



INSTITUTE FOR BEHAVIORAL HEALTHCARE IMPROVEMENT

**Reducing Readmissions:  
The Role of Long Acting Injectable Psychotropic  
Medications, Gaining Consumer Acceptance,  
and Peer Counselors**

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**December 11, 2012**

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INSTITUTE FOR BEHAVIORAL HEALTHCARE IMPROVEMENT

# **Institute For Behavioral Healthcare Improvement Reducing Readmissions Project**

**This project will involve hospitals and related outpatient providers, and is dedicated to reducing readmission within 30 days of people initially admitted to hospitals for a behavioral health problem**

**Planned to begin in February 2012**

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# Reducing Readmissions: The Role of Long Acting Injectable Psychotropic Medications, Gaining Consumer Acceptance and Peer Counselors

Tuesday, December 11, 2012



# OUTLINE

- Learning Objectives
- Readmissions
- Antipsychotic Long Acting Injectables
- Administrative/Operational Overview
- Recommendations
- Q & A



# DISCLOSURE

Dr. Jorge Petit does not have any financial arrangements or affiliations with any commercial entities whose products, research or services may be discussed in these materials.



# Learning Objectives

Upon completion of the webinar, the participant will:

- 1) Understand the use of the long acting injectable psychotropic medications as a strategy to improve adherence.
- 2) Understand the administrative and operational aspects of implementing services aimed at the use of injectable psychotropic medications.
- 3) Identify the importance of using injectable psychotropic medications as an important treatment intervention in different service settings.

# Overview

- Hospitalizations make up a large percentage (almost 31%) of the total healthcare expenditures.
- Hospital readmissions are increasingly a public policy concern due to the cost and quality burdens.
  - 19.6% of Medicare beneficiaries (about 2 million) discharged were re-hospitalized within 30 days
  - Cost = \$17.5B in additional hospital bills
  - Medicaid enrollees (18-64 years old) had a 10.7% 30-day readmission rate

# Overview

- Federal and state agencies and private payers are searching for ways to reduce or contain costs and improve quality of care.
- More than 2,000 hospitals will be penalized by CMS starting in October 2012 because many of its patients are readmitted soon after discharge.
- Readmission rates are an important indicator of quality of care because they may result from actions taken or omitted during the initial hospital stay.



# Overview

| MDC at 1 <sup>st</sup> Admission | Readmission Rate | % Readmissions (non-OB related) |
|----------------------------------|------------------|---------------------------------|
| Circulatory System               | 10.4%            | 15%                             |
| Mental Disorder                  | 11.8%            | 12%                             |
| Respiratory System               | 11.4%            | 10.7%                           |
| Digestive System                 | 10.3%            | 9.6%                            |
| Substance Use Related            | 13%              | 8.4%                            |

# Behavioral Health

- Behavioral health disorders affect a substantial portion of the U.S. population.
- Nearly half of all Americans will develop a mental illness during their lifetime.
- One in four Americans experiences a mental illness or substance abuse disorder each year, and the majority also has a comorbid physical health condition.

# Behavioral Health

- Approximately 17% of Medicare beneficiaries have a mental illness.
- An analysis of Medicaid beneficiaries across 13 states found that more than 11 percent of beneficiaries used behavioral health services in a year.
- Treatment capacity for behavioral services is in critically short supply and getting worse.

# Behavioral Health

- Many states have cut their mental health budgets dramatically, and that trend is intensifying.
  - States are closing their government-funded psychiatric hospitals
  - States are reducing payment rates for mental health providers and residential treatment.
- In 2009, more than 2 million discharges from community hospitals were for a primary diagnosis of mental illness or substance abuse disorder.
- Psychiatric LOS and total days of treatment have decreased and readmission rates have dramatically accelerated in the past decade when compared to other medical conditions.

