



Organizational
Toolkit
On Medication
Adherence

NATIONAL
COUNCIL
for Mental
Wellbeing

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INTRODUCTION

A PURPOSE OF THE TOOLKIT

The National Council for Mental Wellbeing's Organizational Toolkit on Medication Adherence was developed for providers implementing key recommendations from the National Council's Medical Director Institute whitepaper, [Medication Matters: Causes and Solutions to Medication Non-adherence](#), disseminated in September 2018. The Medical Director Institute is comprised of a representative group of medical directors from all regions of the country, recognized for their outstanding leadership in shaping psychiatric and addictions service delivery. The goal of the paper was to alert the health care system to a major public health problem associated with non-adherence to medications and offer a practical set of evidence-informed recommendations designed to improve medication adherence and ultimately to improve health outcomes.



This toolkit supports **individual practitioners including case managers, therapists and peer specialists, as well as organizations** seeking to strengthen their capacity and skills in improving patients' adherence with their medication regimens. Behavioral health, integrated health and other settings providing medication services may use some or all of the information and tools provided in the toolkit to promote the safe and effective use of medication and to reduce the risks associated with non-adherence.

B HOW TO USE THE TOOLKIT

This toolkit provides actionable guidance for individual practitioners to (1) effectively engage individuals in making informed decisions and using medication in a safe and effective manner, (2) understand the multiple barriers that contribute to non-adherence, (3) assess medication adherence and treatment planning practices and (4) implement strategies and best practices to promote medication adherence. All practitioners involved in supporting safe and effective use of medication will find information and resources pertinent to their role.

Individual practitioners will be more successful in improving medication adherence if they have systematic active organizational guidance and support. The toolkit also supports organizations interested in improving medication adherence across their population, especially cohorts at risk for the most serious and negative outcomes associated with non-adherence. The toolkit emphasizes the importance of an organization establishing a medication adherence improvement team comprised of prescribers, behavioral health staff, nurses, recovery coaches, peers, patients, pharmacists, administrators and others who play an instrumental role in promoting the safe and effective use of medication. The toolkit offers the improvement team background information, description of critical competencies, organizational strategies and numerous tools and resources to support informed decision-making and guide improvement plans related to organizational policies, practices and procedures. One of the most important tools available to organizations within this toolkit is the [Medication Adherence Organizational Self-assessment](#) (MA-OSA). This tool helps identify areas of strengths and needs as they relate to medication adherence. The last section of the toolkit on organization-level strategies describes the MA-OSA in greater detail.

At the organizational level, we recommend the medication adherence improvement team review the toolkit in its entirety and familiarize themselves with all the content areas since increasing medication adherence typically involves the following improvement goals:



Increasing the medical and behavioral health providers' knowledge about the prevalence and impact of medication non-adherence, as well as the multi-level barriers that contribute to non-adherence.



Strengthening the patient-practitioner relationship through a shared decision-making process.



Assessing the patient-specific barriers contributing to non-adherence.



Developing and implementing a plan to address these factors/barriers based on best practices.



Evaluating and monitoring improved adherence and health outcomes for individuals and populations through data-driven decision-making.

BACKGROUND

A Defining Medication Adherence

Adherence to a medication regimen is the extent to which patients take medications as prescribed by their health care providers to promote safety and improved health outcomes. Research literature defines patients as adherent if they take more than 80 percent of prescribed medications; partial adherence is taking 50 percent of prescribed medications and there is consensus among experts that non-adherence is being off medications for one week.

B Why Medication Adherence is Important

The prevalence and impact of non-adherence is a major public health challenge. The World Health Organization (WHO) estimates that up to 50 percent of prescribed medications are not taken as prescribed. Non-adherence has costly impacts on individuals, communities and the health care system, including increased chances of relapse, hospitalization, increased use of the emergency room, lifestyle disruption, placement in a nursing home, illness chronicity and premature death. It impacts the efficiency of the health system by requiring more frequent use of high-cost services, additional prescriptions to offset non-adherence and remedial interventions to address relapse. The estimated added cost of non-adherence to the health care delivery system is between \$100 and \$300 billion annually.

The consequences of medication non-adherence include psychotic relapse; the need for hospitalization; risk of suicide; interruption of education, work activities and social relationships; and potential progression of illness. Non-adherence to medication is a major problem that limits the effectiveness of treatment and adds to the personal burden of illness and cost of health care.

This toolkit provides a balance of information, tools and resources to assist organizations, practitioners, patients and families to increase the safe and effective use of medications and thereby improve patients' well-being.

IMPROVING MEDICATION ADHERENCE — PRACTITIONER-LEVEL APPROACHES

A Strengthening the Therapeutic Relationship

Engaging patients in care is a vital first step in the process of helping them adhere to treatment. According to a group of stakeholders associated with the National Association on Mental Illness (NAMI), **“Engagement is the strengths-based process through which individuals with mental health conditions form a healing connection with people that support their recovery and wellness within the context of family, culture and community.”** Successful patient engagement requires a safe environment that promotes trusting and collaborative relationships. These empowering and healing relationships are facilitated when staff understand trauma-informed, recovery-oriented/person-centered approaches to care and possess the knowledge and skills to educate patients and families on the risks and benefits of medication adherence and guide them through the process of shared decision-making.

Recovery-oriented or person-centered care (PCC) closely aligns with trauma-informed approaches and are both important in engaging patients in care. These approaches emphasize interactions that promote autonomy, empowerment and respect for the person receiving services. Research has demonstrated that the PCC approach promotes development of a trusting therapeutic relationship, increases treatment adherence and improves health outcomes by focusing on an individual's unique goals and life circumstances.^{1,2} Training a workforce to understand and possess the skills to engage patients in a person-centered framework will contribute significantly to improved treatment adherence.

History and/or current experience of adverse events and conditions are among the most significant factors that can contribute to an individual's difficulties engaging in care and using medication safely and effectively. The psychological trauma associated with highly stressful life events and conditions is prevalent among patients receiving behavioral health services. Research has clearly demonstrated that trauma often affects people across their lifespan leading to mental and physical health issues, substance use and other conditions. Consequently, organizations committed to improving patient engagement, medication adherence and overall treatment effectiveness should ensure that the workforce has received training focused on understanding the prevalence and impact of trauma. It is especially important to understand how it relates to treatment engagement and adherence and how to promote trauma-informed principles. This includes creating safe and comfortable treatment environments, building trusting and respectful therapeutic relationships, reliance on peer support services, employing a collaborative approach to care, empowering clinicians through the use of shared decision-making (SDM) and motivational interviewing (MI) approaches and cultural sensitivity. SAMHSA's [Concept of Trauma and Guidance for a Trauma-Informed Approach](#) is a good resource.

1. Lisa B. Dixon, 2016

2. Janice H. Robinson MSN, 2008

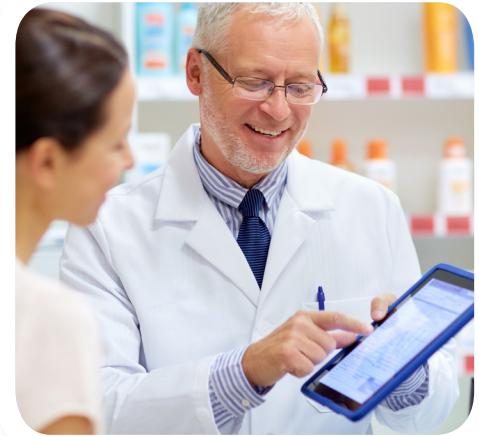
SDM and MI are complementary approaches grounded in a set of values and strategies to strengthen the therapeutic relationship and can be used to educate and activate patients to make informed decisions about medication. When adopted by an organization and implemented by practitioners throughout the clinical process, these approaches encourage a strong working partnership between patient and provider to improve the long-term safe and effective use of medication.

To improve medication adherence, there must be discussion about how medication helps a person achieve their personal recovery goals and not about symptoms, except to the extent that they directly block the path to those goals.

B Assessment of Factors Related to Medication Non-Adherence

A comprehensive assessment process determines the factors that contribute to medication non-adherence. There are multiple factors that may contribute to patient non-adherence that fall within the following categories:

- ▶ Socioeconomic
- ▶ Patient-related attitudes, beliefs and values
- ▶ Treatment-related
- ▶ Health care system-related
- ▶ Psychiatric illness-related



Socioeconomic

Socioeconomic factors may negatively impact the patient's ability to access and use medication in a safe and effective manner. For example, patients may experience barriers associated with the cost of medications, insurance coverage, transportation, unstable living situations and poverty.

