Non Adherence • Real time EMR/Population Health Platform Based Monitoring • Real Time Formulary Checking

Whole Person Care

Longitudinal, Continuous, Proactive Care

1.1 Prospective Health Risk Assessments and Annual Wellness Exams

While medication use excellence should occur and be a focus of engagement for every patient encounter, payors recognize the value of setting aside time for a holistic patient assessment at least once a year. For example, Medicare covers an initial preventive physical exam (IPPE) and annual wellness visits (AWVs). These annual events are a key opportunity to review a patient's medications, including prescription, non-prescription, and over-the-counter medications and other supplements. Patients can be encouraged to actively participate in medication excellence by bringing to their visit 1) a list of their current medications, 2) the pill bottles of medications they are currently taking and 3) the pill bottles of medications they no longer take but still possess.

Patients with commercial insurance should also be encouraged to schedule annual "physical exams" during which a practice can perform medication management activities (medication reconciliation, medication adherence screening, evidence-based medication gap management, deprescribing, regimen simplification, etc.).

Why is this important? When done meaningfully and robustly, AWV and similar prospective health status examinations (annual physical exams) can provide a regularly recurring structured way to review medication use. AWV completion rates have been shown to correlate with improved patient outcomes.

Self Reflection *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Providers know the different requirements for AWVs, IPPE and commercial annual visits and reliably provide these services, with a particular focus on medication management.
- Medication reconciliation occurs in a standard way during AWVs, IPPE and commercial annual visits.
- Medication adherence is assessed during AWV, IPPE and commercial annual visits.
- Patients with large number of medications are systematically encouraged to bring in their medication bottles for review during AWVs, IPPE and commercial annual visits.

References/Resources

- CMS Learning Network: Annual Wellness Visits

(home)

1.2 Risk-Based Approaches to Ensure Optimal Continuity and Frequency of Care

In the transition from reactive fee-for-service to value-based care, practices need to ensure that each patient on their panel is assessed for risk of avoidable medical problems, morbidity, and costs. A systematic review of every patient's medical conditions, at least annually, is necessary to ensure that all chronic conditions are adequately addressed and that the delivery of requisite preventive services occurs. Risk of future health-related outcomes such as emergency room visits, hospitalizations, and other potentially preventable events can be determined by factors such as patient age, medical conditions, and social determinants of health. Risk approximation can be further refined when medication burden (e.g., number of medications, frequency of dosing, routes of administration) and medication adherence history are incorporated into the risk assessment. Patients with elevated risk should interact more frequently with the primary care team (e.g., in-person visits, video/telehealth encounters, practice outreach calls/texts). For example, it may be more appropriate to see patients with diabetes and an A1C > 9 more frequently than patients with an A1C < 7.

Payors use risk scoring tools based on the documentation of patients' diagnoses and comorbidities to determine their complexity (i.e., risk adjustment factor), often used to determine payments.

Why is this important?: Developing methods to identify high- and rising-risk populations (and incorporating a patient's medication history in doing so) can ensure that the appropriate level of attention to evidence-based, goal-directed, patient-centered care is provided. Incorporation of the patient's medication burden can further refine predictive patient-level risk assessments.

Self Reflection *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- A risk scoring system is utilized to identify and surface patients of high and rising risk for downstream potentially preventable utilization of medical services
- Patient medication burden / history is utilized to further refine the high and rising risk scoring system
- All providers utilize the risk prediction system in the development of appropriate patient care plans (at minimum the frequency of contact with the patient)
- All providers utilize the risk prediction system to systematically refer to available care management services

References/Resources

- Measuring Care Continuity: A Comparison of Claims-Based Methods - PMC

(home)

1.3 Screening for Behavioral Health

Depression, anxiety, and other behavioral health (BH) comorbidities are found in upward of 1 in 3 primary care patients. The prevalence of any mental illness among U.S. adults is approximately 18%. That rate is higher in 18–25-year-olds (33.7%) and adults reporting two or more races (34.9%). Approximately 30% of US adults with diabetes have depression, and the prevalence in non-diabetic patients is almost 18%.

Practices are encouraged to screen for depression with PHQ2, anxiety with GAD 7, and alcohol abuse with AUDIT-C or similar validated screening instruments. Following up on positive screens with appropriate diagnostic and management plans is essential in providing whole-person care.

Why is this important? Patients who have unrecognized and uncontrolled BH or substance use disorder (SUD) diagnoses are less likely to adhere to medications and other plans necessary to treat concurrent medical problems. Non-adherence results in lower quality of care, increased utilization of medical services, and higher total cost of care. Screening and follow-up for depression are important as this measure is included in several CMS programs.

Self Reflection *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Practice screens for depression, anxiety and alcohol use disorder using validated screening tools
- Practice ensures adequate follow up and treatment of patients with BH or SUD diagnoses. For example, practice may routinely review ACO quality data related to depression/SUD screening and follow up.

References/Resources

- SAMHSA - Substance Abuse and Mental Health Services Administration
- Relationship between depression and medication adherence in cardiovascular disease: the perfect challenge for the integrated care team - PMC
- https://www.ncqa.org/hedis/measures/depression-screening-and-follow-up-for-adolescents-and-adults/
- https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/anxiety-adults-screening#fullrecommendationstart
- https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-depression-suicide-risk-adults
- https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/unhealthy-alcohol-use-in-adolescents-and-adults-screening-and-behavioral-counseling-interventions

(home)

1.4 Screening for social factors that impact health

A patient's health is influenced more by social factors than by healthcare. Standard workflows to screen for social factors that impact health (SDOH) should be developed as part of routine ambulatory and inpatient care. Having a home, feeling safe, having transportation, and financial stability for everyday needs such as utilities and food are examples of social factors that impact health. Screening may uncover challenges, including difficulty affording medications or access to pharmacies. Practices are encouraged to develop relationships with social workers and community-based organizations to help patients with identified issues. Referrals to local organizations to assist patients are increasingly possible with referral platforms like 'Find Help.'

Several validated tools for screening for social factors that impact health include PRAPARE and the AAFP Social Needs Screening Tool.

Why is this important? Screening for and addressing social needs can significantly improve individuals' health and positively affect their health outcomes. Referral platforms such as 'Find Help' are increasingly available, robust, and effective in helping healthcare providers connect patients to resources.

Assessment question:

- The practice screens for social factors that impact health no less than annually
- The practice has processes in place to refer patients who need assistance managing social factors
- The practice uses referral platforms such as Find Help to connect patients to resources.

References/Resources

References/Resources

- https://www.ahrq.gov/sdoh/practice-improvement.html
- https://prapare.org/
- https://www.aafp.org/dam/AAFP/documents/patient_care/everyone_project/hops19-physician-form-sdoh.pdf
- https://www.findhelp.org /

(home)

1.5 Medical Nutrition Therapy

Medical Nutrition Therapy (MNT) is vastly underused but should be offered as part of whole-person care.

Many chronic conditions are directly related to a patient's lifestyle. Poor nutrition choices and lack of regular exercise contribute to conditions such as obesity, diabetes, hypertension, heart disease, hyperlipidemia, and certain cancers. Most modern guidelines that address these chronic medical conditions start with a recommendation to address lifestyle factors before or concurrent with the initiation of medication management. Counseling on lifestyle (exercise and nutrition) during routine primary care visits has shown minimal benefit. Medical Nutrition Therapy, as provided by certified nutritionists and dieticians, improves a wide array of outcomes in multiple conditions. For example, MNT can improve obesity, reduce the progression of prediabetes, reduce A1C in patients with diabetes, and improve hypertension while also reducing required medications. Clinicians who have developed systems to facilitate referrals to local providers of MNT are more likely to do so. EMR order sets and care pathways that include MNT enable the clinician to be systematic in referrals. Claims data can be used as a source of real-world evidence that shows how frequently MNT is used, and clinicians who are underutilizing MNT can be encouraged to increase referrals.

