



## Resources

### Case Study: An Analysis of Medication Adherence at Family & Children's Services

Nikki Harrop, MA, LPC

Family & Children's Services, Tulsa, OK, 2017

**Abstract:** Patient adherence to a medication regimen is central to positive recovery outcomes. Poor medication adherence contributes to treatment failures, increased hospitalizations, and puts patients at increased risk for homelessness, incarceration, and violence (Lee, 2013). Medication adherence is a multidimensional issue that impacts the recovery process for people with severe mental illness. Through the development of an organizational culture that is focused on medication adherence, all levels of staff can assess for and identify barriers to adherence every service. By using these tools, consumers receive consistent, person-centered treatment which addresses barriers as they're reported. As barriers are addressed through simple, targeted solutions, adherence increases for the Family & Children's Services client.

#### Background

Family & Children's Services offers comprehensive mental health care services to Tulsans across the life-span spectrum, including over 100,000 people each year. Most clients served by the agency experience life within a culture of poverty, homelessness, and chronic illness. A majority of adherence related efforts prior to May 2017 were focused within programs that serve adult populations. An exception to this would be the in-house pharmacy, which serves clients receiving medication from Adult and Child Psychiatry Clinics. At every medication pickup, clients are asked if there are questions or concerns related to their medications. The in-house pharmacy also generated adherence rates automatically within their WinRx software. Those rates were based on Medication Possession Ratio (MPR). More specific adherence efforts related to the adult services include verbal screening for adherence at all adult psychiatry provider appointments. Client populations with more intensive needs, such as those recently discharging from the hospital under a court commitment for outpatient treatment, had Transitional Care case managers monitoring medication pickup thru the electronic pharmacy system. Family & Children's Services also has two Program of Assertive Community Treatment (PACT) teams which service clients with psychosis-based mental illness and struggle to engage in traditional outpatient treatment. The PACT teams manage daily and weekly medication deliveries in the community and monitor for adherence at each delivery.

While Family & Children's Services provided consistent attention to adherence in all adult psychiatry provider appointments, there were not cohesive or overarching adherence efforts between departments. Due to the agency's size, a lack of communication and coordination between generalized outpatient departments were reported as a consistent barrier for staff addressing the needs of consumers.

#### Initial Efforts

The initial approach to enhancing medication adherence at Family & Children's Services focused on four main goals; reducing barriers to psychiatry providers by providing rapid appointment availability, enhancing access to medications, adopting clinical tools to improve medication adherence, and focusing on increasing the number of clients on long acting injections (LAIs).

To increase access to psychiatry providers, Family & Children's Services increased the number of prescribers on staff, as well as increasing access to the same provider for continuity of care and relationship building. In addition to this, walk-in opportunities were added to the outpatient Medication Clinic and the 24-hour Crisis Care Center offered medication management to those seeking respite.



Family & Children's Services balanced increased access to psychiatry providers with increased access to medications. Through their in-house pharmacy, the Patient Assistance Program distributes \$20 million in free medications per year. Partnerships with Dispensary of Hope and community support/forgiveness for copays enabled the distribution of those medications.

The adult psychiatry team adopted clinical tools to improve medication adherence, including the SIMPLE method. SIMPLE focuses on simplifying regimens, enhancing the provider-patient relationship via knowledge sharing and communication, and evaluating adherence.

Promoting the use and acceptance of long-acting injectable (LAI) medication has been a cornerstone of adherence efforts at Family & Children's Services. From 2016 to 2017, the number of clients receiving injectable has increased dramatically. There are now close to 250 clients receiving a LAI as part of their medication management. Specially, over 90 clients are currently on a 3-month LAI and only one has been hospitalized for their mental illness since transitioning to it. Adult psychiatry providers operate from a philosophy that LAIs should be used as Family & Children's Services also works closely with community partners to stabilize clients long-term via LAI. This includes working with local judiciary to decrease inpatient stays by providing injections in urgent care recovery settings for committed outpatient clients. The agency also has partnered with a local inpatient facility to begin tracking the sustainability of starting clients on LAIs and transferring them to outpatient care.

### **Advanced Adherence Strategies**

Family & Children's Services CEO, Gail Lapidus, wanted to push medication adherence in behavioral health to new levels of awareness in the agency. Much like trauma informed care permeates an agency culture to provide sensitive, responsive treatment at every level; she wanted the same for addressing the barriers to adherence. The main focus of the agency's medication adherence initiative is that medication adherence is everyone's responsibility. Previously, it had mainly been the responsibility of medical providers and specialty teams. Through the initiative, medication services are integrated and coordinated with psychosocial services to promote medication adherence and sustained recovery.