Patient-related attitudes, beliefs and values

The decision to use medication can be influenced by one's personal beliefs, previous experience with taking medications, perceived benefits and risks, the degree of burden associated with the prescribed regimen, beliefs of family, friends and others and the attitudes of one's culture and/or spiritual community.

Treatment-related

A patient's course of treatment can impact the likelihood of adhering to medication regimens. There are two facets to treatment-related factors — medication complexity and adverse side-effects:

Medication complexity: The number of medications prescribed and the frequency of dosing can adversely affect medication adherence. Often, medication complexity is a result of misdiagnosing the patient's lack of an adequate response. If the practitioner assumes the patient is taking the medication as prescribed, a different medication may

be added or the dose of the current medication increased. This increases the likelihood of side-effects and poor outcomes.

The mechanics of taking medication is often a barrier that practitioners need to explore and consider. It is important to learn how and where patients store medications and how accessible and visible the medication is to the patient. Visual reminders like putting medications in the path of something else the patient would be doing that time of day, like brushing teeth, can help medication adherence. Bubble packs or pillboxes can also help organization when taking multiple pills. The presence of social supports, such as a family member, is another key factor that practitioners should explore with the patient. This is especially true for patients experiencing serious cognitive and physical challenges. The presence of reliable supports is strongly associated with improved medication adherence.

Adverse side-effects: Side-effects can be a major contributor to non-adherence. It's important to identify and address the most concerning side-effects, including metabolic conditions (weight gain), gastro-intestinal problems, sexual dysfunction, flattening of affect and sleep disturbances. The practitioner's knowledge of practical strategies to minimize the risk and discomfort of side-effects goes a long way in addressing the concerns of patients for whom side-effects is a major contributor to medication non-adherence.

Health care system-related

Policies, procedures and practices of the health care system can strongly influence medication adherence. These systems can support the safe and effective use of medication by promoting easy and timely access to services, effective discharge coordination and planning across all levels of care, use of decision-support tools and effective and efficient communication strategies through electronic health records (EHR) and information sharing networks.

Psychiatric Illness-related

The patient's psychiatric condition can pose numerous challenges to the safe and effective use of medications. Some conditions are associated with impaired memory, concentration and/or judgement, limited insight, difficulty with problem-solving and organized decision-making, lack of motivation, low energy, hypersensitivity to stress and substance use conditions. Identifying and addressing these can lead to improved adherence with medication regimen.

A comprehensive medication adherence assessment should cover each of the following factors/barriers:

TABLE 1. COMPREHENSIVE MEDICATION ADHERENCE ASSESSMENT FACTORS/BARRIERS

Factors/Barriers	Practitioner Strategies	Organizational Supports	Tools/Resources
SOCIO-ECONOMIC			
Medication Costs	Education, Referral to Case Manager and other Organizational Supports	Patient Assistance Programs, Case Management, Partner with Payers, E-prescribing, Sample Meds and Integrating Medication Management Services and Pharmacists into Care Delivery Systems	Opportunities to Enhance Community-based Medication Management Strategies for People with Complex Health and Social Needs , by Genoa Pharmacy Services

Factors/Barriers	Practitioner Strategies	Organizational Supports	Tools/Resources
Insurance Drug Coverage	Education, Referral to Case Manager	Work with Payers, Case Management	See Resource Above
Lack of Transportation	Referral to Case Manager, Peer Support, Family Engagement	Case Management, Peer Services, Van, In-home Services, Family Services	Use of Van, Medicaid Transportation, NAMI Partnership
Presence of Daily Stressors in Environment (e.g., poverty, violence, lack of resources)	Trauma-informed Care (TIC), Referral to Case Manager, Peer Support, Therapy	Case Management, Peer Services, Best Practice Treatment Options, Wellness Services, Staff Training on Cognitive Behavior Therapy (CBT), TIC, Wellness Services	Mindfulness, Meditation, Yoga, SAMHSA's TIP 57 and SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach , CBT, Whole Health Action Management (WHAM) Training
Homelessness, Living Instability	Prescribe Long-acting Medications (LAMs), Referral to Case Manager/ Intensive Case Manager, Peer Support, Family Engagement, TIC	Housing Assistance, Case/ Intensive Case Management, Formulary includes LAMs, LAM Infrastructure, Peer Services, Family Services, Staff Training in TIC	Guide to Long-acting Medications , NAMI Partnership, SAMHSA Homelessness Programs and Resources , SAMHSA Trauma Resources

PATIENT-RELATED

Attitudes About Medication Not Helping	Psychoeducation, Family Engagement, Peer Support, Therapy	Staff Training in CBT, Motivational Interviewing (MI) and Shared Decision-making (SDM), Family Services, Peer Services	CBT, MI, SDM, NAMI Partnership, Patient and Family Brochures and Posters
Health Beliefs About their Condition	Psychoeducation, Family Engagement, Peer Support,	Staff Training in CBT, MI and SDM, Family Services, Peer Services, Wellness Services	CBT, MI, SDM , NAMI Partnership, Patient and Family Education Brochures, Posters, Whole Health Action Management (WHAM) Training
Health Literacy	Culturally Sensitive Care, Peer Support, Family Engagement	Staff Training on Cultural Sensitivity, Wellness Services, Peer Services	Cultural Humility, Patient and Family Education Brochures, Posters, Whole Health Action Management (WHAM) Training

Factors/Barriers	Practitioner Strategies	Organizational Supports	Tools/Resources
Previous Experiences with Pharmacological Treatments	Psychoeducation, TIC, Family Engagement, Peer Support	Staff Training in CBT, MI and SDM, Peer Services, Family Services	SAMHSA Trauma Resources, SHARE Approach, MI, SDM, NAMI Partnership, Patient and Family Education Brochures
Lack of Family or Social Support, Living Alone	Family Engagement, Peer Support, Referral to Case Manager	Family Services, Peer Services, Case Management	NAMI Partnership, Patient and Family Education Brochures/Posters
Race, Age, Gender, Culture, Religion	Culturally Sensitive Care	Staff Training in Cultural Sensitivity	Relias, Cultural Humility
ILLNESS-RELATED			
Cognitive Impairment, Forgetfulness, Poor Insight	Family Engagement, Psychoeducation, Prescriber Simplifies Medication Regimen, Reminder Techniques, Prescribe LAMs, Referral to Case Manager	Staff Training in CBT, MI, SDM, Simplifying Medication Regimen, NAMI Partnership, Case Management, Peer Services, Formulary includes LAMs, LAM Infrastructure	Alarms, Pillboxes, Bubble Packs, Activities Checklist, Organization of Personal Belongings, NAMI Partnership, LAM Guide, CBT, MI, SDM
New to Treatment or Young Age at Onset	Family Engagement, Psychoeducation, MI, CBT, SDM, TIC, Prescribe LAMs	Social Connectedness/Wellness Services, Peer Services, Family Services, Staff Training in MI, CBT, SDM, TIC, Formulary includes LAMs, LAM Infrastructure	Patient and Family Brochures/Posters, MI, SDM resources, SAMHSA Trauma Resources, LAM Guide, NAMI Partnership, WHAM
Lack of Motivation, Low Energy	Psychoeducation, Peer Support, Family Engagement	Social Connectedness/Wellness Groups, Peer Services, Family Services, Staff Training in WHAM, MI, SDM	MI, SDM Resources, WHAM, NAMI Partnership
Comorbid Substance Use	Psychoeducation, Prescribe MAT TIC, Referral to External Support Groups, Family Engagement	Staff Training in MAT, TIC, Co-occurring Services, Formulary includes MAT Drugs, On-site Support Groups, Family Services, External Support Group Resources	Trauma-informed/ Substance Use Best Practice-Seeking Safety, SAMHSA Trauma Resources, MAT Resources, AA/NA Partnership, NAMI Partnership

Factors/Barriers	Practitioner Strategies	Organizational Supports	Tools/Resources
Lack of Improvement in Positive Symptoms	Prescribe LAM or Clozapine	Formulary Updates, Train RNs, LAM and Clozapine Infrastructure	LAM Guide, Positive and Negative Syndrome Scale
Intolerable Side-effects	Assess for Medication Adherence, Prescribe LAMs, Clozapine, Adjust Medication Dosage, Change Medication	Update Formulary, Train RNs, Prescribers and Staff on Assessing for Side-effects and Medication Reconciliation, LAM	LAM Guide, Management of Common Adverse Effects of Antipsychotic Medications , Medication Reconciliation, Assessing for Side-effects (such as My Medicines and Me Questionnaire)
Stigma	Psychoeducation, Family Engagement, Peer Support	Peer Services, Family Services	NAMI Partnership, Patient and Family Education Brochures and Posters
Trauma History	MI, SDM, TIC	Staff Training in TIC, MI and SDM	SHARE Approach (SDM), SAMHSA Trauma Resources, MI