Why is this important? MNT has been shown to improve patient outcomes while concurrently reducing the need for medications. It can also reduce the risk of preventable downstream medical services, such as ER visits and admissions related to chronic conditions.

Assessment Questions

- All clinicians are aware of MNT providers
- Order sets and care pathways are used to facilitate use of MNT
- Claims data is used as a source of feedback to ensure optimal use of MNT by all clinicians

References/Resources

- Evidence Base for Medical Nutition Therapy
- The effectiveness of medical nutrition therapy provided by a dietitian in adults with prediabetes: a systematic review and meta-analysis - PubMed

(home)

Real Time Patient Care:

Medication Reconciliation, Medication Adherence, Evidence Based Prescribing

2.1 Medication Reconciliation

Patients are increasingly seeing multiple clinicians for their medical care. It is common for medication changes to occur during office visits with various clinicians (PCPs and specialists) as well as during intercurrent ER or hospital stays. The EMRs used by ambulatory practices and hospital systems are often different and disconnected. This lack of integration or a shared, single medical record increases the likelihood of inaccurate and incomplete lists of active medications. Medication reconciliation is the process of reviewing and updating the medication list as it appears in the medical record after reviewing other available and potentially more contemporaneous sources. For example, after transitions of care (e.g., post-hospital discharge, post-ED encounter), discharge summaries and instructions may show changes to the active regimen with the intent to continue them in the post-acute setting. As noted here, claims data can be an additional information source for medication reconciliation.

Medication reconciliation processes should be a routine office visit workflow, at minimum, for all transitions of care visits, after specialist consultations, prescheduled office visits for non-acute problems, and whenever a new medication is ordered.

Patients should be given an updated medication list after office visits where medication reconciliation has occurred. They should be encouraged to carry and replace it (or adjust it) when any changes are made (e.g., medication initiations, discontinuations, or dosage adjustments).

Medication reconciliation takes time. Medical assistants, nurses, and other staff who engage the patient during office visits (e.g., patient rooming) should have a standard workflow that includes medication review and reconciliation. Clinicians should also review the active medication list during office visits for an additional safety layer.

Why is this important? Accurate medication lists are challenging to maintain when patients see multiple providers and have transitions of care. When performed systematically and reliably, medication reconciliation processes have been shown to reduce error rates and improve patient safety.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- A process exists to perform medication reconciliation at minimum for all transitions of care visits, after specialist consultations, non-acute office visits and when new chronic medications are prescribed
- Patients are provided an updated medication list after office visits where a new chronic medication is prescribed or when reconciliation activities have resulted in an updated list.

References/Resources

- Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation
- Medication Reconciliation Guidance Document for Pharmacists

(home)

2.2 Medication Adherence-Related Patient Outreach

Medication non-adherence occurs when a patient does not take a medication as prescribed by their clinician. It is common and contributes to poor health outcomes related to both chronic and acute medical problems.

Non-adherence can be reduced by focusing on patient education, reducing medication regimen complexity, provision of refills, medication affordability, and 90-day prescriptions. Medication adherence to ACE/ARBs, statins, and diabetes medications is a focus of the Medicare Part D Stars measures, which are heavily weighted in 2026 for calculating CMS Stars for health plans. Practices, however, are encouraged to think more broadly than these three classes, given the high prevalence of medication non-adherence issues across other classes of medications.

A best practice for organizations attempting to increase patient adherence is to contact (call, text, email) patients who are late filling their medications. The intent is to encourage/remind patients to fill their medications and surface any underlying reasons for any delay. Patient factors for non-adherence can be addressed on a case–by–case basis (e.g., by educating the patient on why the medication is important), and data can be collected for performance improvement activities focused on medication prescribing within the practice.

For outreach to occur, organizations need access to reports from payers that identify patients who are late refilling their medications.

Why is this important? Proactively contacting patients who are late to fill their medications can improve medication non-adherence. This contact can serve as a reminder and prompt patients to fill the medications. It can also uncover underlying reasons that can be remedied for delays in medication fills (e.g., side effects, lack of understanding of why the drug is being prescribed, and financial/transportation barriers to adherence).

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Practice has access to pharmacy fill data to identify patients who are late in filling medications (at minimum ACE/ARBs, statins and oral diabetes medications)
- Practice has workflows in place to reach out to patients who are late in filling ACE/ARBs, statins and diabetes medications

References/Resources

- Using Data and Patient Outreach to Improve Medication Adherence for the Most Frail Patients
- Evaluating Success Factors of a Medication Adherence Tracker Pilot Program in Improving Part D Medication Adherence Metrics in a Medicare Advantage Plan: Importance of Provider Engagement - PMC

(home)

2.3 Tactics to Reduce Primary Non-Adherence When Prescribing New Medications During Visits:

Primary non-adherence occurs when a patient fails to pick up the first prescription for a new medication. Clinicians can reduce the risk of primary non-adherence by ensuring patients are educated, in plain English or their preferred language, without jargon, about what the medication is, what it treats, why it is important to take, how to take it, and what side effects they can expect. Clinicians should be encouraged to use the 'teach back' technique to ensure patients understand the medication and the rationale behind its use. They should ensure that prescribed drugs are within the patient's medication formulary and that any associated patient cost-sharing (e.g., co-pays/co-insurance) is affordable to the patient.

Why is this important? Primary non-adherence (where a patient never fills the first prescription) is common – in some studies, it happens around 17% of the time. Non-adherence is an important factor in disease progression and can lead to adverse outcomes. Tactics can be implemented at the point of prescribing to reduce primary non-adherence.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Clinicians and their clinical teams have been educated about primary nonadherence
- Clinicians have been educated about best practices in prescribing that have been shown to reduce primary nonadherence: no use of jargon, explaining the rationale for the medication and what it treats, why the medication is important to take, how to take it, what side effects to expect, etc.
- Providers use teach back technique after educating patients about new medications.
- Formulary information is available and used at the point of prescribing

References/Resources

- Characteristics of patients with primary non-adherence to medications for hypertension, diabetes, and lipid disorders - PubMed
- Prevalence and predictors of primary nonadherence to medications prescribed in primary care - PMC
- Reasons for Primary Medication Nonadherence: A Systematic Review and Metric Analysis - PMC

(home)

2.4 Post-Visit Calls after New Medication Prescriptions

Primary non-adherence occurs when a patient does not pick up a new prescription. Certain clinical situations put patient safety at risk if a new medication is not filled expeditiously. Examples include new antibiotics needed to treat an infection, new antidepressants for patients with severe depression, and new antihypertensives prescribed to address dangerously elevated office blood pressures (e.g., systolic BP >180mmHg).

Practices are encouraged to develop consensus around a list of scenarios that would trigger a post-visit phone call to ensure the patient has picked up the medication, has started taking it, is tolerating it, and has no questions.

While the Identification of at-risk patients starts in the exam room, a robust process that leads to the follow-up phone call involves developing communication pathways to other clinical staff who have been identified as owning the process of adding the patient to a 'will call list' and then executing the call after a prespecified time has elapsed (e.g., call patients within two business days of the office visit).