Following recommendations by the American College for Preventive Medicine (2011), Family & Children's Services began to look at integrating treatment to utilize and address all dimensions that affect adherence, including: social/economic, health care system, condition-related, therapy-related, and patient-related factors. To drive this new approach, a Medication Adherence Coordinator position was created within the agency. This position is responsible for improving the culture of client success through championing medication adherence support initiative and programs. With the support of medical and program leadership, the coordinator works collaboratively with all departments in the 16 Adult Severe Mental Illness Division. In May 2017, the position was filled and a comprehensive literature review was completed shortly thereafter.

Evaluating adherence within the client population began over the summer 2017 with three different tools. Firstly, the Intake Department began administering a Medication Adherence Questionnaire at all new patient intakes and 6-month treatment plan reviews. The Questionnaire is a 16 question composite of the Morisky-8 (MMAS-8) and Drug Attitude Inventory. Secondly, all department in the Adult Mental Health Division, except PAP and Pharmacy, screened for adherence at each visit. The screener consisted of a mandatory question embedded in the electronic health record's (EHR) individual service documentation. If a client identified as not taking medications as prescribed, a mandatory selection of adherence barriers was prompted. Lastly, an Adherence Barrier Questionnaire was administered to clients in the Medication Clinic to identify the frequency common barriers were contributing to missed doses in a given month. The questionnaire was adapted from an Adherence Barrier Questionnaire developed for HIV patients. The Medication Adherence Coordinator collaborated with the EHR team to pull data for review and analysis. Internal



data from the in-house pharmacy software indicated MPR in the low 90th percentile. That data combined with staff observations of client non-adherence indicated that adherence issues laid more in the behaviors of clients following medication pickup.

As data began to be collected from clients, the Medication Adherence Coordinator began meeting with all teams within the Adult Mental Health Division to gather staff feedback and begin forming an interdisciplinary “Change Champion” team with representative from each department. Through collaborative work with the teams and the development of the “Change Champions” team, an organizational culture and framework regarding the importance of medication adherence began to grow. The expectation that everyone could help address barriers to adherence was gaining acceptance.

Through the growing organizational culture, common barriers found in adherence literature, and initial staff/client feedback; several pilots to address barriers were launched in late Summer 2017. The first and most successful pilot addressed the barrier of transportation, which was identified routinely as a common barrier within the Family & Children’s Services population. The pilot ran for one month in Summer 2017 and addressed bus-based transportation amongst the most vulnerable populations, including the chronically homeless and those recently discharged from inpatient care. Participants were identified and enrolled by a combination of therapist, case managers, and recovery support specialists. There was a 66% increase in adherence among homeless clients and 64% increase in those involved in the Transitional Care Program. Adherence was measured using the previously mentioned MPR rates available in pharmacy software. Due to the success in these departments, the pilot was extended through October 2017.

In regards to bus tokens and transportation, the Change Champions team identified internally created boundaries by not providing bus tokens during the medication pickup process. Historically, bus tokens were available to clients receiving same-day services for all other programs, except PAP and Pharmacy. To eliminate the barrier and effectively manage resources, PAP began screening non-insured clients at every medication pickup for bus-based adherence issues. If a client indicates bus token would help improve adherence, a token is provided to them.

Internal data became available in early Fall 2017, indicating difficulty remembering and side effects were dominant reasons for non-adherence with the agency’s population. This led to the development of several new pilots. Single week pillboxes were given out by the Live Well team, involving initial set up with a nurse and evaluation of beliefs related to medication forgetfulness. The pilot is currently running for seven months, with monthly re-evaluation of use and beliefs by Live Well case managers. Additional reminder adherence tools will soon become available for the Adult Case Management department to distribute to clients who identify as non-adherent due to forgetfulness during face to face sessions and phone outreach.

To address the barrier of side effects, the Medication Adherence Coordinator collaborated with the Medical Director and Head Psychiatrist of the Crisis Care Center on creating Medication Appointment Prep Sheet. The prep sheet focuses on streamlining client concerns, expectations, and appropriate coping skills to use in conjunction with medications. In September/October 2017, the prep sheet was distributed to therapists in the Specialized Outpatient Services, recovery support specialists, and mental health technicians at the Crisis Care Center to complete with clients. The tool is designed to be a tool for self-advocacy and promote focused conversations on side effects/medication concerns.

The future of Family & Children’s Services medication adherence initiative will begin to move into new phases over the winter of 2017. Additional parts of the initiative include an educational campaign targeted towards clients, enhancement of adherence related pharmacy services, and an incentive program for the most non-adherence portion of the client population.