HEALTH CARE SYSTEM

Lack of Discharge Planning, Follow-up or Continuity of Care	Sharing Medication Updates, Discharge/ Transition Info through Electronic Health Record (EHR), Family Engagement, Referral to Case Manager	Supporting Policies and Procedures, Improved Communication Systems via EHR, Medication Reconciliation, Family Services, Case Management	EHR, Medication Reconciliation Resource, NAMI Partnership
Lack of Access to Providers/Care	Increased Provider Time	Same Day Access, Telehealth, Walk-in Services	MTM Services
Lack of Tools/Systems Promoting Medication Adherence	Routine Assessment of Medication Adherence, Family Engagement, Peer Support	Family Services, Peer Services	Text Message, Medication and Appointment Reminders, Calendars, Pillboxes, Bubble Packs, NAMI Partnership, Patient and Family Education Brochures and Posters, Assessment Tools

Factors/Barriers	Practitioner Strategies	Organizational Supports	Tools/Resources
Lack of Access to Pharmacy Services	Partner/Communicate with Local and On-Site Pharmacies	Co-locate Pharmacy Services, Pharmacy Cooperative Agreements, Home/Organization Medication Delivery, E-prescribing	Genoa Pharmacy Services

Treatment-related

Complexity of Drug Regimen	Simplify Medication Regimen, Reduce Dose	Staff Training in Simplifying Medication Regimen, Pharmacy Partnerships	Medication Simplification Protocol resource
Adverse Side-effects	Assess for Non-adherence, Change Medication or Lower Medication Dose	Staff Training in Assessing for Non-adherence	Assessment Tools, Management of Common Adverse Effects of Antipsychotic Medications
Provider/Patient Relationship, Communication, Involvement	Patient-centered Care (PCC), MI, SDM, Recovery-oriented Care, TIC	Staff Training in MI, SDM, PCC, Recovery-oriented Care and TIC	SHARE Approach, MI, SDM SAMHSA Trauma Resources

C Assessing Populations at Higher Risk for Non-Adherence

Certain populations of patients are at higher risk for non-adherence, including those experiencing intolerable side-effects, unstable living conditions, cognitive impairments, poor insight into the need for treatment, limited family/social supports, a history of erratic or transient involvement in treatment services, substance use and complicated health/mental health conditions. Assess these for non-adherence regularly and make efforts to match interventions, tools and supports to the identified challenges.

Additionally, consider the principle of universal precautions for each patient due to dynamic factors involving changes in medication, life circumstances, perceived benefits and other changes that may influence the safe and effective use of medication. Consequently, conversations related to medication adherence should be a routine part of sound clinical treatment. [Table 1](#) in the previous section outlines strategies and suggestions for these conversations.

D Measuring and Monitoring Individual-Level Medication Adherence

Researchers have used a number of direct and indirect methods to measure and monitor medication adherence — including direct observation, patient reports and diaries, manual and automated (Medication Event Monitoring System, or MEMS, caps) pill counts, measurement of drug (or metabolites) blood levels, prescription refills, assessment of the patient’s clinical response and technological devices (biosensors, smartphone and virtual monitors) — that all have benefits and limitations such as patient inconvenience, accuracy of reporting and the cost of administration and measurement.

The most commonly used measure as the standard reference for rates of medication adherence is the medication possession ratio (MPR). MPR is the number of days' supply of medication a patient has received divided by the number of days' supply needed if the patient uses the medication continuously. Patients are "adherent" to prescribed medication when they achieve an MPR of greater than 80 percent, meaning the patient possesses the amount of medication that is sufficient for taking the medication 80 percent of the time within the period measured. Any ratio below that is non-adherent, although in some studies a ratio of 60 to 80 percent may be considered "partial adherence." An MPR of less than 60 percent is "non-adherence."³

Providers should also monitor adherence through a combination of laboratory testing, information sharing with pharmacists and data collection from payers like managed care organizations (MCOs). Laboratory testing should preferably involve urine testing either through direct collection of specimens or with the use of a conveniently located lab with seamless insurance coverage. Information can be shared between the pharmacist and the provider through pharmacy dispensing software systems that communicate with the provider's electronic medical record. Similarly, MCOs can provide data on pharmacy claims to organizations through aggregate reports.

Share information on an individual patient's prescribed medications among all prescribers to reduce duplication and ensure the most appropriate medication regimen.⁴

E Interventions to Support Medication Adherence

The following describes several interventions designed to address barriers to the safe and effective use of medication. Use of specific interventions should be the result of an informed and shared decision-making process. Practitioners increase the chances for success by approaching patients and family members as critical partners of the care team. Creating a safe and trusting relationship based on communication aligned with the principles of motivational interviewing and shared decision-making is key to ensuring the safe and effective use of medication in the long term.

1. Assess Current Medication Utilization Process and Adherence

Use a standardized interview to assess in detail how each patient obtains, stores and self-administers their medication. This information will reveal likely challenges in maintaining adherence that are opportunities for improvement. The following questions are a good starting place and page 59 of Medication Matters: Causes and Solutions to Medication Non-Adherence provides additional support for talking with clients about their medications.

Getting Medication

- ▶ Which pharmacies do you use?
- ▶ Why those? What do you like about these pharmacies?
- ▶ How do you get to the pharmacy?
- ▶ What insurance do you use to pay for medication?

3. National Council for Mental Wellbeing, 2018

4. National Council for Mental Wellbeing, 2018

- ▶ Are you able to afford the co-pays?
- ▶ Do you get all your medications filled once a month on the same day? (Medication synchronization)
- ▶ Are there any other obstacles to you getting your medication on time?

Handling Medication

- ▶ How many different medications do you take?
- ▶ How many times a day do you take medications?
- ▶ Which time is hardest to remember?
- ▶ Where do you keep your medications?
- ▶ How do you keep them – bottles, pillbox, blister pack?
- ▶ How do you remember to take each dose?
- ▶ Is there anyone who helps you remember?

Current Adherence

- ▶ How many times did you miss taking your medication in the last week?
- ▶ Why did you miss it – did you forget to take it, or did you decide not to take it? Why did you decide not to take it?
- ▶ If you forgot, is there a strategy you think you can use to remember to take your medications as prescribed? (This slide deck on [Practitioner Interventions](#) is a helpful resource.)

2. Selecting and Ordering Medications

Patient needs, including their current symptoms and individual side-effect sensitivities, should inform medication decisions.⁵ Prescribers should consider that patients can be sensitive to medication effects which can then lead to non-adherence.

When working with individuals experiencing psychotic disorders, give special consideration to Clozapine because of its superior efficacy against psychotic symptoms, suicide, substance abuse and violence — which all contribute to enhancing treatment adherence. Prescribers should also consider long-acting medications (LAMs) as a first line approach as they offer both clinical and patient-related benefits. (See [Expanding the Use of LAMs](#) section).

When ordering medications, organizations should use e-prescribing which improves adherence, is preferred by patients, reduces errors and is more efficient because the prescription is guaranteed to arrive at the pharmacy and available for pickup immediately.⁶

5. National Council for Mental Wellbeing, 2018

6. National Council for Mental Wellbeing, 2018

3. Involving the Patient and Family

The role of the family is critical, particularly when it comes to providing emotional and physical support around medication adherence. A family member or more broadly, any person identified by the patient as helpful, kind, trustworthy and respectful may be able to provide gentle reminders regarding taking daily medications, offer emotional support and can accompany and/or transport a patient to the pharmacy and/or appointments. It is very important that providers and organizations have systems, policies and procedures in place to promote family partnerships. To ensure effective partnerships, patients and families or other support persons require inclusion in care and ongoing, clear communication, support and education. Some organizations offer family support groups, family education and some have active partnerships with NAMI. Families that know what medications their loved one is taking and why are better prepared to assist them. This slide deck on [shared decision-making](#) from the Center for Practice Innovations at Columbia University is a helpful resource.