Why is this important? Given the high rate of primary medication non-adherence, a post-visit touchpoint can increase the likelihood that medications are taken as directed, thereby enhancing patient safety.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- A list of scenarios that warrant contacting the patient after an office visit to ensure they have picked up their new medication and are using it as directed has been derived.
- Processes exist and are being executed to contact the patient after an office visit based on agreed to scenarios
- Escalation processes exist whereby the patient's prescriber will be notified if a patient is found to be non adherent during the post visit outreach.

References/Resources

- Preventing medication nonadherence: a framework for interventions to support early engagement with treatment - PubMed
- Automated Phone and Mail Notices Increase Medication Adherence - Kaiser Permanente Department of Research & Evaluation

(home)

2.5 Medication Non-Adherence Screening: Patient Questionnaires

Medication non-adherence is common. As a result, patients should be asked during office visits about challenges in taking their medications regularly. Incorporating screening questions for non-adherence complements other tactics, such as reviewing claims data, to uncover barriers to adherence.

A nonjudgmental manner should be used when inquiring about adherence. Combining screening for non-adherence to the medication reconciliation activity, usually done by a medical assistant or nurse, makes embedding this additional component more likely to occur reliably. Having clinicians revisit medication nonadherence before intensifying therapy for chronic conditions such as hypertension, diabetes, asthma, and COPD may avoid overprescribing.

Examples of nonjudgmental language include:

- "It is common for people not to be able to take their medications exactly as prescribed. What medication is the hardest for you to take regularly?"
- "How many days a week are you taking your medications exactly as directed?"
- "Everyone forgets things now and then. How often do you forget to take a dose of your medication?"

Multiple tools have been validated to screen for nonadherence in practice. These include the Brief Medication Questionnaire (BMQ) and the MMAS- 8 (the Morisky Scale).

PDC, or "Proportion of Days Covered," is a metric health plans use to measure adherence. Patients are considered to be non-adherent when PDC is less than 80%. When PDC is presented to clinicians at the point of care, it can prompt an exploration of root causes.

Why is this important? Medication non-adherence is common, and screening questions have been validated to identify patients. Screening can be embedded into existing workflows.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- A process exists for screening questions to be asked about medication nonadherence during office visits
- An expectation exists for providers to review nonadherence with patients as a contributing cause to poorly controlled chronic medical problems prior to further intensification of medications.

References/Resources

- A systematic review of primary care-focused, self-reported medication adherence tools
- Svarstad BL, Chewning BA, Sleath BL, Claesson C. The Brief Medication Questionnaire: a tool for screening patient adherence and barriers to adherence. Patient Educ Couns. 1999 Jun;37(2):113-24
- De Las Cuevas C, Peñate W. Psychometric properties of the eight-item Morisky Medication Adherence Scale (MMAS-8) in a psychiatric outpatient setting. Int J Clin Health Psychol. 2015 May-Aug;15(2):121-129.
- What Does PDC Stand for in Pharmacy & How Do You Measure It? - DocStation
- Self-reported adherence and reasons for nonadherence among patients with low proportion of days covered for antihypertension medications - PMC

(home)

2.6 Medication Adherence – Recommending Pillboxes

With chronic conditions increasingly prevalent, patients often take a significant number of medications and supplements daily. To increase adherence, a best practice is to encourage the use of pillboxes. Pillboxes filled once weekly may help patients track which medications must be taken daily. While evidence that pillboxes improve medication adherence is mixed, they may be an important tool for some patients. Increasingly, 'smart pill boxes' are being used. These solutions can alert patients (and providers as indicated) if a dose is missed.

Why is this important?

Medication adherence is a common problem. Pillboxes are inexpensive and may help some patients, especially those with several daily medications, remember to take them.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Clinicians systematically inquire about and recommend pill boxes to help patients with medication adherence.

References/Resources

- Conn VS, Ruppar TM, Chan KC, Dunbar-Jacob J, Pepper GA, De Geest S. Packaging interventions to increase medication adherence: systematic review and meta-analysis. Curr Med Res Opin. 2015 Jan;31(1):145-60.

(home)

2.7 Lists Management

Patients should be encouraged to always carry an updated medication list with them. The list should be provided after each office visit (ideally as part of the after-visit summary), any time a medication is stopped or started, or when a dose or schedule is changed. Building processes to enable this often requires training the front desk staff to ensure the list is reprinted and given to the patient as part of standard 'check out' procedures.

Patients who are active users of patient portals can also be directed to the portal as an additional source of their most up-to-date medication list.

Healthcare remains fragmented. Patients should be encouraged to show their written active medication list during all healthcare interactions (e.g., office visits with specialists before outpatient procedures, ER visits, and hospital admissions). Providing this list can serve as a conduit of information for clinicians who do not share the same electronic medical record system, thereby enabling optimal medication reconciliation.

Why is this important? Patients with a list of active medications are more likely to take them as prescribed. Given the fragmentation that exists in healthcare, patients are in a position to show their most updated list to all of their providers to enable optimal medication reconciliation at all points of service, thereby improving patient safety.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- A process exists to reprint medication lists at visit checkout if a change has occurred to the medication list
- Patients are educated to carry a physical copy of their medication list and present it to other clinicians

References/Resources

- https://www.jointcommission.org/standards/national-patient-safety-goals/
- https://www.ahrq.gov/patient-safety/reports/engage/interventions/medmanage.html

(home)

2.8 Medication Prescribing: 90-Day Prescriptions With Refills

Clinicians should be encouraged to write prescriptions for stable chronic medications with a 90-day supply. This interval of prescribing has been shown to improve adherence. Additionally, providing *refills* similarly enables improved medication adherence. To facilitate this prescribing, the EMR can be configured to default to 90 days with three refills for commonly prescribed chronic condition medications. Reports can be written from the EMR and/or population health platforms that identify patients prescribed medications for 30 days. These reports can facilitate provider behavior change and/or further EMR optimization and help increase 90-day prescribing.

The practice should avoid requiring an office visit for refills and encourage the patient to be seen at a frequency appropriate for their medical conditions—with patients with more medical complexity being seen more frequently. Patients who have missed scheduled office visits intended to review medication management should not have their prescriptions withheld; instead, smaller quantities can be prescribed to hold the patient over until the appointment can be rescheduled.

Why is this important?

Nonadherence is common. 90-day fills have been shown to improve adherence. Lack of refills has been identified as a common reason for nonadherence.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Provider expectations exist to provide prescriptions for chronic medications for 90 days with refills
- EMR 'favorites' have been updated to default to 90 day fills with 3 refills.
- Reports exist and are used to identify prescriptions that are written for 30 days.

References/Resources

- Batal HA, Krantz MJ, Dale RA, Mehler PS, Steiner JF. Impact of prescription size on statin adherence and cholesterol levels. BMC Health Serv Res. 2007 Oct 25;7:175.
- Rymer JA, Fonseca E, Bhandary DD, Kumar D, Khan ND, Wang TY. Difference in Medication Adherence Between Patients Prescribed a 30-Day Versus 90-Day Supply After Acute Myocardial Infarction. J Am Heart Assoc. 2021 Jan 5;10(1
- Marupuru S, Dhatt H, Bingham JM, Warholak T. Evaluation of a Novel Pharmacist-Delivered Adherence Improvement Service via Telehealth. Pharmacy (Basel). 2021 Aug 17;9(3):140. doi: 10.3390/pharmacy9030140. PMID: 34449707; PMCID: PMC8396285.

(home)

2.9 Point of Care Dispensing

Over the last few years, office-based medication dispensing machines have increasingly been used to address primary non-adherence (failure of a patient to pick up the initial prescription). These machines are usually stocked with the most common medications prescribed within primary care. Usual classes of medications include anti-hypertensives, cholesterol-lowering medications, diabetes medications, and common antibiotics (amongst others). The practice can customize the formulary. Patient safety is improved as patients have immediate access to their medications. The seamless ability to obtain the needed medication also improves patient satisfaction and experience scores.