# Behavioral Health

- Early return to hospital is a frequently measured outcome in mental health system performance monitoring.
  - risk is greatest in the 30-day period immediately after discharge
  - history of repeated admission increases risk
- Impacts on the system include:
  - Cost of care per patient
  - Inpatient bed availability
  - Increase ED utilization
  - Negative influence on patient's and staff's perception of treatment and recovery

# Factors

## 1) Prior Hospitalizations

- Many studies have demonstrated an association between prior inpatient admission and readmissions
- Prospective cohort study (2012) of 233 high utilizing psychiatric inpatients found that number of inpatient days in previous year predicted readmission within 2 years

# Factors

## 2) Engagement in Outpatient Services

- Retrospective review of 3,113 inpatients found that those without an outpatient appointment after discharge were twice as likely to be re-hospitalized in the same year compared to those with at least one outpatient appointment

## 3) Substance Use Disorders

- Prospective cohort study of 262 adult inpatients with schizophrenia found those readmitted within 3 months were more likely to have comorbid SUD
- Study of 50 Medicaid inpatients at high risk for readmission identified SUD as a common reason for readmission

# Factors

## 4) Medication Non-Adherence

- Non-adherence to oral antipsychotic medications is one of the most significant clinical challenges in the treatment of schizophrenia.
- Over 90% of patients with schizophrenia are prescribed medication.
- Reviews indicate that non-adherence rates are as high as 50% in the first year of treatment, and almost 75% in the first two years of treatment.



# Factors

## 4) Medication Non-Adherence

- In an effectiveness study it was found that 9 of 10 patients taking oral antipsychotic medication for 1 year were only partially adherent.
  - degree of their adherence was linked to outcome: lower adherence was significantly associated with higher (worse) symptom ratings.
- Despite these statistics only 30% or less of patients with schizophrenia are prescribed a long-acting antipsychotic injectable.

# Factors

## 4) Medication Non-Adherence

- Another analysis found that patients who stopped taking their medication for as little as 10 days incurred a significantly increased risk of hospitalization.
- Other studies have demonstrated a direct relationship between reduced adherence, re-hospitalization, and hospitalization costs.



# RESEARCH/EVIDENCE BASE

Medication adherence is a common treatment focus for persons with serious mental illnesses, including schizophrenia and schizoaffective disorder.

Medication non-adherence can be a significant barrier to recovery.

A potential clinical benefit for the use of intramuscular, long-acting medications is to help patients improve medication adherence.

# Guidelines

- National Institute for Health and Clinical Excellence (NICE) Guidelines, 2002
- PORT Recommendations, 2003
- American Psychiatric Association Guidelines, 2004
- Texas Medication Algorithm Project

# RESEARCH/EVIDENCE BASE

## RECENT STUDIES COMPARING ORAL TO LONG-ACTING INJECTABLE ANTIPSYCHOTICS

- Veterans Affairs Cooperative Studies Program 555
  - Robert Rosenheck et al.
- NIMH Relapse Prevention Study (PROACTIVE)
  - John Kane et al.

# RESEARCH/EVIDENCE BASE

## VA STUDY 555

- Psychiatric symptoms, quality of life, scores on the Personal and Social Performance scale of global functioning, and neurologic side effects were not significantly improved with long-acting injectable risperidone as compared with control treatments.
- **CONCLUSION:** Long-acting injectable risperidone was not superior to a psychiatrist's choice of oral treatment.

# RESEARCH/EVIDENCE BASE

## PROACTIVE

### CONCLUSIONS:

- No significant difference in time to first relapse and hospitalization between risperidone microspheres and oral SGAs
- Psychotic symptoms benefit favoring risperidone microspheres



# RESEARCH/EVIDENCE BASE

Treating with LAI as early as possible, from the first episode if possible, can reduce relapse, number and duration of re-hospitalization, and cognitive symptoms and improve the quality of life and prognosis.

