Improving Health Outcomes by Impacting Adherence to Medication

February 21, 2018
2:00pm ET
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**Todays Presenter**

**Joe Parks, MD** – Medical Director, National Council for Behavioral Health

- Practicing psychiatrist and state policymaker
- Served as Director of Missouri Division of Comprehensive Psychiatric Services
- Served as Missouri Medicaid Director
Learning Objectives

• Identify the factors influencing non-adherence and the adverse effects of non-adherence on clinical outcomes.

• Embrace a person-centered approach to increase adherence to medication.

• Implement the steps of shared decision making to increase client engagement and improve health outcomes.
Why Focus on Medication Adherence as a CCBHC?

• Current research reports that adherence rates for both medical and behavioral chronic conditions are only about 40-60%

• 1 of the required measures to be reported by the states as part of the CCBHC demonstration

• Mathmetica/RAND evaluation component:
  – **Savings:** What is CCBHCs’ impact on inpatient, emergency, and ambulatory service utilization rates as well as state and federal Medicaid costs?
# CCBHC State-Reported Measures

<table>
<thead>
<tr>
<th>Potential Source of Data</th>
<th>Measure or Other Reporting Requirement</th>
<th>NQF Endorsed</th>
</tr>
</thead>
<tbody>
<tr>
<td>URS</td>
<td>Housing Status (Residential Status at Admission or Start of the Reporting Period Compared to Residential Status at Discharge or End of the Reporting Period)</td>
<td>N/A</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Follow-Up After Emergency Department for Mental Health</td>
<td>2605</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Follow-Up After Emergency Department for Alcohol or Other Dependence</td>
<td>2605</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Plan All-Cause Readmission Rate (PCR-AD) (see Medicaid Adult Core Set)</td>
<td>1768</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Diabetes Screening for People with Schizophrenia or Bipolar Disorder who Are Using Antipsychotic Medications</td>
<td>1932</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Adherence to Antipsychotic Medications for Individuals with Schizophrenia (see Medicaid Adult Core Set)</td>
<td>N/A</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Follow-Up After Hospitalization for Mental Illness, ages 21+ (adult) (see Medicaid Adult Core Set)</td>
<td>0576</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Follow-Up After Hospitalization for Mental Illness, ages 6 to 21 (child/adolescent) (see Medicaid Child Core Set)</td>
<td>0576</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Follow-up care for children prescribed ADHD medication (see Medicaid Child Core Set)</td>
<td>0108</td>
</tr>
<tr>
<td>Claims data/ encounter data</td>
<td>Antidepressant Medication Management (see Medicaid Adult Core Set)</td>
<td>0105</td>
</tr>
<tr>
<td>EHR, Patient records</td>
<td>Initiation and engagement of alcohol and other drug dependence treatment (see Medicaid Adult Core Set)</td>
<td>0004</td>
</tr>
<tr>
<td>MHSIP Survey</td>
<td>Patient experience of care survey; Family experience of care survey</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Adherence to Medications

“Adherence to (or compliance with) a medication regimen is generally defined as the extent to which patients take medications as prescribed by their health care providers.”