## Recommendations

Family & Children's Services is fortunate to have resources that allow for small and large scale adherence efforts. No matter the size of a provider, steps can be taken to addressing the barriers related to medication non-adherence. The first recommendation would be to develop an interdisciplinary Change Champion team. This team will act as the drivers for acknowledging the scope of the problem and creating buy-in that it is a problem everyone can help with. This team should begin by evaluating adherence within their own population, so efforts are tailored appropriately. Based on this data, the team can create targeted, simple approaches to common barriers found.

Providers should evaluate what role they play in creating barriers. By following the SIMPLE method for medication adherence, the provider can be aware of how multi-dimensional the topic truly is. The relationship between provider and client remains crucial to the issue of adherence. Promoting and implementing shared decision making into clinical process creates buy-in with both parties involved. The philosophy guiding medication adherence improvement should remain that this is everyone's responsibility. Medications work when everyone works together.

## References

Medication Adherence Clinical Reference. (2011). *MEDICATION ADHERENCE TIME TOOL: IMPROVING HEALTH OUTCOMES* [Brochure]. Washington DC: American College of Preventive Medicine.

Lee, Kelly (2013). Improving medication adherence in patients with severe mental illness. *Pharmacy Today*, (6), 69–80. [http://elearning.pharmacist.com/Portal/Files/LearningProducts/8e1241c42b5047829a1cdc44598e6ebe/assets/0613\\_PT\\_80\\_FINAL.pdf](http://elearning.pharmacist.com/Portal/Files/LearningProducts/8e1241c42b5047829a1cdc44598e6ebe/assets/0613_PT_80_FINAL.pdf)



## Talking with Clients About Their Medication

*Untreated psychiatric problems are a common cause for treatment failure in substance abuse treatment programs. Supporting clients with mental illness in continuing to take their psychiatric medications can significantly improve substance abuse treatment outcomes.*

### Getting Started.

Take 5–10 minutes every few sessions to go over these topics with your clients:

- Remind them that taking care of their mental health will help prevent relapse.
- Ask how their psychiatric medication is helpful.
- Acknowledge that taking a pill every day is a hassle.
- Acknowledge that everybody on medication misses taking it sometimes.
- Ask if they felt or acted different on days when they missed their medication.
- Was missing the medication related to any substance use relapse?
- Without judgment, ask “Why did you miss the medication? Did you forget, or did you choose not to take it at that time?”

**Reframe about non-adherence:** Do not ask if they have missed any doses; rather ask, “How many doses have you missed?”

**For clients who forgot,** ask them to consider the following strategies:

- Keep medication where it cannot be missed: with the TV remote control, near the refrigerator, or taped to the handle of a toothbrush.
- Everyone has 2 or 3 things they do every day without fail. Put the medication in a place where it cannot be avoided when doing that activity — but always away from children.
- Suggest they use an alarm clock set for the time of day they should take their medication. Reset the alarm as needed.
- Suggest they use a Mediset®: a small plastic box with places to keep medications for each day of the week, available at any pharmacy. The Mediset® acts as a reminder and helps track whether or not medications were taken.

**For clients who admit to choosing NOT to take their medication:**

- Acknowledge they have a right to choose NOT to use any medication.
- Stress that they owe it to themselves to make sure their decision is well thought out. It is an important decision about their personal health and they need to discuss it with their prescribing physician.
- Ask their reason for choosing not to take the medication.
- Don’t accept “I just don’t like pills.” Tell them you are sure they wouldn’t make such an important decision without having a reason.



- Offer as examples reasons others might choose not to take medication. For instance, they:
  - Don't believe they ever needed it; never were mentally ill
  - Don't believe they need it anymore; cured
  - Don't like the side effects
  - Fear the medication will harm them
  - Struggle with objections or ridicule of friends and family members
  - Feel taking medication means they're not personally in control
- Transition to topics other than psychiatric medications. Ask what supports or techniques they use to assist with emotions and behaviors when they choose not to take the medication.

**General Approach:**

The approach when talking with clients about psychiatric medication is exactly the same as when talking about their substance abuse decisions.

- Explore the triggers or cues that led to the undesired behavior (either taking drugs of abuse or not taking prescribed psychiatric medications).
- Review why the undesired behavior seemed like a good idea at the time.
- Review the actual outcome resulting from their choice.
- Ask if their choice got them what they were seeking.
- Strategize with clients about what they could do differently in the future.



## Special Packaging for Medications (Slides)

### Special Packaging



Color-coded yellow for morning, white for noon, orange for evening, and blue for bedtime.