From the clinical point of view, psychiatrists should think in terms of relapse prevention from the outset of the illness, identify and overcome local barriers to use LAIs, and consider the option of SG-LAIs to all patients with first-episode or recent-onset schizophrenia in a shared decision-making approach.

# RESEARCH/EVIDENCE BASE

Randomized studies suggest that suggest that LAIs reduce risk of relapse versus oral antipsychotics in schizophrenia outpatients when combined with quality psychosocial interventions.

In Finland, only a minority of patients adhere to their initial antipsychotic during the first 60 days after discharge from their first hospitalization for schizophrenia but use of depot antipsychotics was associated with a significantly lower risk of re-hospitalization than use of oral formulations.

# RESEARCH/EVIDENCE BASE

Healthcare providers, patients and family members should be made aware of the safety and benefits of long-acting injectable atypical antipsychotics in order to diminish the unnecessary restrictions of these therapies for patients with schizophrenia.

Observational data confirm that risperidone LAI is an effective treatment in schizophrenia and high levels of adherence to therapy offers an opportunity for effective long-term disease management and significant sustained decreases in hospitalization.



# PREPARATIONS

- Haloperidol decanoate
- Fluphenazine decanoate
- Risperidone microspheres [Risperdal Consta]\*
- Paliperidone palmitate [Invega Sustenna]\*
- Olanzapine pamoate [Zyprexa Relprevv]\*

\*On patent

# LAI/DEPOT COMPARISON CHART



Strategic Solutions.  
Better Care.

**TABLE 8-4.** Long-acting antipsychotic drugs (all given intramuscularly)

|                          | <b>How supplied</b>   | <b>Half-life (days)</b> | <b>Starting dose (mg)</b> | <b>Second dose (mg)</b>      | <b>Maintenance dose (mg)</b>                               |
|--------------------------|---|-------------------------|---------------------------|------------------------------|--|
| Fluphenazine decanoate   | 25 mg/mL  | 6-10                    | 12.5                      | 12.5-25<br>(6-14 days later) | 12.5-50<br>every 2-3 weeks                                 |
| Haloperidol decanoate    | 50 mg/mL or<br>100 mg/mL  | 21                      | 50                        | 50-100<br>(3-28 days later)  | 50-200<br>every 3-4 weeks                                  |
| Risperidone microspheres | Prepared packages of<br>25, 37.5, and 50 mg                     | 3-6                     | 25                        | 25-50<br>(2 weeks later)     | 25-50<br>every 2 weeks                                     |
| Paliperidone palmitate   | Prefilled syringes<br>containing 39, 78,<br>117, 156, or 234 mg | 25-49                   | 234                       | 156<br>(7 days later)        | 39-234<br>every 4 weeks                                    |
| Olanzapine pamoate       | Prepared packages of<br>210, 300, or 405 mg                     | 30                      | 210-300                   | 210-300<br>(2 weeks later)   | 150-300<br>every 2 weeks<br>or<br>300-405<br>every 4 weeks |

Stroup et al. in Essentials of Schizophrenia, 2011

# LAI/DEPOT COMPARISON CHART

|                     | Weight gain and metabolic side effects | Extrapyramidal side effects | Hyperprolactinemia |
|---------------------|--|-----------------------------|--------------------|
| <b>Fluphenazine</b> | <b>+</b>                               | <b>+++</b>                  | <b>+++</b>         |
| <b>Haloperidol</b>  | <b>+</b>                               | <b>+++</b>                  | <b>+++</b>         |
| <b>Olanzapine</b>   | <b>+++</b>                             | <b>+</b>                    | <b>+</b>           |
| <b>Paliperidone</b> | <b>++</b>                              | <b>++</b>                   | <b>+++</b>         |
| <b>Risperidone</b>  | <b>++</b>                              | <b>++</b>                   | <b>+++</b>         |