— Osterberg & Blaschke (2006)
Adherence to Medications

“No medication works inside a bottle. Period.”
— C. Everett Koop, MD

“Drugs don't work in patients who don't take them.”
— C. Everett Koop, MD
<table>
<thead>
<tr>
<th>Test</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct methods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directly observed therapy</td>
<td>Most accurate</td>
<td>Patients can hide pills in the mouth and then discard them; impractical for routine use</td>
</tr>
<tr>
<td>Measurement of the level of medicine or metabolite in blood</td>
<td>Objective</td>
<td>Variations in metabolism and &quot;white-coat adherence&quot; can give a false impression of adherence; expensive</td>
</tr>
<tr>
<td>Measurement of the biologic marker in blood</td>
<td>Objective; in clinical trials, can also be used to measure placebo</td>
<td>Requires expensive quantitative assays and collection of bodily fluids</td>
</tr>
<tr>
<td><strong>Indirect methods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient questionnaires, patient self-reports</td>
<td>Simple; inexpensive; the most useful method in the clinical setting</td>
<td>Susceptible to error with increases in time between visits; results are easily distorted by the patient</td>
</tr>
<tr>
<td>Pill counts</td>
<td>Objective, quantifiable, and easy to perform</td>
<td>Data easily altered by the patient (e.g., pill dumping)</td>
</tr>
<tr>
<td>Rates of prescription refills</td>
<td>Objective; easy to obtain data</td>
<td>A prescription refill is not equivalent to ingestion of medication; requires a closed pharmacy system</td>
</tr>
<tr>
<td>Assessment of the patient’s clinical response</td>
<td>Simple; generally easy to perform</td>
<td>Factors other than medication adherence can affect clinical response</td>
</tr>
<tr>
<td>Electronic medication monitors</td>
<td>Precise; results are easily quantified; tracks patterns of taking medication</td>
<td>Expensive; requires return visits and downloading data from medication vials</td>
</tr>
<tr>
<td>Measurement of physiologic markers (e.g., heart rate in patients taking beta-blockers)</td>
<td>Often easy to perform</td>
<td>Marker may be absent for other reasons (e.g., increased metabolism, poor absorption, lack of response)</td>
</tr>
<tr>
<td>Patient diaries</td>
<td>Help to correct for poor recall</td>
<td>Easily altered by the patient</td>
</tr>
<tr>
<td>When the patient is a child, questionnaire for caregiver or teacher</td>
<td>Simple; objective</td>
<td>Susceptible to distortion</td>
</tr>
</tbody>
</table>
Medication Possession Ratio

\[ \text{MPR} = \frac{\text{Number of days that a drug is supplied}}{\text{Number of days the drug should be supplied if the prescription was filled per the drug regimen}} \]

**Benchmarks:**
- > 80% is adherent
- 80-60% is partial adherence
- < 60% is non-adherent
# Rates of Medication Nonadherence

<table>
<thead>
<tr>
<th>Condition</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary Heart Disease</td>
<td>40-50%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>16-22%</td>
</tr>
<tr>
<td>Diabetes: oral meds</td>
<td>7-64%</td>
</tr>
<tr>
<td>Diabetes: insulin</td>
<td>37%</td>
</tr>
<tr>
<td>Asthma</td>
<td>25-75%</td>
</tr>
<tr>
<td>HIV</td>
<td>13%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>30-60%</td>
</tr>
<tr>
<td>Major Depression</td>
<td>51-69%</td>
</tr>
<tr>
<td>Bipolar</td>
<td>21-50%</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>57%</td>
</tr>
<tr>
<td>ADHD</td>
<td>26-48%</td>
</tr>
<tr>
<td>Alcohol Abuse / Dependence</td>
<td>35%</td>
</tr>
</tbody>
</table>

Rates of Medication Non-adherence

Average

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>13.0%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>19.0%</td>
</tr>
<tr>
<td>Alcohol Abuse/Dependence</td>
<td>35.0%</td>
</tr>
<tr>
<td>Bipolar</td>
<td>35.5%</td>
</tr>
<tr>
<td>Diabetes: oral meds</td>
<td>35.5%</td>
</tr>
<tr>
<td>ADHD</td>
<td>37.0%</td>
</tr>
<tr>
<td>Diabetes: insulin</td>
<td>37.0%</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>45.0%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>45.0%</td>
</tr>
<tr>
<td>Asthma</td>
<td>50.0%</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>57.0%</td>
</tr>
<tr>
<td>Major Depression</td>
<td>60.0%</td>
</tr>
</tbody>
</table>
Antipsychotic Non-Adherence

• Schizophrenia
  – Self report: 20%
  – More accurate estimate is 50%
  – CATIE: ~40% of patients discontinued their antipsychotic medications on their own.²

• Bipolar Disorder
  – Less well studied but likely similar to schizophrenia
  – Strongly associated with substance abuse

Adherence Metrics: MPR

Table 1

Rates of adherence over 12 weeks according to various methods among 52 outpatients with schizophrenia