4. Utilizing Peer Specialists

As highlighted above, family and other relationship supports are crucial to a patient's success in adhering to medication. However, the utilization of peer specialists is another valuable resource. Peer specialists bring their own lived experience related to adhering to medication and the ways in which it supports recovery. Whether your organization chooses to hire peer specialists directly or form a partnership with a peer contracting agency, incorporating the role of peers into treatment planning can have a beneficial impact on a patient's experience of care. Peer specialists support patients by modeling strategies for success – for example, peers can demonstrate how to have an effective conversation about medication adherence with prescribers or can share different options for creating successful medication regimes. Or if a peer specialist is on a long-acting injectable (LAI) medication regime, he or she can share the advantages of considering an LAI and help talk through any challenges or barriers where the patient may have concerns. The peer's shared history with some situations the patient may be currently experiencing can be a source of enormous comfort and help create a deeper feeling of understanding and solidarity within a care team.

5. Simplifying Medication Regimens

Review each patient's medication regimen annually, at a minimum, for opportunities to simplify the regimen (e.g., reduce the number of medications and the number of times a day the patient must take medication).

This may be most convenient during a specific medication reconciliation visit. During the annual review, providers request that the patient bring all their medications to the clinic, so the provider can conduct a reconciliation and review of adherence through pill counts. The provider doing the medication reconciliation and the patient together examine each medication that the patient brought with the following goals:

- ▶ Discard any medications that are not currently taken.
- ▶ Ensure the patient knows the target symptoms and purpose of each medication.
- ▶ Find out if the patient believes the medication is currently effective for the identified target symptoms and purpose.
- ▶ Identify medications that are redundant or ineffective and flag them for discussion with the prescriber to be considered discontinuing.
- ▶ Identify any medications the patient could take once or twice a day instead of more often.

This review will also help reduce polypharmacy, identify ways to simplify regimens, reduce adverse drug events and allow patients to dispose of medications they no longer take.

It is a best practice to transfer the current medication list when making a referral to another provider, to another organization and at the time of any transition of care for that patient. The Institute for Healthcare Improvement has [several medication reconciliation resources](#) compiled to prevent adverse drug effects.

6. Managing Common Side-Effects

Effective management of side-effects plays an important role in medication adherence. Accomplish this with a sensitive and comprehensive assessment of side-effects followed by a plan to minimize these effects. You can address side-effects with a combination of strategies, including modifications to the type, dosage and timing of medication, lifestyle changes and ongoing problem-solving.

The following chart lists a number of coping strategies for common side-effects.

TABLE 2. COPING WITH SIDE-EFFECTS OF PSYCHIATRIC MEDICATIONS

Side-effect	Strategy
Blurry vision	For mildly blurry vision, talk to your doctor about getting reading glasses. Many people buy these inexpensively without a prescription at a drug store.
Constipation	Drink six to eight glasses of water daily. Eat high-fiber foods such as bran cereals, whole grain breads, fruits and vegetables. Do light exercise daily.
Dizziness	Avoid getting up quickly from a sitting or lying position.

Side-effect	Strategy
Drowsiness	Schedule a brief nap during the day. Get some mild, outdoor exercise such as walking. Ask your doctor about taking medication in the evening.
Dry Mouth	Chew sugarless gum, suck on sugarless hard candy or take frequent sips of water.
Extreme Restlessness	Find a vigorous activity that you enjoy such as gardening, jogging, skating, aerobics, sports, swimming or bicycling.
Increased Appetite and Weight Gain	Emphasize healthy foods in your diet such as fruits, vegetables and grains. Cut down on sodas, desserts and fast foods. Exercise regularly. Go on a diet with a friend or join a weight reduction program.
Muscle stiffness	Try doing regular muscle-stretching exercises, yoga or isometrics exercises.
Sensitivity to the sun	Stay in the shade, use sunscreen and wear protective clothing. Avoid going out at the sunniest time of day.
Shakiness or tremors	Avoid filling cups and glasses to the brim.

Source: [SAMHSA's Illness Management and Recovery Tool](#)

7. Maximizing the Use of Medication Organizing Tools

Organizations and practitioners should be familiar with and utilize expanded opportunities to monitor and address medication adherence through technological patient tools such as compatible devices, pill implants, reminder alarms and mobile phone applications.

Behavioral approaches such as placing pills in the line of sight with another daily chore like a toothbrush, blister packs and weekly pillboxes are additional interventions that can remove some of the burden for patients, especially those who have more than one prescription and whose regimen requires dosing more than once per day — a common cause of non-adherence.

Bubble packs — also known as compliance packs or blister packs, can help patients keep track of their medicines. Bubble packs contain designated sealed compartments or spaces for medicines that are taken at particular times of the day. Each order is custom-filled and individually labeled for the patient.

► Organized by date and time

Clearly mark each pack with the date, day of the week and simple icons alerting the patient to the next dose — morning, midday, evening or bedtime.

► Timesaving

A 30-day supply of multi-dose packs means fewer trips to the pharmacy and less time organizing multiple bottles and pillboxes.

▶ Convenient

The bubble pack holds all medications in one place. Packs are convenient and portable.

Timing and positioning of medications can be effective organizational tools. Working with the patient to identify a convenient, reliably occurring moment in their morning and evening routines and positioning the medication in a hard to miss location can be very helpful strategies. Setting these goals and periodically checking-in with the patient about the effectiveness of these strategies will improve medication adherence.

8. Engaging Pharmacy Support

Pharmacists are directly involved in dispensing medicines and, therefore, are in a good position to collaborate with patients, support their treatment and assess and promote the importance of medication adherence.⁹

Medication Synchronization – Getting medications from multiple pharmacies that are refilled at different times of the month or quarter is a set-up for reduced adherence. It is beneficial to use a single pharmacy for all medications, preferably one with a low turnover of pharmacists and pharmacy technicians. Working with a pharmacy that will remind patients do not pick up refills and where pharmacists are willing to adjust the refill schedules so all the person's medications are refilled at the same time can greatly assist patients with adherence.

Some pharmacies offer medication therapy management (MTM) services, which is medical care provided by pharmacists who aim to optimize drug therapy and improve therapeutic outcomes for patients. MTM services include formulating a medication treatment plan, monitoring efficacy and safety of medication therapy, enhancing medication adherence through patient empowerment and education and documenting and communicating MTM services to prescribers to promote comprehensive patient care.

There are multiple ways organizations can enhance pharmacy services and improve medication adherence, including contracting with a pharmacy to provide on-site services or by partnering with several local pharmacies.

Benefits of working closely with pharmacies include:

Easy access to unit-of-use packaging (blister packs, compliance packs, course-of-therapy packs).

- ▶ Pharmacist education of patients, staff and families related to medication benefits, potential side-effects and strategies to address side-effects.
- ▶ Pharmacy tools and strategies to improve the safe and effective use of medications like those in [AHRQ's Health Literacy Tools for Use in Pharmacies](#), including strategies and tools on assessment, communication, pill cards, refill reminders, prescription medicine instructions and post-discharge follow-up phone calls.
- ▶ Timely sharing of data related to patients' failure to fill prescriptions and pick up medications.

9. Luis Salvador-Carulla, 2014

9. Expanding the Use of Long-Acting Medications (LAMS)

LAMs are widely available and have evidence-based clinical benefits for individuals with schizophrenia, schizoaffective or bipolar disorder, including a significant delay and reduction in relapse, particularly in patients with early-phase or first-episode schizophrenia. There is also evidence of a lower risk of discontinuation of medication treatment and frequency of hospitalizations compared with oral antipsychotics. LAMs are an excellent option for any patient, especially those who are non-adherent to oral medications or have had multiple relapses. They deliver a lower total dose of medication but are more effective at reducing symptoms and have fewer side-effects compared to oral medication. Peer specialists using LAMs are especially effective at promoting and supporting the use of LAMs with other patients.

Recent evidence and guidance support offering LAMs to all eligible patients as a treatment option and recommend that organizations play an active role in establishing systems to support staff, patients and families with information and education about the safe and effective use of LAMs and the infrastructure, policies and procedures needed to deliver this method of treatment. The National Council for Mental Wellbeing created a [Guide to Long-acting Medications](#) that provides more detailed information.

10. Educating Patients and Family Members

Patient and family education and assessment of non-adherence are inter-related strategies that typically begin with a conversation about past experiences with taking medications to identify fears, worries, challenges as well as perceived benefits. Addressing medication-related concerns and educating both the patient and family members on the benefits and risks associated with taking medications as prescribed is key to engaging them in a collaborative process that is activating and likely to increase medication adherence.

It is important to provide family members with a full range of treatment options to discuss and decide on collaboratively, review medication regimens, discuss potential side-effects and who to contact if there is a concern. It is important to provide this information both orally and in a written format.