There are many different options on the market. Many can accept insurance, be fully customized, and be installed without upfront costs. Installing these machines also enhances revenue for primary care practices.

Why is this important?

Up to 30% of medications are not filled at the pharmacy. Point-of-care dispensing at the physician's office can reduce primary non-adherence and improve the patient experience.

Assessment questions:

- The practice has a point of care medication dispensing machine in the office.

References/Resources

- Improving outpatient primary medication adherence with phyhsician guided automated dispensing
- Moroshek JG. Improving outpatient primary medication adherence with physician guided, automated dispensing. Clinicoecon Outcomes Res. 2017 Jan 5;9:59-63

(home)

2.10 Regimen Simplification Techniques / Deprescribing

Due to the increasing prevalence of chronic conditions, the number of medications taken by patients is increasing. One review has shown that over 39% of Medicare recipients take more than five medications. As the medication burden increases, the likelihood of nonadherence increases, as does the risk to patient safety and financial toxicity. Providers can reduce these risks by reviewing the requirements and indications for every medication during each encounter.

It is essential to systematically deprescribe medications that are either no longer necessary or that are leading to adverse secondary effects. For drugs that patients need, clinicians should be encouraged to use combination medications to reduce the total pill burden. Finally, to improve adherence, clinicians should attempt to prescribe once-daily medications instead of those that need to be taken multiple times a day.

Why is this important? Patients with multiple medications and frequent doses are less likely to be able to adhere to all of their medications, are placed at greater risk due to potential drug-drug interactions, and can suffer financial hardship. Sensitizing clinicians to the need to reduce total medication and daily pill burden can yield improvements.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

1. Clinicians are educated to the benefits of deprescribing, use of combination medications and once daily dosing.
2. Clinicians deliberately and routinely review medication lists with a goal of regimen simplification

References/Resources

References/Resources

- Charlesworth CJ, Smit E, Lee DS, Alramadhan F, Odden MC. Polypharmacy Among Adults Aged 65 Years and Older in the United States: 1988-2010. J Gerontol A Biol Sci Med Sci. 2015 Aug;70(8):989-95
- Carollo M, Crisafulli S, Vitturi G, Besco M, Hinek D, Sartorio A, Tanara V, Spadacini G, Selleri M, Zanconato V, Fava C, Minuz P, Zamboni M, Trifirò G. Clinical impact of medication review and deprescribing in older inpatients: A systematic review and meta-analysis. J Am Geriatr Soc. 2024 Jun 1.
- Saini SD, Schoenfeld P, Kaulback K, Dubinsky MC. Effect of medication dosing frequency on adherence in chronic diseases. Am J Manag Care. 2009 Jun 1;15(6):e22-33. PMID: 19514806.
- Deprescribing.org

(home)

Working with Pharmacists

3.1 Pharmacists and Collaborative Practice Agreements

Collaborative practice agreements (CPAs) create formal relationships between pharmacists and clinician prescribers. These agreements allow pharmacists to expand beyond their traditional scope of practice to provide more direct patient care as integral care team members. Direct care provision can occur under specified situations and conditions whereby the pharmacist can autonomously order labs and initiate, adjust, or discontinue medications. Typically, pharmacists operating under CPAs assist in managing defined chronic conditions such as hypertension and diabetes. Care teams operating with embedded pharmacists have been shown to produce superior outcomes in managing chronic conditions.

Why is this important?

Pharmacists, working in close collaboration and coordination with PCPs through Collaborative Practice Agreements, can provide high-quality care and manage chronic conditions, significantly improving health outcomes.

Self Reflection *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice works with pharmacists using Collaborative Practice Agreements.
- If Collaborative Practice Agreements mechanisms are in place to review care outcomes to enable ongoing continuous improvement.

References/Resources

- Advancing Team-Based Care Through Collaborative Care Agreements - An Implementation Guide
- Collaborative Practice Agreements: Resources and More
- Pharmacy-Based Interventions to Improve Medication Adherence

(home)

3.2 Medication Synchronization

Medication synchronization enables patients to pick up all their medications simultaneously instead of having different refill dates. Aligning medication refill dates can help medication adherence rates by minimizing trips to the pharmacy. This is especially important for people with complex medication regimens and multiple conditions who may have difficulty with transportation.

Many pharmacies will work with clinicians to develop a plan to synchronize medications.

Why is this important?

Medication adherence is a significant barrier to adequately managing chronic conditions. Synchronizing medication refills can improve adherence and contribute to better clinical outcomes.

Self Reflection *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Identify patients with complex medication regimens and align medication prescriptions to facilitate synchronization.
- The practice is working deliberately with pharmacies on medication synchronization plans for patients identified as those that would benefit from it.

References/Resources

- Krumme AA, Glynn RJ, Schneeweiss S, Gagne JJ, Dougherty JS, Brill G, Choudhry NK. Medication Synchronization Programs Improve Adherence To Cardiovascular Medications And Health Care Use. Health Aff (Millwood). 2018 Jan;37(1):125-133
- Health care resource utilization in Medicare beneficiaries obtaining medication synchronization1 Sep 2024 | Journal of the American Pharmacists Association, Vol. 64, No. 5
- Luder H, Lawrence J, Musich S, Friderici J, Andrade K, Reed C, Ren J, Halpern R. Total cost of care of Medicare Advantage beneficiaries participating in an appointment-based model in a national pharmacy chain. J Manag Care Spec Pharm. 2024 Aug;30(8):782-791

(home)

3.3 CMM and MTM

Practices should be aware of CMS efforts to improve medication management. Two specific programs are Medication Therapy Management (MTM) and Comprehensive Medication Management (CMM).

Medication Therapy Management is a requirement for any Part D sponsor. It is provided by pharmacists and intended to ensure optimal medication use while reducing adverse events. Through chart review and interaction with patients, five (5) elements are delivered: medication therapy review, a personal medication record, a medication-related action plan including recommended intervention or referral, documentation, and follow-up.

CMM builds on the MTM principles but takes a more holistic approach. While MTM is usually delivered by pharmacists who are not known by and are separated from the care team, CMM is generally offered by pharmacists who are embedded within care teams. CMM focuses on all medications (prescription and over-the-counter) in the context of the patient's active medical problems, behavioral health issues, and social factors. Specific recommendations can be tailored for the patient using this fuller understanding of the patient's needs. When CMM is coupled with collaborative care agreements, pharmacists can make medication changes (e.g., additions, deletions, dose changes, etc.) and follow the patient longitudinally as a core care team member.

Why is this important?

Medications are a key tool used by primary care providers. Pharmacy-led MTM and CMM programs and processes, when executed and integrated deliberately into primary care, have been shown to improve outcomes.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- All providers are aware of MTM programs that are interacting with patients and know how to follow up and execute recommendations.
- All providers are aware of CMM programs that are involved in the care of the practices patients and know how to optimally interact with the pharmacists and their recommendations.

References/Resources

- The Patient Care Process for Delivering Comprehensive Medication Management
- The Outcomes of Implementing and Integrating Comprehensive Medication Management in Team-Based Care: A Review of the Evidence on Quality, Access and Costs, December 2023

(home)

3.4 Medication Fills: Blister packaging

Certain pharmacies will fill medications in what is known as medication adherence blister packaging. This type of packaging helps patients with complex, stable medication regimens by pre-packaging their daily medications into one compartment. The blister pack is often labeled with a specific date and is usually for a specified period, such as a month. Patients undergoing frequent medication changes or dose/schedule titration are less suitable candidates for this type of packaging. Practices should be aware of community pharmacies that provide this option for select patients.