<table>
<thead>
<tr>
<th>Assessment method</th>
<th>Total N</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-report</td>
<td>50</td>
<td>43</td>
<td>86</td>
</tr>
<tr>
<td>Physician impression</td>
<td>50</td>
<td>33</td>
<td>66</td>
</tr>
<tr>
<td>Pill count</td>
<td>51</td>
<td>38</td>
<td>75</td>
</tr>
<tr>
<td>Electronic monitoring</td>
<td>52</td>
<td>33</td>
<td>63</td>
</tr>
<tr>
<td>Variability of antipsychotic plasma level(^b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Across 72 hours at the end of the study</td>
<td>46</td>
<td>29</td>
<td>63</td>
</tr>
<tr>
<td>Across the study period</td>
<td>45</td>
<td>22</td>
<td>49</td>
</tr>
</tbody>
</table>

\(^a\) Electronic monitoring data were missing for one participant who consistently left the top off the pill container. One individual received drug samples, so the pill count could not accurately be computed. Complications in blood collection resulted in missing data for seven patients at 12 weeks and eight patients across time. Data for self-report and physician report at 12 weeks were not collected for two individuals.

\(^b\) If the difference between antipsychotic plasma levels was more than 30%, patients were considered to be nonadherent.

Consequences of Nonadherence

Failure to take medication as prescribed:

- Causes 10% of total hospital admissions
- Causes 22% of nursing home admissions
- Has been associated with 125,000 deaths
- Results in $100 billion/year in unnecessary hospital costs
- Costs the U.S. economy $300 billion/year

IMPROVEMENT IN MEDICATION ADHERENCE ASSOCIATED WITH LOWER RATES OF HOSPITALIZATION

Annual Hospitalization Rates in Relation to Adherence to Antipsychotics

- **Adherent** = *MPR 0.8 – 1.1
- **Partially Adherent** = *MPR 0.5 – 0.79
- **Nonadherent** = *MPR 0.0 – 0.49

![Graph showing hospitalization rates by adherence](image)


* MPR = Medication Possession Ratio
Partial Compliance and Risk of Rehospitalization

Percentage of patients with schizophrenia who were rehospitalized, by maximum gap in therapy\(^1\)

<table>
<thead>
<tr>
<th>Maximum Gap (days within one year)</th>
<th>Percentage of Patients Hospitalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-10</td>
</tr>
<tr>
<td>11-30</td>
<td>&gt;30</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

1. All pairwise comparisons were significant at \(P<.005\).

Consequences of Nonadherence

- Lack of progress toward goals/recovery
- Polypharmacy
- Unnecessarily high doses
- Illness progression and relapse
- ER usage and hospitalization
Patient-Reported Barriers to Adherence With Antipsychotic Medications*

Percentage of Patients Reporting Barrier

- Stigma: 40%
- Adverse drug reactions: 30%
- Homelessness/substance abuse: 30%
- Memory problems: 20%
- Lack of social support: 20%
- Afraid of medication: 10%
- Denial of Illness: 10%
- Lack of trust in provider: 5%
- Difficulty with regimen: 5%

*In patients with schizophrenia.
Adherence is Related to Dosing Frequency

Obesity as a Risk Factor for Antipsychotic Noncompliance

Noncompliant Respondents According to BMI Category

*\( P = 0.01 \) vs normal; Chi-square: \( P = 0.03 \).
Test for linearity: \( P = 0.01 \)

Schizophrenia population.

Clinician Factors — Communication

• Clinician-Patient relationship may impart the most value in improving adherence.

• Key elements are trust and caring.

• Promoting participation in decision making.

• Positive expectancy/hope.

I believe the reason your medication tastes so bad every other time you take it is because the directions "take one pill twice daily" means two separate pills.
A Person Centered Approach

Adherence: An individual’s conformance with the provider’s recommendation with respect to timing, dosage, and frequency of medication-taking during the prescribed length of time based on a collaborative discussion of treatment options accounting for the person’s individualized goals, values, personal medicine and barriers to achieving adherence.

Initiation: The moment at which the person takes the first dose of medication as prescribed.

Implementation: The extent to which a patient’s actual dosing corresponds to the prescribed dosing regimen.