F Treatment Planning

Recovery, as defined by SAMHSA (2012), is as a process of change through which individuals improve their health and wellness, live a self-directed life and strive to reach their full potential. Treatment or recovery planning is a critical step in the recovery process. SAMHSA's Five Stages of the Recovery Process ([Table 3](#)) provides a helpful foundation to assist patients develop their treatment plan. Considering the following is important as the practitioner partners with the individual to develop a mutually agreed upon plan:

- 1) Practitioner's beliefs, exploration, education and empowerment are important aspects of the planning process and include instilling hope that recovery is possible; exploration of the individual's strengths, skills, needs and desires; education about the role of medications in assisting the individual reach their personal goals (including furthering their education, maintaining a job, living independently, etc.); and empowering the person to use their identified strengths, skills and supports to take small steps toward their goals.

- 2) Assessing the symptoms associated with the illness, particularly those the patient describes as interfering with their ability to reach their personal recovery goals; educating the patient about the available treatment options, including medications, their potential side-effects and other best practice approaches. Assessing commitment to adherence with the treatments of choice should also be a routine part of the process.

Routine assessment of adherence to the individual's medication regimen may reveal specific barriers. Following a discussion of barriers to adherence, the prescriber and patient should come to a shared decision about the specific interventions to address these barriers (see barriers and intervention chart). The treatment plan includes the agreed-upon interventions, who will be involved in supporting the patient's safe and effective use of medications, where and when to implement the plan and how to measure and monitor adherence to the medication. The treatment plan should consider the patient's living situation, availability of supports and level of risk. In patients with psychotic disorders, where risk is determined to be high (potential for violence, suicide, hospitalization), consider Clozaril or a LAM (see [Section 8](#) for more information on these topics). Critically, successful treatment plans will focus on the patient's personal goals as the primary motivation for their medication adherence. A patient whose self-identified goal is, for example, finding employment, returning to school or independently managing activities of daily living may be more likely to adhere to their medication regimen in pursuit of what motivates them.

Based on patient needs/desires, individuals may wish to include one or more family members, residential staff in supervised settings, pharmacist, peer recovery coach, case manager or other support people. A determination will be made as to when and where progress will be monitored. The timeframe and setting will be based on the level of risk posed by non-adherence.

TABLE 3. FIVE STAGES IN THE RECOVERY PROCESS

Impact of Illness	The person is overwhelmed by the disabling power of the illness. The role of services is to decrease the emotional distress by reducing the symptoms.
Life is Limited	The person has given into the disabling power of the illness. The role of services is to instill hope, a sense of possibility, and to rebuild a positive self-image.
Change is Possible	The person is questioning the disabling power of the illness. The role of services is to empower the person to participate in his/her recovery by beginning to take small steps.
Commitment to Change	The person is challenging the disabling power of the illness. The role of services is to help the person identify his/her strengths and needs in terms of skills, resources and supports.
Action for Change	The person is moving beyond the disabling power of the illness. The role of services is to help the person use his/her strengths and to get the necessary skills, resources and supports.

IMPROVING MEDICATION ADHERENCE — ORGANIZATION-LEVEL STRATEGIES

Organizational policies, practices and procedures play a critical role in promoting the safe and effective use of medication. To help providers identify their organizational strengths and areas for improvement in promoting medication adherence, the National Council developed the [Medication Adherence Organizational Self-Assessment \(MA-OSA\)](#).

This tool assists organizations in several ways:

- 1) Supports the improvement team in developing a shared understanding of the key principles and practices of a comprehensive medication adherence improvement effort.
- 2) Enables the organization to assess their current alignment with these key principles and practices.
- 3) Provides the organization with information to make informed decisions related to the selection of high priority improvement strategies that are practical and meaningful.
- 4) Supports the organization to establish a baseline and monitor progress on implementing medication adherence promoting practices.
- 5) For information, guidance and resources on creating and implementing an improvement process, please go to [National Council's Quality Improvement Toolkit](#).

The following section describes a variety of organizational best practices designed to increase the safe and effective use of medication and reduce the adverse effects of non-adherence.

A Harness the Power of Team-Based Care

All behavioral health organization staff — not just psychiatric providers — should receive training in risk factors for medication non-adherence, the impact of medication non-adherence and methods of improving medication adherence. Ongoing staff training (all-staff meetings, in-service training and lunch-and-learns) in risk assessment, TIC, MI and positive behavioral communication should support these efforts.

In addition to professional medical staff, peers are increasingly playing a role in engaging patients through their unique perspective and lived experience of treatment including issues related to medication decisions and adherence. Their role may include welcoming, orienting and providing information to patients about the treatment setting, expectations, rights and addressing concerns about treatment including concerns related to medication, along with other responsibilities.

Peer support specialists or peer recovery coaches, particularly within mental health, substance use and veteran's services, are helpful in engaging patients in care through role modeling, how they fit taking medication into their day, sharing their stories about their journey from poor to good adherence and providing information, education and support in assessing the tradeoffs between medication benefits and burdens. Organizations should hire peer recovery coaches and ensure they receive ongoing support, supervision and education to be effective in their role. Alternatively, organizations can partner with a peer support organization to provide this support to patients. It is, however, important to note that the peer support workers should never feel personally pressured to ensure medication adherence due to the main focus of their role as supportive partners in treatment.

B Quality Improvement and Data-Driven Care

One of the most important and challenging tasks for an organization focused on determining the effectiveness of their improvement efforts involves collecting, analyzing and monitoring data related to a number of key performance indicators associated with increased medication adherence and related health outcomes.

Process-related performance indicators include the degree to which the elements of an improvement plan are being implemented as expected, for example, the percentage of clients who have been assessed for medication adherence, the percentage assessed to be significantly non-adherent, the percentage of clients who are non-adherent who have a treatment plan in place to improve adherence and the percentage of staff who have been trained in best practices to promote adherence.

Important outcome-related performance indicators include direct evidence of medication adherence including blood chemistry and urinalysis. Meaningful indirect indicators of adherence include client report, prescription refills and pill counts, clinical symptom measures, reduction in emergency/hospitalization usage, measures of functioning in work, school, social relationships and daily living stability.

At the organizational level, collecting and analyzing population-based data can determine the degree to which organizational practices designed to improve adherence are working. This often involves identifying and monitoring high-risk cohorts, including the population of clients who are homeless, struggle with substance use, experience significant trauma or exhibit severe cognitive difficulties and poor insight and monitoring the impact of medication adherence strategies over time. The organization should have a system in place to ensure that executive leadership reviews medication adherence data on a regular basis and explores strategies to improve adherence through changes in organizational policies and practices. The National Council's [Quality Improvement Toolkit](#) is a valuable resource.

C Educate and Train the Workforce

Educating the workforce begins with ensuring that the medical and behavioral health workforce have knowledge about the prevalence and adverse effects of medication non-adherence and the factors that contribute to medication non-adherence and are skilled in applying the basic principles and practices of motivational interviewing and shared decision-making. To be successful, organizations need to implement systems, policies and procedures that support ongoing education efforts that begin with training new hires and are reflected in supervision and performance reviews. The Medication Matters whitepaper contains a helpful section entitled, "Talking with Clients about their Medication."

Educating all staff on the impact and prevalence of trauma and adopting core competencies related to using trauma-informed approaches, improved communication and cultural and ethnic competency can lead to improvements in medication adherence. Additionally, utilizing the principles and approaches of recovery-oriented and patient-centered care as the foundation for their work with patients and expanding membership on clinical teams to include peers with lived experience and recovery coaches is necessary to improve adherence.

“Building competencies for a team approach to complex, high-risk patients, including patients with low rates of adherence will expand the range of interventions available from the provider. When teams include peers, people in recovery from substance use disorders, nurses, prescribers and pharmacists, there is a much greater chance of matching the appropriate intervention to the patient’s individual needs, thereby increasing medication adherence. To build competencies among disciplines: pharmacists and others must understand the recovery orientation of peer counselors, prescribers and other staff; and they must be skilled in working with pharmacists and other team members.”¹⁰

In addition, use of LAMs and Clozapine is critical to an organization’s goal of increasing rates of medication adherence. Educate prescribers and other staff about the benefits of these agents, feel comfortable talking about them with patients and families and the organization needs to develop systems and supports to promote their use.