# HALOPERIDOL DECANOATE





# FLUPHENAZINE DECANOATE



NDC 63323-272-05 27205

**FLUPHENAZINE  
DECANOATE**  
*INJECTION, USP*

**25 mg/mL** 

For IM or SC Use

**5 mL**  
Multiple Dose Vial  
Rx only

# RISPERIDONE MICROSPHERES



# PALIPERIDONE PALMITATE



# OLANZAPINE PAMOATE

**ZYPREXA** *Relprevv*  
(olanzapine) *For Extended Release*  
*Injectable Suspension*

# OLANZAPINE PAMOATE

## Warnings

- Post-Injection Delirium/Sedation Syndrome: Adverse events with signs and symptoms consistent with olanzapine overdose, in particular, sedation (including coma) and/or delirium, have been reported.
- Zyprexa® Relprevv™ must be administered in a registered healthcare facility with ready access to emergency response services. After each injection, patients must be observed at the healthcare facility by a healthcare professional for at least 3 hours.

# ADMINISTRATIVE/OPERATIONAL



# ADMINISTRATIVE/OPERATIONAL

Overall Medication Management Policy, Practices or Guidelines



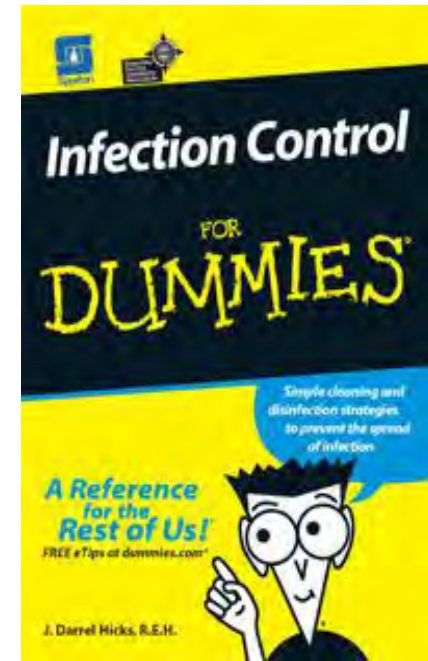
# ADMINISTRATIVE/OPERATIONAL

- Disposal of medical waste and sharps including placement and handling of regulated medical waste containers, identification of hazardous to handle medications and mitigation techniques, and disposal guidelines for expired or unusable medications.





# ADMINISTRATIVE/OPERATIONAL



# ADMINISTRATIVE/OPERATIONAL



# ADMINISTRATIVE/OPERATIONAL



# RECOMMENDATIONS

Improve engagement and linkages across the service continuum:

- Increase use of case management and/or ACT (where available)
- Increase use of peer services
- Increase hospital and community-based linkages and collaborations
- Develop group programming and/or Injection clinics

# RECOMMENDATIONS

Improve clinical practices:

- Develop a RARC (Repeat Admission Review Committees/Coordinator)
- Increase focus on integrated dual diagnoses treatment
- Increase focus on management of comorbid medical conditions
- Develop recovery-oriented, strengths based treatment planning
- Other:
  - Motivational Interviewing (pre-discharge)
  - CBT

# RECOMMENDATIONS

Improve overall medication practices:

- Increase use of clozapine and LAIs
- Increase staff and patient awareness and education about LAIs.
- Improve medication prescription fills upon discharges
- Increase medication-assisted alcohol treatment

# RECOMMENDATIONS

Agency for Healthcare Research and Quality – AHRQ /  
Service Delivery Innovation

Plan: Strategies focused primarily on steps that could be taken in the inpatient setting to facilitate the provision of appropriate treatment and support services after discharge including switching medications from oral to LAI .

Outcome: Significant reduction in overall readmission rates at participating hospitals with associated declines in inpatient days and costs.