Discontinuation: When the next dose is omitted or no more doses are taken.

Medication Persistence

Shared Decision Making
The Clash of Perspectives

• “…my psychiatrist said I was getting better, but I experienced being disabled by the medication. He said I was more in control, but I experienced the medication controlling me. He said my symptoms were gone, but my experience was that my symptoms were no longer bothersome to others but some continued to torment me.

• …I lost years of my life in this netherworld, and although I was treatment compliant and was maintained in the community, I was not recovering.”

Pat Deegan

<table>
<thead>
<tr>
<th>Me</th>
<th>Psychiatrist</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel sedated</td>
<td>You are not psychotic</td>
</tr>
<tr>
<td>I’m still hearing distressing voices</td>
<td>You are not shouting at your voices anymore</td>
</tr>
<tr>
<td>I can’t think clearly on this medicine.</td>
<td>You are not thought disordered</td>
</tr>
<tr>
<td>I feel like the meds are controlling me</td>
<td>You are more in control</td>
</tr>
<tr>
<td>I’m not myself when I’m on this medicine</td>
<td>You have returned to baseline</td>
</tr>
</tbody>
</table>

Pat Deegan: The Clash of Perspectives
The Clash of Perspectives

Source: The Recovery Library
https://www.recoverylibrary.com/content/57166a4c3aa174263a00057a
Person-Centered Care

**Person-centered care** (or treatment) is care or treatment that is based on the goals of the individual being supported, as opposed to the goals of the system or as defined by a doctor or other professional.
It is more important to know what manner of patient has the disease, than to know what manner of disease the patient has.

Sir William Osler
Shared Decision Making

Moving from medication ‘compliance’

Patients’ passive following of provider orders

Making collaborative treatment decisions jointly based on client lived experience and choice
Principles of Shared Decision Making

1. The goal of using psychiatric medication is recovery. Drug “maintenance” in the community is too low an outcome standard to strive for.

2. Psychiatric medication must serve personal medicine and the overarching goal of recovery.

3. The goal of the psychiatrist and treatment team (in relation to medications) is to support clients through decisional conflict to achieve optimal use of personal medicine and psychiatric medicine in support of recovery.

Steps to Shared Decision Making

1. Choice Talk → help people to understand that choices exist and that they are invited to participate in making decisions related to their treatment.

2. Option Talk → provide more information about treatment options available, including pros, cons, benefits and harms related to each. Ensure that the person understands the options.

3. Decision Talk → support the person’s consideration of preferences in deciding what is best for them.

Peer Support: Formal Definition

International Association of Peer Supporters:

Peer support providers are people with a personal experience of recovery from mental health, substance use, or trauma conditions who receive specialized training and supervision to guide and support others who are experiencing similar mental health, substance use or trauma issues toward increased wellness.

Source: https://inaops.org/definition-peer-specialist/
Peer Support: The evidence

- 2007- CMS (Center for Medicaid Services) said peer support is an EBP

<table>
<thead>
<tr>
<th>Peer Support Benefit</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>More time and engagement with the community</td>
<td>Clark et al, 2000; Min et al, 2007</td>
</tr>
<tr>
<td>Better treatment engagement</td>
<td>Craig et al, 2004; Sells et al, 2006; Felton et al, 1995</td>
</tr>
<tr>
<td>Greater satisfaction with life</td>
<td>Felton et al, 1995</td>
</tr>
<tr>
<td>Greater quality of life</td>
<td>Klein et al., 1998</td>
</tr>
<tr>
<td>Better social functioning</td>
<td>Klein et al., 1998</td>
</tr>
<tr>
<td>Fewer Problems and needs</td>
<td>Craig et al, 2004; Felton et al, 1995</td>
</tr>
</tbody>
</table>

Source: Adapted from [www.academyofpeerservices.org](http://www.academyofpeerservices.org)
The Power of Peer Support

• Forchuk et al (2005): Peer support transition program added to psychiatric hospital team had a **decrease in the number of hospital days**, **reduction in readmission rates**, **increased discharge rates** and an increase in **quality of social relationships**