Clinicians with good communication skills who use shared decision-making principles can more than double the odds of patient adherence by including the patient in treatment decisions that increase self-determination.¹¹

Organizations should ensure that practitioners and other staff have the skills needed to effectively explore the patient’s interest in engaging a member of their social network to support them in the safe and effective use of medication through:

- ▶ Discussion of what matters most to them and the potential role that one or more members of the patient’s social network may play in supporting their treatment goals, including the safe and effective use of medication.
- ▶ Reaching out to and involving a supportive member of the person’s social network to assist in promoting medication adherence.
- ▶ Reviewing the support patient’s cultural and other concerns and attitudes about the use of medication for behavioral health conditions.
- ▶ Providing the support person with health literacy information (verbally, brochures and posters) about the mental health condition and importance and purpose of using medication, side-effects to watch for and how they can help in a way that is acceptable to the patient.

10. National Council for Mental Wellbeing, 2018

11. Thompson, 2012

EXPLORING THE ROLE OF SOCIAL SUPPORTS — OPTIONAL PATIENT QUESTIONS AND CONSIDERATIONS:

- 1) Do you have anyone who helps you get to the pharmacy to pick up your meds or pay your medication co-pays? Do you know anyone that could help you with this?
- 2) Do you have anyone that helps you remember to take your medications or set them up in a pillbox? Do you know anyone that could help you with this?
- 3) Are there people you live with or see several times a week who give you helpful feedback when your symptoms change for the better or worse? Sometimes other people see changes in us sooner than we do. Do you know anyone who could provide that kind of feedback for you? Do you need help figuring out how to talk to them about your symptoms and side effects and how to ask them for help?
- 4) Are your friends or family members aware of the symptoms and early warning signs of your illness?
- 5) Do you have friends or family members you talk with when deciding if you are going to continue taking medication? Or who you ask for advice about side-effects of your medication?
- 6) Always anticipate that patients will stop their prescribed medication and discuss that with them ahead of time.
 - a. Everybody decides stop taking their medications at some point, usually when they are feeling better.
 - b. I assume that you will have this experience as well, so let's plan for it by agreeing to discuss how best to taper off the medications if you want to stop them at some point.
 - c. One important recommendation is to stop only one medication at a time, not all of them at once.
 - d. I would also recommend tapering medications slowly to avoid withdrawal effects.
- 7) But let's agree that you will come in and discuss your desire to stop one of your medication so we can ensure that this occurs in a safe and effective way.
 - a. Would you like to write down your three early warning symptoms of relapse on three index cards? One can remain with you, one can be for me, your provider, and the other can be given to a reliable friend or family member so they can share honest feedback with you when needed.

The education and training curricula of an organization for all medical and behavioral health staff should include the following competencies, along with supervision:

- 1. Assessing for Non-adherence** requires that organizations have systems in place to achieve this on a consistent basis, that a standardized tool is identified and embedded in the EHR and that all staff are trained on [why medication adherence is important](#), effective communication and engagement skills, utilizing the assessment tools and acquiring the knowledge and skills to match the appropriate [practitioner interventions](#) with the identified barrier to adherence.
- 2. Motivational interviewing** is an evidence-based practice approach to engaging, communicating effectively and promoting collaborative relationships with patients. Train and supervise all medical and behavioral health staff in the use of MI strategies. Review of a sample slide deck introducing the value of [motivational interviewing](#) training may be helpful.
- 3. Shared decision-making** is another evidence-based practice that improves engagement through a strength-based, empowering and recovery-oriented approach. All medical and behavioral health staff should be trained and supervised in utilizing [SDM](#).
- 4. Facilitating family involvement** in the treatment planning process can improve adherence. When members of the patient's family or social network are included in care, receive education about their relative's mental health condition, the importance of medication adherence, the risks and benefits of medications and how they can help in a way that is acceptable to the patient, adherence to medication regimens and other recovery goals and health outcomes are improved. All staff should have training to increase their comfort level and skills in engaging and working with both the patient and their family members.
- 5. Involvement of peer recovery coaches, pharmacists and others** in educating and engaging patients around the safe and effective use of medications is critical to the care team, particularly around ensuring optimal communication. Support, supervision and cross training are necessary elements to achieve success. Additionally, to further improve rates of adherence, teams should include staff who reflect the cultural, linguistic and ethnic backgrounds of the patient population served.
- 6. Cognitive behavioral therapy** helps the patient link medication adherence to symptom reduction and personal health. It involves behavioral approaches including conditioning, rewarding, cues, reminders and skill training. It has demonstrated benefits in improving adherence in patients diagnosed with bipolar disorder and in increasing insight in patients with schizophrenia.



D Identify Your Implementation Team

“Organizations can identify one or more internal ‘champions’ – a member in a leadership position who will be charged with carrying through on the interventions needed to improve medication adherence. It is the responsibility of the leadership of these organizations to identify and promote their champions.

Strategies to help organizations support champions in their medication adherence efforts include:

- ▶ Add the topic of non-adherence to the agenda of all meetings to keep the issue, goals and successes front and center for all.
- ▶ Identify champions trained in evidence-based practices of medication adherence, research the topic or provide education and information to all staff and who can build a case for adopting medication adherence as a key strategic goal.
- ▶ Name champions from various departments including fiscal management, program management and legal in order to consider a wide range of recommendations and their possible ramifications.
- ▶ Advocate for the resources, authority and support needed to achieve success: if resources allow, increase and expand staffing to include peers and family champions and outreach to other community partners.¹²

E Improve Health and Mental Health Literacy

Psychoeducation, the practice of providing education and information to individuals and their support network about their mental health condition, is primary among the many interventions available to improve medication adherence. Offer psychoeducation via individual or group counseling sessions on psychiatric diagnoses, medications, potential side-effects and other treatment and support options available. To achieve optimal benefit, organizations should provide information related to taking medications safely and effectively through multiple avenues: verbally, through face-to-face contact and visually through waiting room videos, brochures for patients and families, posters and infographics. These products should be available in the language of the patients. These health literacy efforts should align with best practice approaches to health within the individual community based on cultural background, historic access to care, unique beliefs of the etiology of mental health problems and substance use disorders and strategies to engage these groups based on their cultural practices.¹³

F Reconcile Medications

As soon as possible after every hospital discharge, patients should have a clinic or home visit for the purpose of medication reconciliation. “Medication reconciliation is the process of identifying an accurate list of a person’s current medicines and comparing them with the current list in use, recognizing any discrepancies and documenting any changes, thereby resulting in a complete list of medicines, accurately communicated.¹⁴” Share the results of the reconciliation with

12. National Council for Mental Wellbeing, 2018

13. National Council for Mental Wellbeing, 2018

14. National Institute for Health and Care Excellence (UK), 2015

all dispensing pharmacies and other providers. Medication reconciliation should also occur as soon as possible following release from jail or prison.

Timely exchange of medication information following any transition of care is critical to good patient care. By aligning EMR [or EHR] systems with payers, providers can access timely information on discharges from inpatient and other settings. Connecting with pharmacy services can also be an important source for information and reconciliation practices. Home visits for the purpose of reconciling medications can be made by case managers, peer support specialists, nurses or other staff.”¹⁵

Behavioral health organizations should benchmark the simplification of medication regimen by each individual prescriber. Potential performance measures include the average number of medications per patient, percentage of patients taking medications more often than twice a day, percentage of patients using LAMs, percentage of patients utilizing pillboxes and percentage of patients utilizing bubble pack or blister pack dispensing. Prescribers as a group should review and discuss their differential results on the chosen measures. This overview slide deck on [medication reconciliation](#) may be a helpful resource.

G Support the Use of Clozapine

For many patients, Clozapine is effective in treating psychotic disorders, preventing relapse and reducing suicide, violence and substance abuse. Clozapine’s side-effect profile clearly restricts the range of its use, and providers should



focus on [strategies to address dosing and possible side effect concerns](#). However, Clozapine has distinct advantages. Providers need to develop the requisite knowledge, skill and comfort level for using Clozapine and explaining its advantages and disadvantages to patients and families. Ensuring that organizational systems are in place can play a key role in supporting both staff and patients. For example, co-locating lab services can improve efficiency and effectiveness around data sharing and can reduce the burden on patients having to travel to another location for regular blood work. Also, having systems in place to streamline the approval process from prescription to distribution can be very beneficial. It is important to note that prescribing Clozapine requires more intensive patient monitoring,

may place more demands on the administrative staff and organizations should be prepared for ensuring the proper supports are in place for both the prescriber and the patient. Ongoing education for prescribers is required nationally through the [Clozapine REMS](#) (Risk Evaluation Mitigation Strategy) program since improper administration of the drug can lead to serious and fatal infections; this certification helps to ensure that the benefits of the drug outweigh the risks.