Why is this important?:
Medication complexity is common, and blister packaging has been shown to reduce non-adherence.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice has a list of pharmacies that provide medication adherence blister packaging
- All providers utilize blister packaging for at risk patients in a systematic manner

References/Resources

- Conn VS, Ruppar TM, Chan KC, Dunbar-Jacob J, Pepper GA, De Geest S. Packaging interventions to increase medication adherence: systematic review and meta-analysis. Curr Med Res Opin. 2015 Jan;31(1):145-60.

(home)

3.5 Preferred pharmacies

Insurance companies, through their relationships with Pharmacy Benefits Managers (PBMs), annually refresh their list of preferred pharmacies. Payors select preferred pharmacies based on multiple factors, including drug prices and achieving quality targets. Preferred pharmacies have lower patient co-pays than non-preferred pharmacies. Many preferred pharmacies offer enhanced services to improve medication adherence and other services, such as patient vaccinations. PCPs are encouraged to develop processes to ensure ongoing awareness of preferred pharmacies and direct their patients to use them.

Why is this important?

Preferred pharmacies have lower patient co-pays and may offer other bundled services, such as care management and outreach activities, to increase adherence.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice systematically obtains, and updates annually, the list of preferred pharmacies for all insurance plans it accepts.
- The preferred pharmacy list is readily available within provider prescribing workflows.
- All providers are aware of the preferred pharmacy list and direct patients to them.

References/Resources

- Preferred Pharmacy Networks. AMCP Website. Accessed 10/3/24
- Starc, Amanda, and Ashley Swanson. 2021. "Preferred Pharmacy Networks and Drug Costs." American Economic Journal: Economic Policy, 13 (3): 406–46.

(home)

3.6 Mail Order Pharmacies

Insurance plans allow patients to fill medications at mail-order pharmacies (e.g., Express Scripts, OptumRx, CVS Caremark, Centerwell, etc.). Patients who have medications filled through mail order have higher medication adherence rates. Increased adherence rates may be due to several factors – including automating the delivery of the medication to the home and bundling other services, such as patient outreach to patients who appear to be having trouble with adherence. A best practice is for providers to understand mail order options available to patients and encourage using those services.

To encourage using mail-order options, the EMR should ideally be configured so each patient has a mail-order pharmacy and a local pharmacy. Providers should be encouraged to have an initial medication fill at a local pharmacy to ensure patient tolerability and rapid dose escalation as necessary, with subsequent fills occurring via mail order.

Why is this important?
Mail-order pharmacy medication fills are associated with higher levels of patient adherence.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- A list of mail order pharmacies is maintained at the practice
- Providers systematically encourage patients to fill their medications at mail order pharmacies
- The EMR is configured to have both a mail order and local pharmacy for each patient

References/Resources

- Schwab P, Racsa P, Rascati K, Mourer M, Meah Y, Worley K. A Retrospective Database Study Comparing Diabetes-Related Medication Adherence and Health Outcomes for Mail-Order Versus Community Pharmacy. J Manag Care Spec Pharm. 2019 Mar;25(3):332-340. doi: 10.18553/jmcp.2019.25.3.332. PMID: 30816817; PMCID: PMC10398324.

- Schmittdiel JA, Karter AJ, Dyer WT, Chan J, Duru OK. Safety and effectiveness of mail order pharmacy use in diabetes. Am J Manag Care. 2013 Nov;19(11):882-7. PMID: 24511986; PMCID: PMC4278640.

(home)

Enabling Technology

4.1 Drug Interation Checkng

Patient safety is of critical importance to consider when managing medications. Adverse events can happen directly during the prescribing of drugs due to allergies, drug-condition, drug-drug, and drug-supplement interactions.

Most EMRs offer real-time allergy-checking and interaction-checking capabilities and are becoming more robust at the point of prescribing. Third-party applications also exist to enable manual entry for the identification of potential drug-drug interaction before the prescribing decision.

Why is this important?

Adverse events related to medications are a common cause of morbidity and mortality. Medication-related errors and adverse events can often be prevented through systems, processes, procedures, and behavioral expectations.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Allergy checking is available at the point of prescribing
- Drug-drug interaction checking is available at the point of prescribing
- Drug-condition interaction checking is available at the point of prescribing
- Quality measures related to medication safety are incorporated into the performance management system.

References/Resources

References/Resources

- Young RA, Fulda KG, Espinoza A, Gurses AP, Hendrix ZN, Kenny T, Xiao Y. Ambulatory Medication Safety in Primary Care: A Systematic Review. J Am Board Fam Med. 2022 May-Jun;35(3):610-628. doi: 10.3122/jabfm.2022.03.210334. PMID: 35641040; PMCID: PMC9730343.
- Assiri GA, Shebl NA, Mahmoud MA, Aloudah N, Grant E, Aljadhey H, Sheikh A. What is the epidemiology of medication errors, error-related adverse events and risk factors for errors in adults managed in community care contexts? A systematic review of the international literature. BMJ Open. 2018 May 5;8(5):e019101. doi: 10.1136/bmjopen-2017-019101.
- Optimzing Medication Safety in Virtual Primary Care. ISMP Canada Saefty Bulletin

(home)

4.2 Patient Portals and Open Notes

Patients should be given access to their medical records through portals or other means. The Open Notes Act of 2021 required health systems to provide this access to increase patient engagement with their care, help them understand their conditions and treatment plans, and serve as an independent double-check of key information recorded, such as the medication list. Patients provided access to their records are more likely to engage in the collaborative setting of their care plan, adhere to their treatment plan, including medication regimens, and help identify and correct any documentation errors in the clinical record.

Why is this important?

Patients given access to their medical records are better able to understand their medical conditions and care plans, increasing the likelihood of engagement and adherence.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Does your practice/health systems provide medical record access to patients?
- Have clinical teams been trained how to document potentially sensitive topics and with clarity (e.g, avoid jargon, acronyms, abbreviations)?

References/Resources

- Magid SK, Cohen K, Katzovitz LS. 21st Century Cures Act, an Information Technology-Led Organizational Initiative. HSS J. 2022 Feb;18(1):42-47. doi: 10.1177/15563316211041613. Epub 2021 Sep 29.
- OpenNotes – Patients and clinicians on the same page
- Sharing Notes with Patients: The Basics (opennotes.org)

(home)

4.3 Interruptive EMR "Pop-Up" Alerts to Drive Evidence-Based Prescribing

Many EMRs can be programmed to generate clinical alerts when certain conditions or situations occur. These alerts, sometimes called 'condition-medication' or 'drug-disease' alerts, can be customized to focus on scenarios where patients do not receive specific evidence-based medications.

For example, the EMR can identify heart failure patients who are not prescribed ACE inhibitors and present an interruptive alert during prescribing for that condition. Practices are encouraged to maximize the potential of their EMR and set customized alerts for prevalent conditions to drive evidence-based prescribing. Care should be taken to reduce unnecessary alerts, which contribute to provider burden and burnout. Alerts, their configuration, use, and utility should be monitored at least annually to continue refining the EMR for optimal prescriber experience and patient care.