• Ochocka et al (2006) found participants who participated in drop in group alongside peers had **fewer emergency room visits** and **better quality of life**.
The Common Ground Approach to Shared Decision Making

- Internet-based computer program with peer specialist support
- People are invited to answer questions about recovery goals
- They are asked to describe their personal medicine
- They rate current symptoms and psycho-social functioning
- They are asked about common concerns that people who take psychiatric medication often experience
- A report is printed out and supplied in advance to their medical provider
DYSFUNCTION

The Only Consistent Feature of All of Your Dissatisfying Relationships is You.
DO NOT…

• Overemphasize the dangers of combining prescription medication with alcohol and drugs of abuse
  – Most combinations are not dangerous except benzodiazepines.
  – Most clients have used while on medication without ill effects. They will conclude you are either a liar or a fool.
  – Most clients will stop prescription medication and continue to use alcohol and drugs of abuse.
  – If they are going to be intoxicated it’s better not to be psychotic too.
Unrealistic Expectations Cause Dissatisfaction

- Unrealistically High Expectations for Medication Encourages:
  - Premature switching of medications
  - Poly-Pharmacy
  - Non-Adherence

- Do Not Overstate Benefits
  - “70% of people get 70% better”
  - “You are likely to feel better but will still have some remaining symptoms”
  - “Most people have some side effects”
  - “Medication will not fix everything”
  - “If we keep adding meds to fix every last symptoms you will end up on so many that you will get the staggers”
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.
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.
Getting Started

• Do not ask if they have missed any doses, rather ask “How many doses have you missed?”

• 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?”
Strategies for Clients Who Forget to Take Medication

- Keep medication where it cannot be missed: with the TV remote control, near the refrigerator, on taped to the handle of a toothbrush. Everyone has 2 or 3 things they do everyday 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. Mediset® acts as a reminder and helps track whether or not medications were taken.
**Clients Right to Choose 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.
For Clients Who Admit to Choosing NOT to Take Their 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:
  1. Don’t believe they ever needed it; never were mentally ill
  2. Don’t believe they need it anymore, cured
  3. Don’t like the side effects
  4. Fear the medication will harm them
  5. Struggle with objections or ridicule of friends and family members
  6. Feel taking medication means they ‘re not personally in control
Assume That All Patients Will Choose to Stop Taking a Medication Eventually

• “Everybody decides not to take their Meds at some Point, usually to see if they still really need them.”
• “I assume that you will too so please tell me so I can help you be successful with how you stop them”
• “I recommend only stopping one med at a time, not all at once”
• “I recommend tapering meds slowly to avoid withdrawal effects”
• “Write down your 3 early warning symptoms of relapse on 3 index cards: you keep one, give me one, give one to a friend you see a lot and lets all watch out for relapse symptoms…i.e.-Treat it like an experiment!”
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.
Offer More Than Meds – Encourage Self-Management and Recovery

• When Meds have done as much as they can for you…
  – “What can you do for yourself to get better?”
    • Social interaction
    • Physical activity
    • A regular schedule
    • Changing habits that make you unsatisfied
  – “How can you get on with having the kind of life you want in spite of your remaining symptoms?”
    • “It’s better to go out and pursue your desires with symptom X than to sit at home waiting for symptom X to go away”
    • “You deserve better”
    • “Don’t let this disease define who you are and what you do”
    • “There is more to life than managing your illness”
I CAN'T STOP DREAMING ABOUT WORK.

AND I USUALLY SLEEP AT WORK, SO I'M DREAMING ABOUT SLEEPING AND IT'S FREAKING ME OUT.

HAVE YOU CONSIDERED DOING WORK?