<http://www.innovations.ahrq.gov/content.aspx?id=3082>

# RECOMMENDATIONS

## A New Psychosocial Tool for Gaining Patient Understanding and Acceptance of Long-acting Injectable Antipsychotic Therapy

by Robert A. Lasser, MD, MBA; Nina R. Schooler, PhD; Mary Kujawa, MD, PhD; Kathleen Jarboe, PHMCNS-BC; John Docherty, MD; and Peter Weiden, MD

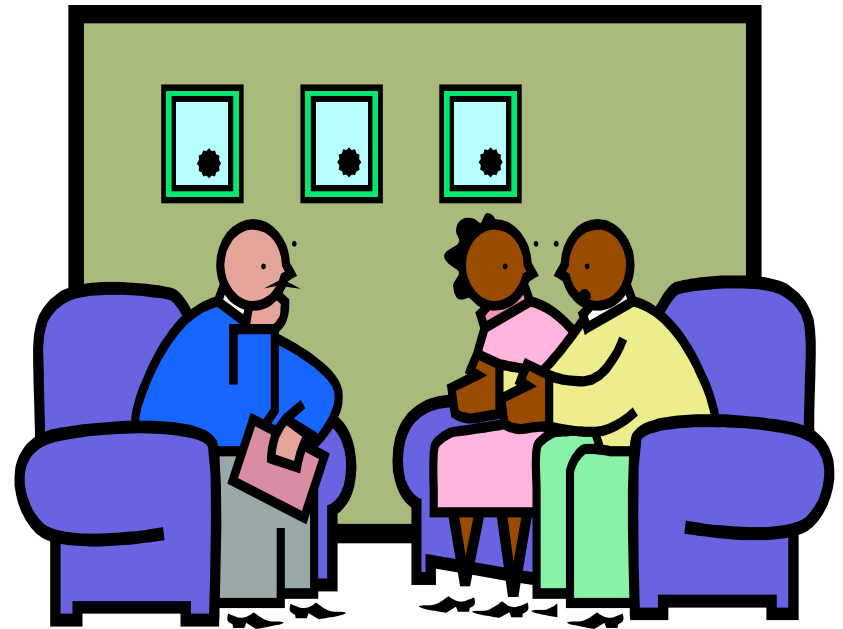
GAIN approach was designed as a standard interview process for presenting the option of changing from oral antipsychotic to LAI and encompasses (acronym for) **g**oal setting, **a**ction planning, **i**nitiating treatment, and **n**urturing motivation.

[http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2714813/pdf/PE\\_6\\_04\\_22.pdf](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2714813/pdf/PE_6_04_22.pdf)



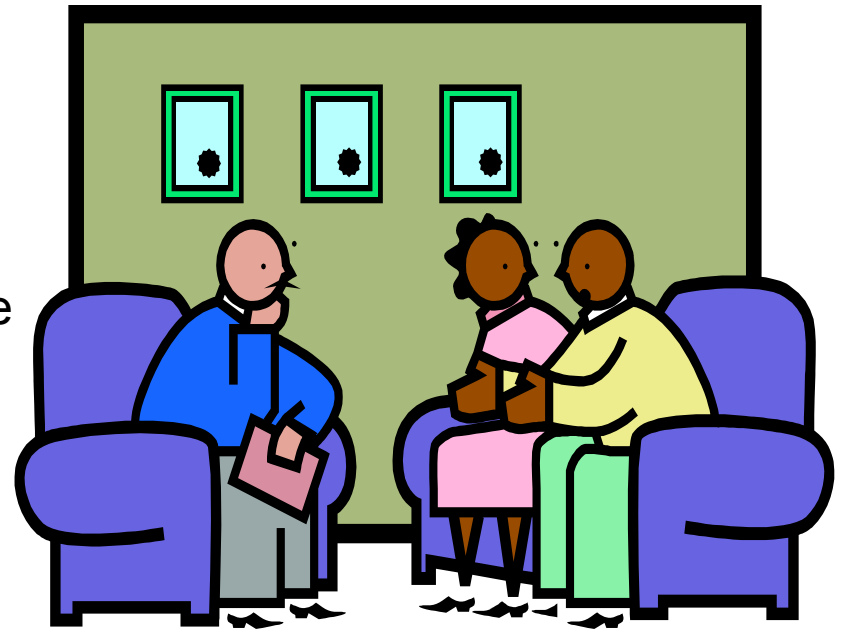
# Role of Peers in Promoting Recovery

- Some Research findings
- Theories and concepts that support the work of peer counseling
- Defining peer counselor and roles