Why is this important:
Evidence shows that a significant number of patients with chronic medical conditions are not receiving evidence-based therapies. Clinical alerts at the point of care can complement other strategies, such as order sets and 'care gap lists' that are worked separately.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The EMR is configured to have interruptive alerts for gaps in evidence-based prescribing
- Existing alerts are reviewed at least annually for effectiveness and impact on provider experience

References/Resources

References/Resources

- Ho VT, Aikens RC, Tso G, Heidenreich PA, Sharp C, Asch SM, Chen JH, Shah NK. Interruptive Electronic Alerts for Choosing Wisely Recommendations: A Cluster Randomized Controlled Trial. J Am Med Inform Assoc. 2022 Oct 7;29(11):1941-1948.
- Tolley CL, Slight SP, Husband AK, Watson N, Bates DW. Improving medication-related clinical decision support. Am J Health Syst Pharm. 2018 Feb 15;75(4):239-246. doi: 10.2146/ajhp160830. PMID: 29436470.

(home)

4.4 Order Sets

Order sets are usually available in EMRs. For common conditions, order sets can bundle evidence-based medications with recommended labs, radiology studies, and patient education, enabling efficient ordering and reducing errors of omission due to prescriber oversight.

It is not infrequent that order sets are both underused and not maintained or updated regularly. Practices are encouraged to develop order sets for common conditions, have 'owners' of order sets, and establish annual review and updating cycles.

Order sets can be helpful for both chronic disease management, such ad diabetes and hypertension as well as acute intercurrent issues such as STD testing, influenza management etc.

Why is this important?
Utilization of order sets increases the likelihood of evidence-based prescribing and patient monitoring.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Order sets exist for common primary care conditions – inclusive of diabetes, hypertension, heart failure, asthma, and COPD
- Order sets are reviewed and updated at least annually.

References/Resources

References/Resources

- ISMP Guidelines for Standard Order Sets

(home)

4.5 Connect to Regional Health Information Exchanges

Healthcare information exchanges (HIEs) facilitate data sharing between providers and health systems. Practices are encouraged to connect with the regional HIE to take advantage of offerings ranging from Direct Messaging between providers (to share office notes) to encounter Notifications (ADT) and access to Clinical Data Repositories. Access to information through exchanges increases the likelihood that clinicians will have access to accurate medication-related information for chronic and intercurrent acute medication needs.

Recent regulations, such as the TEFCA (Trusted Exchange Framework and Common Agreement), will accelerate the standardized sharing of data among all healthcare ecosystem stakeholders.

Why is this important? The number of clinicians with whom patients interact regularly has dramatically increased over time. Many patients visit multiple specialists, receive care in ERs, are admitted, and/or spend time at skilled nursing facilities (SNFs) each year. Each contact point with the healthcare system increases the likelihood of medication changes. HIEs connect the ecosystem to seamlessly transmit medication (and other clinically relevant) information.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice is connected to the local healthcare information exchange
- The practice systematically uses data from the healthcare information exchange in the provision of optimal medication management

References/Resources

References/Resources

- https://www.healthit.gov/topic/health-it-and-health-information-exchange-basics/health-information-exchange
- Barker W, Chang W, Everson J, Gabriel M, Patel V, Richwine C, Strawley C. The Evolution of Health Information Technology for Enhanced Patient-Centric Care in the United States: Data-Driven Descriptive Study. J Med Internet Res. 2024 Oct 28;26

(home)

4.6 Connect to Local Hospital EMRs

When patients use the emergency room or are admitted to local hospitals, the gold standard for primary care clinicians to understand what transpired is to have access to that hospital's EMR. Read-only access is available for many hospital EMRs (e.g., Epic CareLink) and is usually free for practices. The hospital medical record (e.g., the entirety of the chart, including progress notes, specialist consult notes, and procedure summaries) often provides complementary and additive information to the final discharge summary.

Access to nurses' and physicians' progress notes allows a richer understanding of the patient's medication experience during hospitalization. This is in addition to the discharge summary and instructions usually available to the PCP and patient at discharge. For example, patients may have been on medications that were not tolerated or discontinued during a hospitalization, and these events may not be included in the discharge paperwork.

Why is this important?

Hospital discharge summaries or CCDs (continuity of care documents) often do not contain vital information such as the entire medication administration history, the reasons and rationale behind medication changes, or adverse reactions to medications during the hospitalization. Accessing and reviewing the hospital EMR can provide a more complete picture of events and the medication management decisions that transpired.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice has access to the local hospital EMR where the majority of ER and hospital-based care is provided for their panel.
- The practice systematically uses the hospital EMR during transitions of care visits.
- The practice systematically uses the hospital EMR during all visits, as needed.

(home)

4.7 HIPAA Compliant Texting Between PCPs and Specialists

PCPs who build relationships with the specialists who participate in the care of mutual patients are more likely to reach out to them to ask clarifying questions about prescribed medications or other elements of the care plan. When clinicians with relationships use HIPAA-compliant texting, necessary information and guidance can be quickly obtained, enabling optimal medical decision-making at the point of care – even when done with the patient in the exam room. Texting PHI (personal health information) using non-HIPAA-compliant solutions places the providers at risk for penalties related to breaches of HIPAA.

When all clinicians in a region or network are preloaded into the HIPAA-compliant texting solution, it is easier for PCPs who do not have relationships with a particular specialist to look up the specialist by name in the texting directory. This eliminates the need for each clinician to have each other's cell phone numbers.

Why is this important/
Reducing friction and making it easier for consulting specialists to answer medication-related questions enhances the safety, quality, and patient experience.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice uses a HIPAA compliant texting solution in the provision of care
- The practice uses a HIPAA complaint texting solution with the majority of specialists with whom care is shared.

References/Resources

References/Resources

- *Is texting a violation of HIPAA?. The HIPAA Journal.com. Accessed 10/4/24*
- Centers for Medicare and Medicaid. Center for Clinical Standards and Quality/Survey and Certification Group. Texting of patient information among healthcare providers. cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-18-10.pdf. December 28, 2017.

(home)

4.8 E Consults

A significant percentage of patient management questions can be answered by specialists who respond to questions from PCPs using E-consult platforms. This asynchronous communication between clinicians allows for posing a clinical question, attaching medical records with relevant clinical information so that a specialist can respond, and a mechanism for the providers to bill for the consultation. Medication adjustments can occur based on responses to e-consults, thereby reducing the total cost of care and improving the patient experience. Specialists performing e-consults can free up room for in-person access for more complex patients.

Why is this important?

Access to specialist care is increasingly difficult in many parts of the United States, resulting in significant delays in needed patient care. E-consults can improve access to specialists by providing timely guidance for primary care clinicians and opening access for patients who need an in-person consultation.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice has access to an e-consult platform that is able to provide access to all types of specialists
- The practice actively uses an e-consult platform to interact with specialist with the goal of optimal medication management

References/Resources

References/Resources

- Smith M, Vuernick E, Anderson D, Mulrooney M, Harel O, Allotey P. Pharmacist eConsult service for primary care medication optimization and safety. J Am Pharm Assoc (2003). 2021 May-Jun;61(3):351-359. doi: 10.1016/j.japh.2021.01.006. Epub 2021 Mar 5. PMID: 33678565.

(home)

4.9 Artificial Intelligence Assisted Prescribing

Artificial intelligence (AI) in healthcare is now very real, and its use will continue to expand. AI can assist clinicians in optimally selecting medications for patients based on multiple variables that may come from within the medical record and outside of it. Using factors such as the patient's genetics, current comorbidities, prior medication use, and access to the results of studies of effectiveness in real-world populations of similar patients who have previously been prescribed a medication for the same indication, AI will render recommendations that will increasingly improve clinician performance in attainment of treatment goals.

Why is this important?

The cost of pharmaceuticals is rapidly climbing. AI will be an important tool that has the potential to ensure that the most value-based decision is made for each patient – recommending drug regimens that are most efficacious, safest, and most likely to be adhered to at the lowest possible price point.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice has access to artificial intelligence assisted medication prescribing
- The practice uses artificial intelligence assisted medication prescribing.