15. National Council for Mental Wellbeing, 2018

16. National Council for Mental Wellbeing, 2018

H Co-Locate Pharmacy and Lab Services

Organizations can make strides in increasing medication adherence by co-locating a pharmacy and a lab or blood draw station at their site. In-house or co-located pharmacies can improve patient convenience and provider/pharmacist communication regarding adherence and simplification of medication regimens. This can result in positive patient and organizational outcomes.

Pharmacists embedded in behavioral health organizations should have access to the EHR. In-house pharmacies can also assist in clinical pharmacy engagement and medication education with treatment teams and patients. Since medication adherence should be periodically monitored by laboratory testing, having a lab or blood draw station on-site can offer convenience as well as increase efficiency and effectiveness, particularly in the case of Clozapine.¹⁷ Reviewing [examples of clinics co-locating their pharmacy and lab services](#) may be helpful as clinics consider this option.

I Create a Safe and Accessible Environment

Health care environments that are physically and emotionally comfortable and safe — and who offer easy accessibility to services — may contribute significantly to patients' willingness to:

- ▶ Engage in shared decision-making.
- ▶ Honestly share their concerns.
- ▶ Learn about medication.
- ▶ Take action to ensure the safe and effective use of medication.
- ▶ Involve others in their social network.

Challenges with adherence may be a sign that a patient does not feel physically or emotionally safe. To promote medication or other treatment adherence, it is necessary to create environments where all patients feel safe. This is particularly critical for patients with a history of trauma or mental health and substance use conditions that include hypersensitivity to stress and hyper-arousal. Environments that are comfortable, calming and easy to navigate with a welcoming, friendly and respectful staff can lead to increased trust and reduced anxiety and hyper-arousal. When patients are in an optimal arousal and safe zone, they are more likely to thoughtfully address medication and other treatment challenges.

Access to services supports adherence to medication. When patients have to wait to see a provider or schedule a delayed appointment, they are more apt to skip doses or decrease their engagement in treatment. By reducing wait times and increasing accessibility to services, patients may feel more connected and supported by their providers. Some strategies organizations have employed to help mitigate these risks include implementing same-day access and just-in-time scheduling.

17. National Council for Mental Wellbeing, 2018

J Explore Technologies

Organizations should explore approaches that leverage technology to enhance the effectiveness of medications, including cloud-based treatment regimens that integrate medications prescribed by different providers and administered by different pharmacies or benefit organizations. Some examples of optimizing the use of technology to assess medication regimens can be through the use of health information exchanges. By receiving real-time alerts and information from other providers, organizations can begin to identify what medications their patients are taking and being prescribed outside of their organization, for example. Outpatient clinics can also receive alerts when a patient has been hospitalized. When a provider has access to this information, it allows the treatment team to determine whether to assess if medication non-adherence may have been a factor.

Apply new technologies with established measures of success in the settings where patients are treated, and commit to an objective evaluation of the intervention in these practice-based settings.¹⁸ Lists are regularly published highlighting [the array of electronic support options available](#), but providers should remain mindful that this is an ever-changing field and carefully analyze the most recent research.

K Advocate for Medication Formulary Changes

With the help of their partner pharmacists and their patients, organizations should monitor payers for changes to preferred drug lists and prior authorization requirements. Patients covered by Medicare Part D plans are particularly likely to experience unexpected changes when new plans are implemented in January of each year. Patients with Medicare Part D pharmacy coverage should review their current plan in partnership with their health care providers for any formulary or prior authorization changes during the annual Part D enrollment period October 15 through December 1. People with both Medicaid and Medicare coverage can change their plan at any time throughout the year so if a formulary change makes a desired medication difficult to obtain, they can use the formulary finder website, [Drug Finder: Search for Your Prescription Drug Across All Medicare Part D or Medicare Advantage Plans](#), to select a plan that provides better coverage. Providers and organizations should advocate on behalf of patients to include medications on payer formularies. It is critical that providers routinely assess for substance use using assessment tools like [SBIRT and the AUDIT-C, among others](#), and that organizations offer an array of treatment options to address these conditions, including medication-assisted treatment (MAT).

18. National Council for Mental Wellbeing, 2018

ADDITIONAL RESOURCES

Practitioner Resources

[American Medical Association Medication Adherence Module](#) – This module defines medication adherence and its importance for patient health, recognizes the importance of developing a routine process for inquiring about medication adherence, identifies top reasons for patients' intentional non-adherence to medications and explains the importance of a personalized approach to medication adherence and patient involvement in treatment plans. It includes eight steps to improve medication adherence and answers common questions about how to involve staff and patients in identifying non-adherence and changing behaviors.

Staying Well and Achieving Goals (SWAG) [Clinical Guidelines](#) and [Client Handouts](#) – This brief educational program provides a structured set of clinical guidelines and client handouts to be delivered over multiple sessions and is designed to help people with schizophrenia learn information, strategies and skills to stay well and out of the hospital.

[SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach](#) – This paper develops a framework intended to improve communication between systems, understand trauma's connection to behavioral health and guide systems to become trauma-informed.

[Trauma-Informed Care in Behavioral Health Services](#) – This protocol includes a guide for the provision of behavioral health services, an implementation guide for behavioral health program administrators, and a review of literature.

[Recovery-Oriented Systems of Care Resource Guide](#) – This resource guide provides an overview of recovery-oriented systems of care and aligns the tenets of health care reform to the benefits, framework and history of recovery-oriented systems of care as well as the steps for planning and implementing it. It also includes links to additional resources that assist the reader in conceptualizing and developing recovery-oriented systems of care. The guide includes research studies, white papers, conference presentations, manuals, practice guides, check lists, regulations and additional documents.

[AHRQ's National Healthcare Quality and Disparities Report Chartbook on Person- and Family-Centered Treatment](#) – This report is part of a group of documents and tools that are applicable to behavioral health settings.

[Why You Need to Take Your Medications as Prescribed or Instructed](#) – A list of eight tips for sticking to a medication routine, published by the Food and Drug Administration.

[Brief Adherence Rating Scale \(BARS\)](#) and [Medication Adherence Rating Scale \(MARS\)](#) – Two commonly-used medication adherence assessment tools. A list of other common assessment scales is also available through the [Centers of Excellence in Relapse Prevention](#).

[PhenX Multi-Dimensional Assessment](#) – A tool used to determine if the patient is suffering from excessive side-effects from a prescribed antipsychotic medication using 22 questions in a rating scale.

[Why Do Psychiatric Patients Stop Antipsychotic Medication? A Systematic Review of Reasons for Non-adherence to Medication in Patients with Serious Mental Illness](#) – This article includes a qualitative analysis of data from 36 articles and identifies 11 categories of reasons for non-adherence.

[How to Increase Medication Adherence: What Works?](#) – This article highlights several different intervention strategies with positive results.

[Strategies to Enhance Patient Adherence: Making it Simple](#) – This article reflects the results of a narrative review of the current literature to help providers become more familiar with proven interventions that can enhance patient adherence. Article groups the interventions into categories using the easy-to-remember mnemonic, “SIMPLE.”

[Center for Health Care Strategies \(CHCS\), Understanding and Addressing Medication Complexity](#) – This fact sheet sheds light on medication complexity and outlines opportunities to address it through innovative community-based strategies,

[CHCS’ Addressing Medication Complexity through Community-Based Strategies](#) – This infographic illustrates the issue of medication complexity and outlines community-based approaches to address it.

[Opportunities to Enhance Community-Based Medication Management Strategies for People with Complex Health and Social Needs](#) – This report published by CHCS compiles information gathered after a literature review and interviews with experts across the country with the purpose of understanding promising community-based medication management strategies for people with complex needs and uncovering opportunities to support these models in community settings.

[Medal’s Quality Tool of Algorithms](#) – This tool is recommended by the Agency for Healthcare Research and Quality and consists of more than 17,000 algorithms and computational instructions, complete with authoritative documentation and references for each algorithm.¹⁹

[The Joint Commission’s National Patient Safety Goals Effective January 2019](#) – The Joint Commission describes safety goals for behavioral health care.

[2017-2018 Florida Best Practice Psychotherapeutic Medication Guidelines for Adults](#) – These guidelines developed by The University of South Florida and the Florida Medicaid Drug Therapy Management Program for Behavioral Health, sponsored by the Florida Agency for Health Care Administration support clinicians who treat adults with behavioral health conditions and be a starting point in addressing their patients’ needs.²⁰

[Boston Medical Center’s Overview of Pill Counting for Prescribers](#) – This overview details the necessary steps before, during and after the pill count.