# Some Research Findings

- Utilizing people in recovery from serious mental illnesses improves and augments public care.
- Peers provide services that yield equivalent patient outcomes compared to professionals by offering role modeling, hope for recovery, practical skills training and engagement and have impacted the wider mental health system by reducing costs, improving outreach and engagement improving provider attitudes.
- Psychiatric patients who received peer support were less likely to be readmitted.



# Theories & Concepts Supporting Peer Counseling

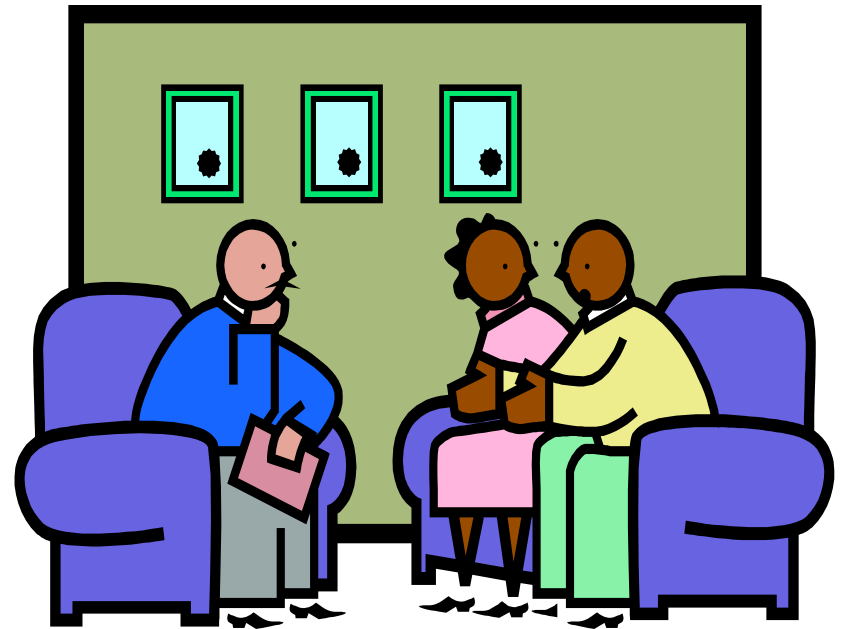
**Social support** – people around us who care about us

**Experiential knowledge** – specialized information gleaned from living with a mental illness

**Helper-therapy principle** – benefits from helping others (enhanced interpersonal competence; feeling of gaining as much as given to others; gets knowledge from working with others; enhances sense of self through positive feedback and affirmations)