I WANT PILLS, YOU QUACK.
Predictors of Poor Adherence

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of psychological problems, particularly depression</td>
<td>van Servellen et al., Ammassari et al., Stilley et al.</td>
</tr>
<tr>
<td>Presence of cognitive impairment</td>
<td>Stilley et al., Okuno et al.</td>
</tr>
<tr>
<td>Treatment of asymptomatic disease</td>
<td>Sewitch et al.</td>
</tr>
<tr>
<td>Inadequate follow-up or discharge planning</td>
<td>Sewitch et al., Lacro et al.</td>
</tr>
<tr>
<td>Side effects of medication</td>
<td>van Servellen et al.</td>
</tr>
<tr>
<td>Patient’s lack of belief in benefit of treatment</td>
<td>Okuno et al., Lacro et al.</td>
</tr>
<tr>
<td>Patient’s lack of insight into the illness</td>
<td>Lacro et al., Perkins</td>
</tr>
<tr>
<td>Poor provider–patient relationship</td>
<td>Okuno et al., Lacro et al.</td>
</tr>
<tr>
<td>Presence of barriers to care or medications</td>
<td>van Servellen et al., Perkins</td>
</tr>
<tr>
<td>Missed appointments</td>
<td>van Servellen et al., Farley et al.</td>
</tr>
<tr>
<td>Complexity of treatment</td>
<td>Ammassari et al.</td>
</tr>
<tr>
<td>Cost of medication, copayment, or both</td>
<td>Balkrishnan, Ellis et al.</td>
</tr>
</tbody>
</table>
Existing Interventions Targeting These Factors

- Improved dosing schedules
- Expanding provider access
- Involving people in tx decisions
- Offering choice
- Enhanced provider communication & positive affect

- Socioeconomic factors
  - CBT
  - Motivational Interviewing
  - Psycho-education
  - Personalized reminders
  - Concrete support-med pick-up etc

- Patient factors
  - Therapy-related factors
    - Concrete support-med pick-up etc

- Health-Care System factors
  - Improved dosing schedules
  - Expanding provider access
  - Involving people in tx decisions
  - Offering choice
  - Enhanced provider communication & positive affect

- Disease-related factors
  - CBT
  - Motivational Interviewing
  - Psycho-education
  - Personalized reminders
  - Concrete support-med pick-up etc
Patient Medication Adherence Algorithm

START:

What Medications are you taking and how do you take them?

- Answer reflects poor or limited understanding
  - Implement education plan. Consider cognitive evaluation.

- Answer reflects good understanding

How many doses of medication did you miss in last 30 days?

- None

  Are there things you don’t like about your medications?

- Yes
  - What don’t you like about your medications?
    - Yes, (other than side effects)
      - Do you feel you need medication?
        - No
          - Implement education plan to improve insight into (and beliefs about) illness and past patterns of response. Use Motivational Interviewing techniques.
        - Yes
          - Do you feel the meds will harm you?
            - Yes
              - Provide medication information. Implement cognitive behavioral therapy.
            - No
              - Do you feel fearful about taking your medication?
                - Yes
                  - Do you feel like you are not in control when you take your medications?
                    - Yes
                      - Do you feel guilty (or equivalent) about taking medications?
                        - Yes
                          - Address issues that might be limiting communication.
                        - No
                          - Implement Cognitive Behavioral Therapy Approach.
                    - No
                      - Do you feel listened to by your provider?
                        - Yes
                          - Implement Cognitive Behavioral Therapy Approach.
                        - No
                          - Treat any residual primary psychotic symptoms.
Family & Children’s Services
Tulsa, OK

• Founded 1949
• Staff of 85
• Annual Operating Budget of $5 million – 82% from Medicaid
• Caseload of 6,500, 50% who have SPMI
• Focus on community based programming
Medication Adherence Strategies

- LAI’s – since 1970’s. Approximately 225 – 80% court ordered
- Medication boxes – 200 plus delivered weekly
- Relationship with local pharmacy
- Medication contracts for controlled
- Iowa Prescription Monitoring Program access
- Open Access since March 2013
- Telehealth expansion since 2011
Medication Adherence Strategies

- Patient Assistance Programs
- Americare Program
- Sample medication
- Escribing of controlled medications
- Transportation
- Pilot Project with UP At Home for those with complex medical problems
Thank You

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Attend an Affinity Group Call
- February 26, 2018 at 3:00pm ET
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Still Have Questions?

Sherronda Anderson
Project Manager
SherrondaA@thenationalcouncil.org
202-748-8783