[SAMHSA’s Shared Decision-Making Resources](#) – This page on SAMHSA’s website compiles resources related to shared decision-making.

[SAMHSA’s Motivational Interviewing Resources](#) – This page on SAMHSA’s website compiles resources related to motivational interviewing.

[Motivational Interviewing Core Skills](#) – This site provides a brief outline of the main skills involved in Motivational Interviewing

19. Agency for Healthcare Research and Quality, n.d.

20. The University of South Florida, Florida Medicaid Drug Therapy Management Program for Behavioral Health sponsored by the Florida Agency for Health Care Administration, 2018)

[The Agency for Healthcare Research and Quality's \(AHRQ\) SHARE Approach](#) – This website details the approach for shared decision-making centered on the patient's goals and supports health care professionals in patient engagement. Additional related resources:

- [Fact Sheet](#) – This fact sheet details the five-step process.
- [Workshop Curriculum](#) – Five modules make up this curriculum that includes content and training tips as well as facilitators training guides and slide decks.
- [Curriculum Tools](#) – These tools include reference guides and posters.

[SAMHSA's Antipsychotic Medications and Recovery Tool](#) – This tool includes decision aids (a computer-based tool to help you consider the role of antipsychotic medications in your recovery plan), videos, brochures and other informational materials, workbooks and additional items.

[The National Alliance for Caregiving in collaboration with the National Alliance on Mental Illness and Mental Health America \(NAMI\) Resource Guide](#) – This guide supports unpaid friends, family, and neighbors who care for someone with a mental health condition and includes 12 fact sheets to assist caregivers with finding help for specific challenges such as finding the right provider, confidentiality and family involvement, health insurance and community services.

[SAMHSA BRSS TACS Family Resources](#) – This individualized technical assistance is available for family-run organizations, those that would like to increase family engagement and voice and parents and families through SAMHSA in partnership with the National Federation of Families for Children's Mental Health, the National Family Dialogue on Substance Use Disorders and others.

[Medication Simplification Protocol](#) – This protocol, developed by the Pennsylvania Centers for Medicare and Medicaid, encourages a standardized and collaborative approach to simplifying complex medication regimens.

[8 Great Reasons to Bubble Pack Prescription Medications](#) – This article describes the benefits of bubble packs.

[The 5 Best Reminders for Your Medications](#) – This article describes five different products available to help patients remember to take their medications.

[5 Digital Tools for Improving Medication Adherence](#) – This article describes how digital tools can improve medication adherence.

[Long-Acting Injectable and Clozapine Prescriber Toolkits](#) – This resource library includes many components of the full toolkits designed to support prescribers to effectively incorporate long-acting injectables and Clozapine into routine practice.

- For those in New York State, these full, interactive toolkits are available with online learning modules guide providers through real-life case studies, scripts for communicating with patients, prescribing guidelines and commonly asked questions. Physicians can earn continuing medical education credits (CMEs) upon completing the toolkit(s). Both the [Long-Acting Injectable](#) and [Clozapine](#) prescriber toolkits are available via the Center for Practice Innovation at Columbia University Psychiatry's website where you can fill out a [registration application](#).

[Video Series on Long-Acting Medications](#) – This series of videos created by The Center for Practice Innovation, led by Lisa Dixon at Columbia University, support clinicians by providing tips on how to talk to patients about long-acting medications. Included are multiple videos of people in recovery which are part of the RAISE Connection Program with funding from the National Institute of Mental Health. [Two additional videos](#) provide information about the value of using motivational interviewing.

[2017-2018 Florida Best Practice Psychotherapeutic Medication Guidelines for Adults](#) – These guidelines published by the University of South Florida and the Florida Medicaid Drug Therapy Management Program for Behavioral Health, sponsored by the Florida Agency for Health Care Administration support clinicians who treat adults with behavioral health conditions and serve as a starting point in addressing their patients' needs. The updated guidelines cover multiple conditions include guidance on the use of long-acting injectable antipsychotics.²¹

[Food and Drug Administration: Ensuring Safe Use of Medicine](#) – These educational resources provide information on the safe use of medicine, including the general use of medicine, driving while using medicine and safe use of medicine for seniors. They are for use by educators, health care professionals, and consumers. Most materials are available in PDF format for immediate downloading or printing.

[Patient and Family Engagement Resources](#) – This Centers for Medicare and Medicaid Services (CMS) resource site, Partnership for Patients, contains information by topic on how families and friends can provide tools and supports during a patient's treatment and/or recovery process.

Organization Resources

[Medication Adherence Organizational Self-Assessment \(OSA\)](#) – This assessment tool guides health care organizations in their decision-making and selection of improvement goals. It assists organizations in identifying mechanisms and methods to support patients in maximizing the benefits of prescribed medication and minimizing adverse health risks associated with non-adherence of medications for behavioral health conditions.

[SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach](#) – This guide provides a working concept of trauma and a trauma-informed approach and develops a shared understanding of these concepts that would be acceptable and appropriate across an array of service systems and stakeholder groups. It includes a description of what it means to create safe physical environments.

[The Agency for Healthcare Research and Quality Workflow Tools](#) – These tools include support for benchmarking, checklists, flowcharts, interviews and usability evaluation. They also provide an [overview of workflow](#).

[The Institute for Healthcare Improvement Workflow Improvement](#) – These resources improve workflow and remove waste and include the use of automation and technology, standardization and using just-in-time prescribing among others.

[Medication Adherence Measures: An Overview](#) – This paper reviews both subjective and objective medication adherence measures, including direct measures, those involving secondary database analysis, electronic medication packaging (EMP) devices, pill counts and clinician assessments and self-reporting.

21. The University of South Florida, Florida Medicaid Drug Therapy Management Program for Behavioral Health sponsored by the Florida Agency for Health Care Administration, 2018

[American College of Clinical Pharmacy – Leadership in Medication Therapy Management](#) – This overview provides details on Medication Therapy Management

[Peers as Facilitators of Medication Adherence Interventions](#) – This article examines medication adherence interventions delivered by peers and what is known about the impact of peer-facilitated interventions.

[Reducing Barriers to Medication Access and Adherence for ACA and Medicaid Participants: A Peer-to-Peer, Community-Based Approach](#) – This article details how peer-to-peer support programs empower patients by improving health literacy and providing education on important patient issues, including increasing access and reducing barriers to life-saving medications and how these programs improve patient outcomes.

[AHRQ’s Creating Patient-Centered Team-Based Primary Care](#) – This white paper details how to apply the key elements involved in patient-centered, team-based care to behavioral health.

[The Agency for Healthcare Research and Quality’s \(AHRQ\) Health Literacy Universal Precautions Toolkit](#) – This toolkit supports patients by simplifying and increasing their understanding of health information.²² The toolkit includes a referral tool, an assessment and quality improvement planning tool, resources for accessing written materials and additional resources. You can [download a copy of the toolkit](#) by visiting the AHRQ website.

[SAMHSA’s Behavioral Health Equity Webpage](#) – This webpage includes information and resources on serving diverse populations.

[The Agency for Healthcare Research and Quality \(AHRQ\)’s Medications at Transitions and Clinical Handoffs \(MATCH\) Toolkit for Medication Reconciliation](#) – This toolkit helps providers evaluate the effectiveness of their existing process, identify any gaps and uses a step-by-step guide to improve the medication reconciliation process.

[PhenX’s Medication Inventory Questionnaire](#) – This toolkit captures the type and dosage of all prescription and over-the-counter medications as well as dietary supplements.

[Talking to Patients about Clozapine](#) – This brief video by Peter Weiden, M.D., provides information on how to first talk to patients about Clozapine.

[Assuring Medication Accuracy at Transitions in Care: Medication Reconciliation](#) – This standard operating protocol (SOP) by the High 5’s Project was published by the World Health Organization and outlines the standard steps of medication reconciliation, guidance for implementation, references and suggestions for quality improvement.

[Medications at Transitions and Clinical Handoffs \(MATCH\) Toolkit for Medication Reconciliation](#) – This toolkit developed in partnership with Northwestern Memorial Hospital in Chicago, Ill., the Agency for Healthcare Research and Quality, Northwestern University Feinberg School of Medicine and The Joint Commission, incorporates the experiences and lessons learned by health care facilities that have implemented the MATCH strategies to improve their medication reconciliation processes.

22. Agency for Healthcare Reserach and Quality, n.d.

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