**Social learning theory** – credibility of peers leads to better outcomes and – enhances both parties' self-efficacy

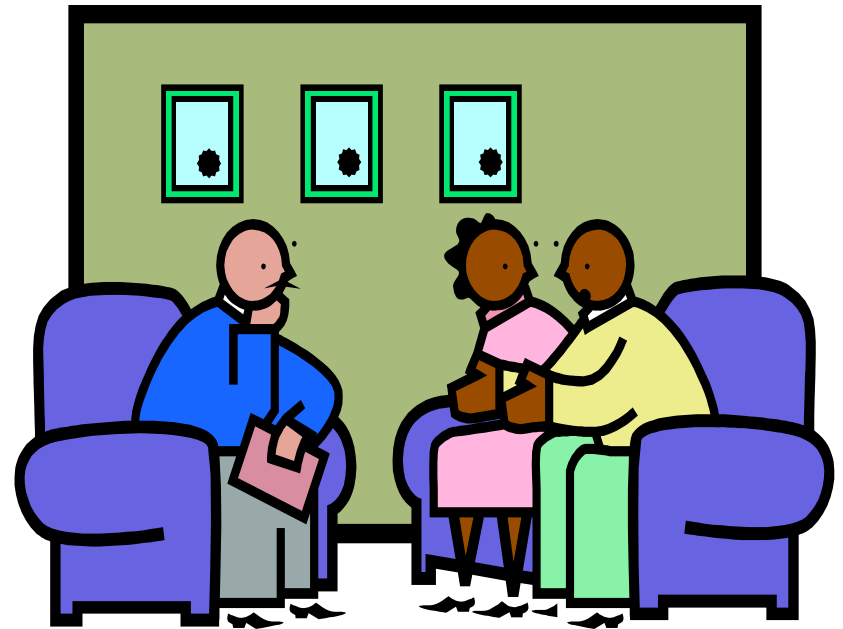
**Social comparison theory** – people are attracted to others who share commonalities, in order to feel a sense of “normalcy”



# The Role of Peer Counselors

Peer Counselors are individuals with lived experience in using the mental health system, and who have...

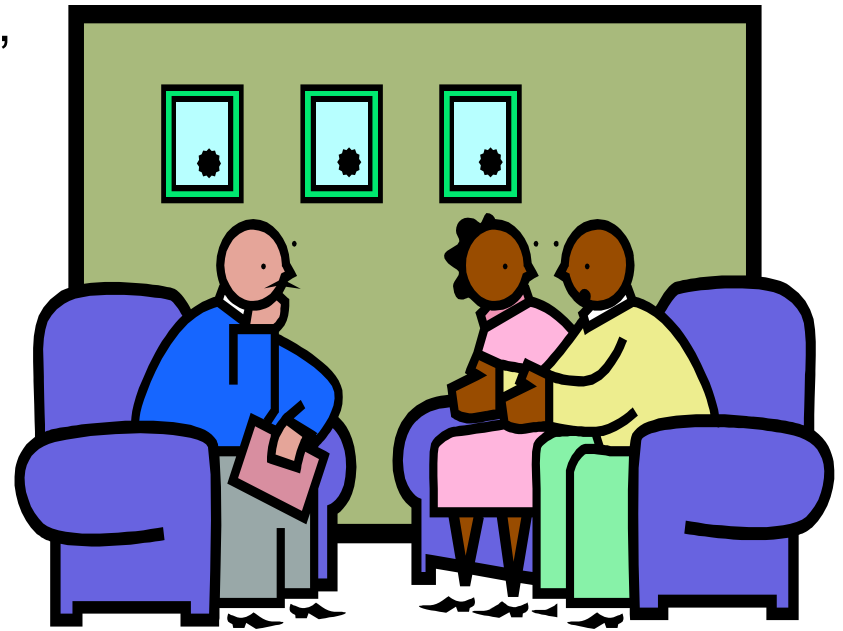
- Been trained within peer advocacy and other human service agencies to help current consumers of services
- Reached a point in their personal recovery where they can give hope to others by sharing stories of overcoming challenge and stigma related to living with a mental illness
- Developed an understanding of recovery principles



# The Role of Peer Counselors

Peer Counselors also

- Teach self-advocacy and encourage consumers to ask questions, set goals, and discuss concerns with their care team
- Run recovery-focused groups and build trust with consumers
- Share resources about recovery programs in the community
- Engage consumers using supportive counseling, role modeling, appropriate disclosure, and providing hope



# CONCLUSION

LAI may be useful for people who:

- experience frequent relapses on oral medications
- have trouble maintaining oral regimen
- who prefer injections over oral treatments

LAI is an important evidenced-based clinical intervention, although underutilized despite strong evidence, that has an impact on treatment adherence, costs, quality, outcomes and re hospitalizations.

Thank You!

Q & A

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