References/Resources

References/Resources

- Damiani G, Altamura G, Zedda M, Nurchis MC, Aulino G, Heidar Alizadeh A, Cazzato F, Della Morte G, Caputo M, Grassi S, Oliva A; D.3.2 group. Potentiality of algorithms and artificial intelligence adoption to improve medication management in primary care: a systematic review. BMJ Open. 2023 Mar 23;13(3):e065301. doi: 10.1136/bmjopen-2022-065301. PMID: 36958780; PMCID: PMC10040015. CopyDownload .nbib,
- Chen Z, Liang N, Zhang H, Li H, Yang Y, Zong X, Chen Y, Wang Y, Shi N. Harnessing the power of clinical decision support systems: challenges and opportunities. Open Heart. 2023 Nov 28;10(2):e002432.

(home)

4.10 Remote patient monitoring

Remote patient monitoring (RPM) is increasingly used to improve chronic disease management. RPM effectively provides insights into patients' real-time physiologic status and is an important tool used by practices to improve outcomes for patients with conditions as varied as hypertension, heart failure, COPD, and obesity. Medications can be rapidly adjusted based on data collected between office visits. For example, patients monitored for blood pressure can more rapidly be titrated up on antihypertensive medications, and heart failure patients can avoid emergency department visits for volume overload as RPM can identify rapid weight gain, thereby allowing rapid rescue with dose intensification/escalation of diuretics. RPM is variably covered by insurance plans.

Additionally, various technologies are increasingly available for remote patient monitoring to ensure patients take their medications as prescribed. These technologies include smart pill boxes, pill bottles, and pen and inhaler devices that track doses automatically.

Why is this important?

The total amount of face-to-face time patients are seen by their treating clinicians is limited. This narrow window does not always allow an optimal understanding of the patient's condition. RPM allows for real-time monitoring of chronic conditions to enhance medication management. RPM also allows a more comprehensive and timely view of how patients respond to prescribed medications and lifestyle interventions. While not for all patients, RPM can provide significant value for select patients.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice utilizes remote patient monitoring to assist with medication management
- The practice has defined criteria that determines who is selected for RPM.
- The practice assesses the utility of RPM on an annual basis.

References/Resources

References/Resources

- Li Y, Jiang Y, Tang Y. Is remote blood pressure monitoring and management a better approach for patients with hypertension? A narrative review. J Clin Hypertens (Greenwich). 2023 Feb;25(2):121-126. doi: 10.1111/jch.14624. Epub 2023 Jan 5. PMID: 36602447; PMCID: PMC9903197.

- Christie RH, Abbas A, Koesmahargyo V. Technology for Measuring and Monitoring Treatment Compliance Remotely. J Parkinsons Dis. 2021;11(s1):S77-S81. doi: 10.3233/JPD-212537. PMID: 34151856; PMCID: PMC8385508.

(home)

4.11 Point of Care Access To Reference Material

The volume of information necessary for clinicians to possess or have access to practice optimal medication management is increasing. To assist the PCP, access to point-of-care references that provide decision support conveniently and efficiently is necessary. Integrating these references and resources into the EMR workflow is ideal but unnecessary. Ensuring that all providers are aware of available resources and are actively using them is the role of leadership. Multiple third-party applications that provide information formatted to be accessed at the point of care enable the PCPs who use these tools to obtain CME credit for doing so. Point of care reference information allows the clinician to determine optimal medication selection (with appropriate dosing, frequency, duration, etc.) and understand the anticipated impact of prescribing.

Why is this important? The increasing complexity of healthcare conditions that PCPs encounter and the concurrent expanding available treatment options demand that clinicians have ready access to references and decision support at the point of care, which enables optimal medication management

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):* :

- The practice provides access to point of care references that can be used for clinical decision support
- All providers are aware and use point of care references

References/Resources

References/Resources

- https://www.elsevier.com/solutions/clinical-reference
- https://www.uptodate.com/login
- https://www.dynamed.com/

(home)

4.12 Real-Time Formulary Checking

Multiple companies now offer real-time formulary checking to enable clinicians to determine the formulary status of a medication of interest when prescribing. When presented within the prescriber's workflow, this information can be used to increase the likelihood that a selection will be made where the insurance plan will cover the medication, have the lowest copay possible for the patient, and reduce the need for additional preauthorization. If a preauthorization is required, the clinician can enter the necessary information during the initial interaction with the system, thereby reducing delays.

Why is this important? To reduce the rate of primary nonadherence, clinicians should, whenever possible, prescribe within a plan's formulary. Prescribing medications within a patient's formulary reduces the office's overall workload and improves the patient experience.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice EMR presents formulary data/checking within the prescriber workflow to enable 'in formulary' prescribing.
- The formulary checking software is kept updated to evolving insurance coverage benefits on a real time basis.

References/Resources

References/Resources

- https://www.medicaleconomics.com/view/precheck-myscript-easing-the-prior-authorization-process-for-physicians-and-patients
- https://dev2-www.optum.com/en/business/providers/pharmacy/home-delivery/precheck-myscript.html

(home)

4.13 Pharmacy Claims-based Fill History Presented at the Point of Care

When available at the point of care, a medication fill history based on claims can significantly contribute to high-quality medication reconciliation and adherence monitoring. Available through direct interfaces to a practice EMR or portal-style websites, multiple vendors now enable access to this increasingly critical data stream. The medication fill history is often presented to providers as a single unified list of medications, independent of the prescriber, with the dates of the last and previous fills. This information enables the provider to optimally perform medication reconciliation, assess for adherence, and develop an optimal care plan.

The data's reliability limits are seen when and if a patient fills a medication without insurance coverage (such as paying via cash, using Good Rx, or having a medication filled at the VA).

Why is this important? Patients see multiple providers who prescribe medications. Access to the actual prescription fill history by all providers at an individual patient level enables optimal medication reconciliation and provides a view into patient adherence.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Medication fill history based on pharmacy claims/fill data is available to the practice
- Medication fill history based on pharmacy claims/fill data is used at the point of care in a reliable manner by all prescribers

References/Resources

- Blecker S, Adhikari S, Zhang H, Dodson JA, Desai SM, Anzisi L, Pazand L, Schoenthaler AM, Mann DM. Validation of EHR medication fill data obtained through electronic linkage with pharmacies. J Manag Care Spec Pharm. 2021 Oct;27(10):1482-1487.
- Park Y, Yang H, Das AK, Yuen-Reed G. Prescription fill rates for acute and chronic medications in claims-EMR linked data. Medicine (Baltimore). 2018 Nov;97(44):e13110

(home)

4.14 **Medication Optimization – Targeting**

Population Health Management software applications can increasingly allow users to identify patients with inappropriate or suboptimal medication regimens. Patient targeting refers to identifying patients who satisfy specific clinical scenarios of interest to the practice where medication adjustments should be seriously contemplated. Practices can configure the software to search for patients based on context-specific parameters set by the practice. Examples of potentially suboptimal prescribing are patients on both SGLT2 and GLP1 inhibitors, elderly patients prescribed medications on the BEERS criteria list, or patients who are on multiple sedating medications such as opiates, benzodiazepines, and muscle relaxants. Identifying these patients through reports and clinical decision support tools generated from the software allows clinicians and their teams to prioritize whether a medication change is required. For patients between visits, depending on the nature of the opportunity, outreach to address the identified medication issue(s) can occur to make a change. Providers can similarly take necessary action during visits when presented with the information.