Tear off the bubble of medication for the correct time of the day.

genOa  
a Q&A healthcare company

2

### Special Packaging

- Consumer's name, date/day of week/time, medication name
- List of medications in each bubble
- Color coordination
- Easy open – peel back instead of push through; no foil backs; no multiple vials
- Perforated and portable
- Detailed with a medication listing at the top of each card:
  - Directions from prescriber
  - Description of drug shape/color/imprint
  - Number of tablets/capsules in each bubble

genOa  
a Q&A healthcare company

1



## Summary of Special Packaging

- Special packaging is an valuable tool for increasing adherence in the treatment of behavioral illness.
- Dispill® allows patients to **understand** their medications by allowing them:
  - To see their medications as one cohesive entity, not just multiple confusing vials.
  - To make their regimen mobile
  - The **capability** of ease of package opening, i.e. instead of difficult to open vials
- Other options such as pill boxes, reminder packs, bubble packs, and strip packaging each focus on different parts of the adherence problem

genOa  
a Qof healthcare company

3

## CFS Tulsa Adherence Barrier Questionnaire

**During the last month, have you been prescribed any mental health medications?**

- ☐ Yes ☐ No

*People may miss taking their medications for various reasons. Here is a list of possible reasons why you may have missed taking your medications.*

**In the past month, how often have you missed taking your medications because:**

**You wanted to avoid side effects?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often

**Of sharing medications with other family members or friends?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often

**Of not fully understanding the medications and what they're for?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often

**Of transportation problems getting to the clinic?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often

**Of lost or stolen pills?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often

**You had too many pills?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often

**You had a bad event happen that you felt was related to taking the pills?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often

**You forgot?**

- ☐ Never ☐ Rarely ☐ Sometimes ☐ Often



**You ran out of pills?**

☐ Never

☐ Rarely

☐ Sometimes

☐ Often

**Of fear of being judged by others?**

☐ Never

☐ Rarely

☐ Sometimes

☐ Often

**You were too ill (mentally or physically) to attend clinic visits to collect medications?**

☐ Never

☐ Rarely

☐ Sometimes

☐ Often



## Screen Shots From CFS Tulsa EMR

### Medication Adherence Questionnaire

Chart Medication Adherence Questionnaire

**Medication Adherence Qu**

Submit

Do you sometimes forget to take your medication(s)?

☐ Yes ☐ No

During the previous two weeks, were there any days when you did not take your medication(s)?

☐ Yes ☐ No

If yes, how many days?

☐ 1-2 days ☐ 3-5 days ☐ 6-8 days ☐ 9-12 day ☐ 14 days

Have you ever cut back or stopped taking your medication(s) without telling your physician because you felt worse when you took it?

☐ Yes ☐ No

When you travel or leave home, do you sometimes forget to bring along your medication(s)?

☐ Yes ☐ No

Did you take your medication(s) yesterday?

☐ Yes ☐ No

When you feel like your symptoms are under control, do you sometimes stop taking your medication(s)?

☐ Yes ☐ No

Do you ever feel stressed about sticking to your medication(s) treatment plan?

☐ Yes ☐ No

How often do you have difficulty remembering to take your medication(s)?

☐ Never ☐ Rarely ☐ Once in awhile  
☐ Sometimes ☐ Usually ☐ All of the time

For me, the good things about medication(s) outweigh the bad.

☐ Yes ☐ No

I take medication(s) of my own free choice.

☐ Yes ☐ No

Medication(s) makes me feel more relaxed.

☐ Yes ☐ No

Medication(s) makes me feel tired and sluggish.

☐ Yes ☐ No

I take medication(s) only when I feel ill.

☐ Yes ☐ No

I feel more normal on medication(s).

☐ Yes ☐ No

It is unnatural for my mind and body to be controlled by medication(s).

☐ Yes ☐ No

My thoughts are clearer on medication(s).

☐ Yes ☐ No

Taking medication(s) will prevent me from having a breakdown.

☐ Yes ☐ No

AVPM (UAT)

Search Windows



## Individual Note, Adherence Question

**Individual Note**

Submit

Progress Made  
☐ No ☐ N/A ☐ Yes

Plan/Identified New Need(s), Goal(s), and/or Objective(s)

Does the client have a Substance Abuse diagnosis?  
☐ Yes ☐ No ☐ N/A

Substance use frequency in the last 30 days  
☐ No use in the past 30 days ☐ 1-3 times per month ☐ 1-2 times per week  
☐ 3-6 times per week ☐ Daily use

Description of use/symptoms

Are you taking your medications as prescribed by your provider?  
☐ Yes ☒ No ☐ N/A

If no, why?

☐ Transportation ☐ Fees/Cost  
☐ Side Effects/Because I don't like how it makes me feel ☐ Because I don't understand the reason for the medication  
☐ Because it's hard to remember to take them

Travel Time in Minutes