See the Real-Time EMR/Population Health Monitoring section, which further describes these concepts, focusing on integrating EMR and claims data.

Why is this important?

The number of medications that patients take has dramatically increased over time. Prescribing based on age, indications, knowledge of contraindications, drug-drug, drug-age, and drug-condition interactions is exceedingly difficult (despite evolving point-of-care decision support). Hence, the ability to build surveillance programs provides an additional layer of quality assurance and patient safety.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- The practice has the ability to customize reports to identify patients who may have suboptimal medication prescribing. The practice can develop and refine scenarios of interest to identify patients based on the nature of the population
- The practice actively uses surveillance/targeting reports to both reach out to patients between visits and during visits to optimize medications

References/Resources

References/Resources

- Curtin D, Jennings E, Daunt R, Curtin S, Randles M, Gallagher P, O'Mahony D. Deprescribing in Older People Approaching End of Life: A Randomized Controlled Trial Using STOPPFrail Criteria. J Am Geriatr Soc. 2020 Apr;68(4):762-769. doi: 10.1111/jgs.16278. Epub 2019 Dec 23. PMID: 31868920.

(home)

4.15 Real-time EMR/Population Health Management Platform Monitoring

Emerging population health management techniques integrate EMR, laboratory, and claims data to allow clinicians to better understand the care being rendered. This integrated data stream and real-time reporting facilitate and accelerate care improvement. Many EHRs now either have internal capabilities to integrate and report using these data sources or connect through APIs to third-party population health platform plug-ins with those capabilities.

Through this integration of data sources and reporting capabilities that are nimble and customizable, new insights can immediately be ascertained and delivered as real-time decision support and reports and dashboards that can identify cohorts of patients. Examples of questions that can be answered through such reporting include "Which patients had very elevated blood pressures in the past 30 days (e.g., > 180/100mmHg), what was done about it, and when is the next follow-up appointment?" Another example is "Which patients have heart failure and diabetes and are not on an SGLT2 inhibitor?" These capabilities allow for more rapid optimization of medications and contribute to the quality of care delivery. These techniques allow for improving care beyond traditional, retrospective data used for quality measure reporting. Enhanced alerting and real-time decision support during care delivery are also optimized by integrating these data sources.

Why is this important? Given multiple competing demands during most primary care visits and the well-recognized phenomena of clinical inertia, there is often a lack of appropriate medication prescribing (e.g., intensification/ deprescribing) even when the clinical scenario to do so is apparent. Real-time monitoring of medical record structured data by a system-level or practice-level population health management platform that produces clinical insights can provide meaningful, timely, and actionable guidance to support better clinical care through enhanced clinical decision support and population-level reporting.

Self Reflection: *(Look for evidence through interview, review of policies, procedures, processes, tech):*

- Providers in the practice are able to view reports or patient registries enriched with EMR, claims and laboratory data
- Reports and dashboards that incorporate EMR, laboratory and claims data are used to improve care
- Clinical Decision Support is offered to providers that is generated from the integration of EMR, labs and claims data at the point of care.

References/Resources

References/Resources

- Alexiuk M, Elgubtan H, Tangri N. Clinical Decision Support Tools in the Electronic Medical Record. Kidney Int Rep. 2023 Oct 29;9(1):29-38
- Integrating Clinical Decision Support Into Electronic Health Record Systems Using a Novel Platform (EvidencePoint): Developmental Study JMIR Form Res 2023;7:e44065

(home)

4.16 Genetic testing for drug optimization

The reduction in cost for genetic testing has enabled this service to increasingly be offered to patients who are at significantly high risk for medication-related adverse events or suboptimal responses to medications. Offered through third-party vendors that contract with insurers, genetic tests identify important differences in enzymatic activity that impact drug metabolism. For example, patients who are slow metabolizers of the cytochrome P45O system may need lower-than-usual medication doses to avoid elevated blood levels. Genetic testing, often performed during the management of psychotropic medication, has now extended to many different drug categories. Despite these advances, most pharmacogenetic testing occurs only in academic settings and has not been widely embraced within primary care. This rapidly evolving tool is an area for primary care physicians to continue to monitor to keep pace with changing standards of care.

Why is this important?

Variable metabolism of medications can significantly impact the required dose needed for optimal efficacy and patient safety. Genetic testing can assist with dose selection for an increasing number of therapeutic categories and medications.

Assessment question:

- The practice uses genetic testing to assist in medication dosing and selection

References/Resources

References/Resources

- Hayward J, McDermott J, Qureshi N, Newman W. Pharmacogenomic testing to support prescribing in primary care: a structured review of implementation models. Pharmacogenomics. 2021 Aug;22(12):761-776.
- Weitzel KW, Duong BQ, Arwood MJ, Owusu-Obeng A, Abul-Husn NS, Bernhardt BA, Decker B, Denny JC, Dietrich E, Gums J, Madden EB, Pollin TI, Wu RR, Haga SB, Horowitz CR. A stepwise approach to implementing pharmacogenetic testing in the primary care setting. Pharmacogenomics. 2019 Oct;20(15):1103-1112
- An Overview of Pharmacogenomic Testing for Psychiatric Disorders

(home)

Novel Medication Related Quality Measures

5.1 Concurrent Use of Opioids and Benzodiazepines (COB)

New in the 2025 MY Medicare STARS program is the introduction of the PQA Measure "Concurrent Use of Opioids and Benzodiazepines." This measure is intended to identify patients who have had two or more benzodiazepine prescriptions that have been filled on top of background opioid medications that have been taken for more than 30 days. Concomitant prescribing of opiates and benzodiazepines places patients at risk for over-sedation, falls, accidents, and other patient safety events.

Why is this important?

Concomitant prescribing of opiates and benzodiazepines places patients at risk for over-sedation, falls, and accidents and is thereby a safety issue. Organizations interested in improving STARS performance must perform well on this new measure.

Assessment question:

- The PCP office has the ability to run reports (or is provided) a list of patients that have been prescribed opiates for 30 days who have had two or more prescriptions of benzodiazepines.
- All prescribers have access and use the PDMP during the course of prescribing controlled substances
- All prescribers are aware of the COB Measure and ways to improve performance

References/Resources

- **eCQI Resource Center - Measure Definition**

(home)

5.2 Polypharmacy: Use of Multiple Anticholinergic Medications in Older Adults (POLY-ACH)

New in the 2025 MY Medicare STARS program is the PQA Measure "Use of Multiple Anticholinergic Medications in Older Adults." This measure has a denominator of patients who are over 65 and have had two or more prescription claims for the same anticholinergic medications on different dates of service during the measurement year. The numerator comprises individuals from the denominator with concurrent use of 30 or more cumulative days of more than two unique anticholinergic medications, each with greater than two prescription claims on different dates of service during the measurement year. The use of multiple anticholinergic medications concurrently places patients at increased risk of falls, mental status decline, delirium, and other types of accidents.

Why is this important? Concurrent use of multiple anticholinergic-acting medications puts patients at risk for cognitive changes such as delirium and thereby increases the risk of falls and other accidents. From a value-based care perspective, this new measure impacts STARS, and the increased utilization of medical services increases the cost of care.

Assessment question:

- The PCP office has the ability to run reports (or is provided) a list of patients that have been prescribed anticholinergic medications concurrently (per the measure criteria).
- An effort is underway to review patients in the denominator to make appropriate medication substituions to reduce anticholinergic burden.
- All prescribers are aware of the POLY-ACH Measure and ways to improve performance

References/Resources

- Measure Oberview: PQA Alliance
- https://www.pharmacyquality.com/wp-content/uploads/2021/05/PQA29Polypharmacy2021.pdf

(home)