

# A Collaborative Approach To Care Coordination For Patients With Schizophrenia: Perspectives From Nursing & Social Work

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# Educational Objectives

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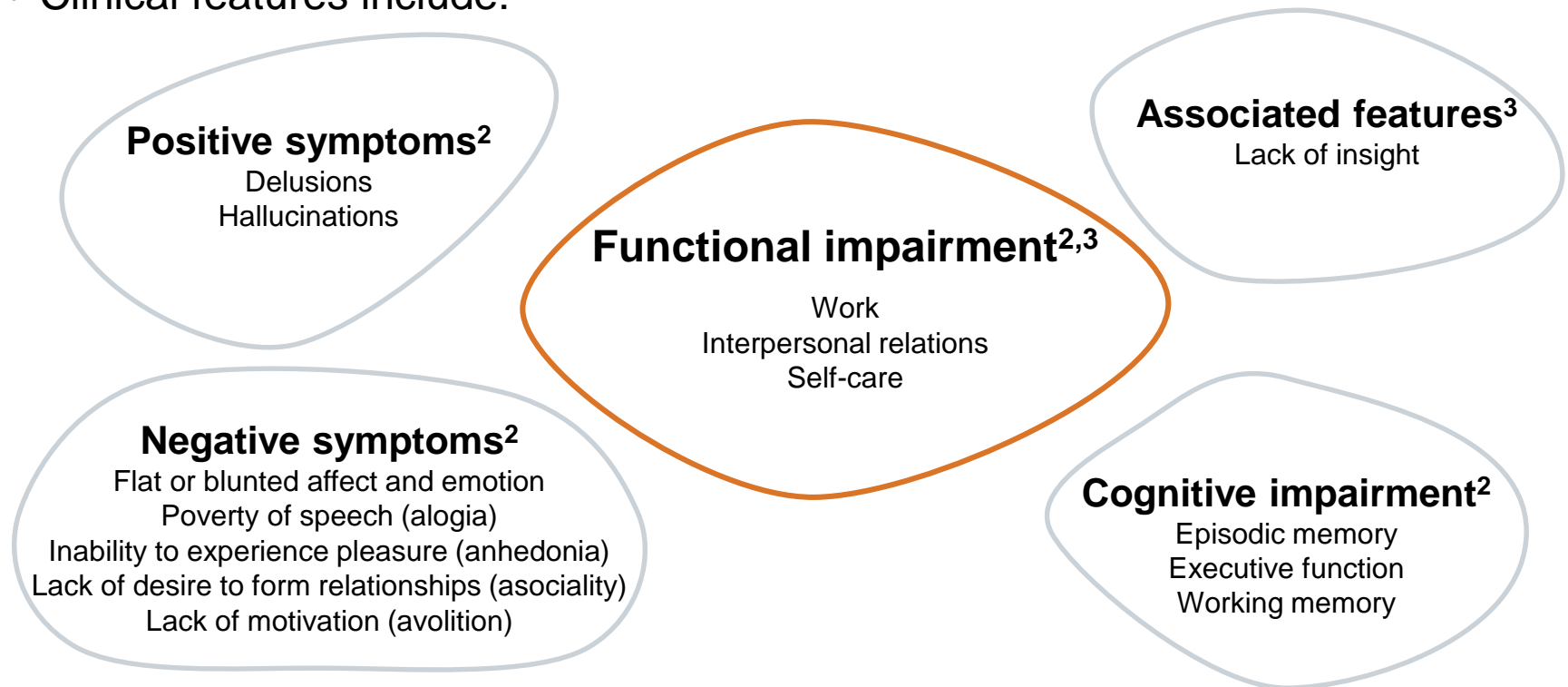
- **Review current challenges** faced by patients with schizophrenia during the transition from hospital discharge to the community care setting
- **Highlight published data on** outcomes related to patient relapse, outpatient visit attendance, rehospitalization and the value of clinical bridging strategies
- **Review interventions** to assist in discharge planning
- **Discuss antipsychotic medications** and adherence issues

# SCHIZOPHRENIA BACKGROUND

**James McCreath, PhD**

# Clinical Features of Schizophrenia

- Schizophrenia is a cyclical disease characterized by multiple psychotic relapses<sup>1</sup>
- Clinical features include:

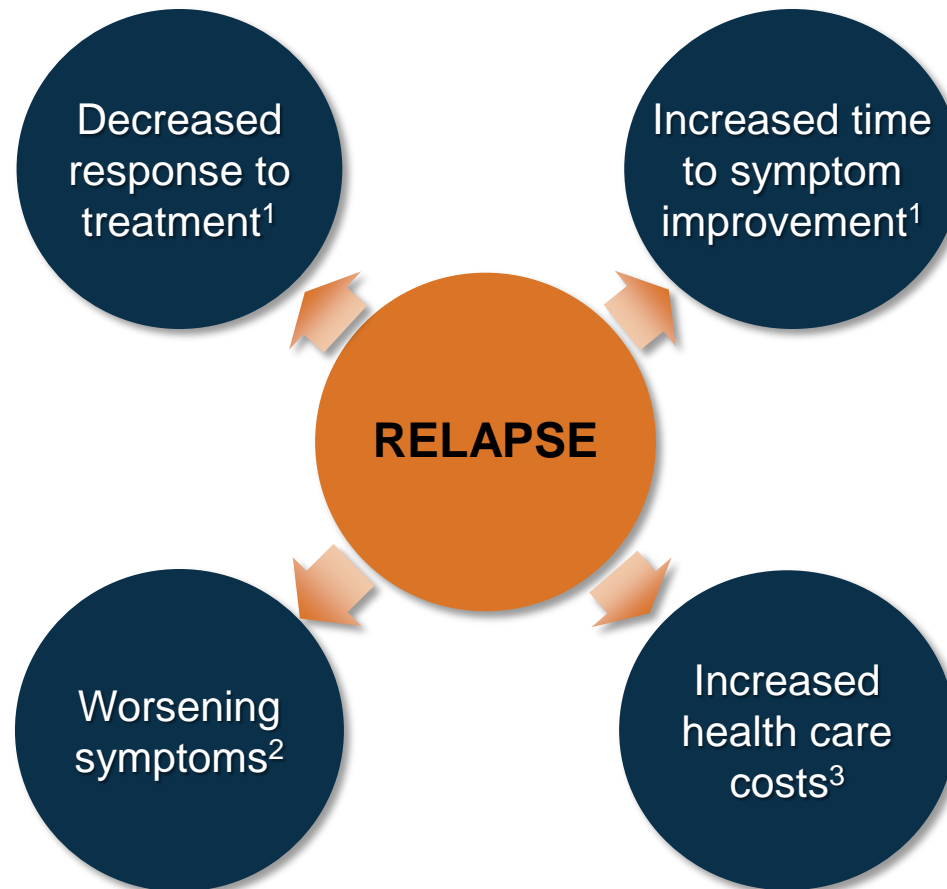


1. Lieberman JA, et al. *Psych Serv.* 2008;59(5)487-496.

2. Tandon R et al. *Schizoph Res.* 2009;110(1-3):1-23;

3. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.* Washington, DC: American Psychiatric Association; 2013.

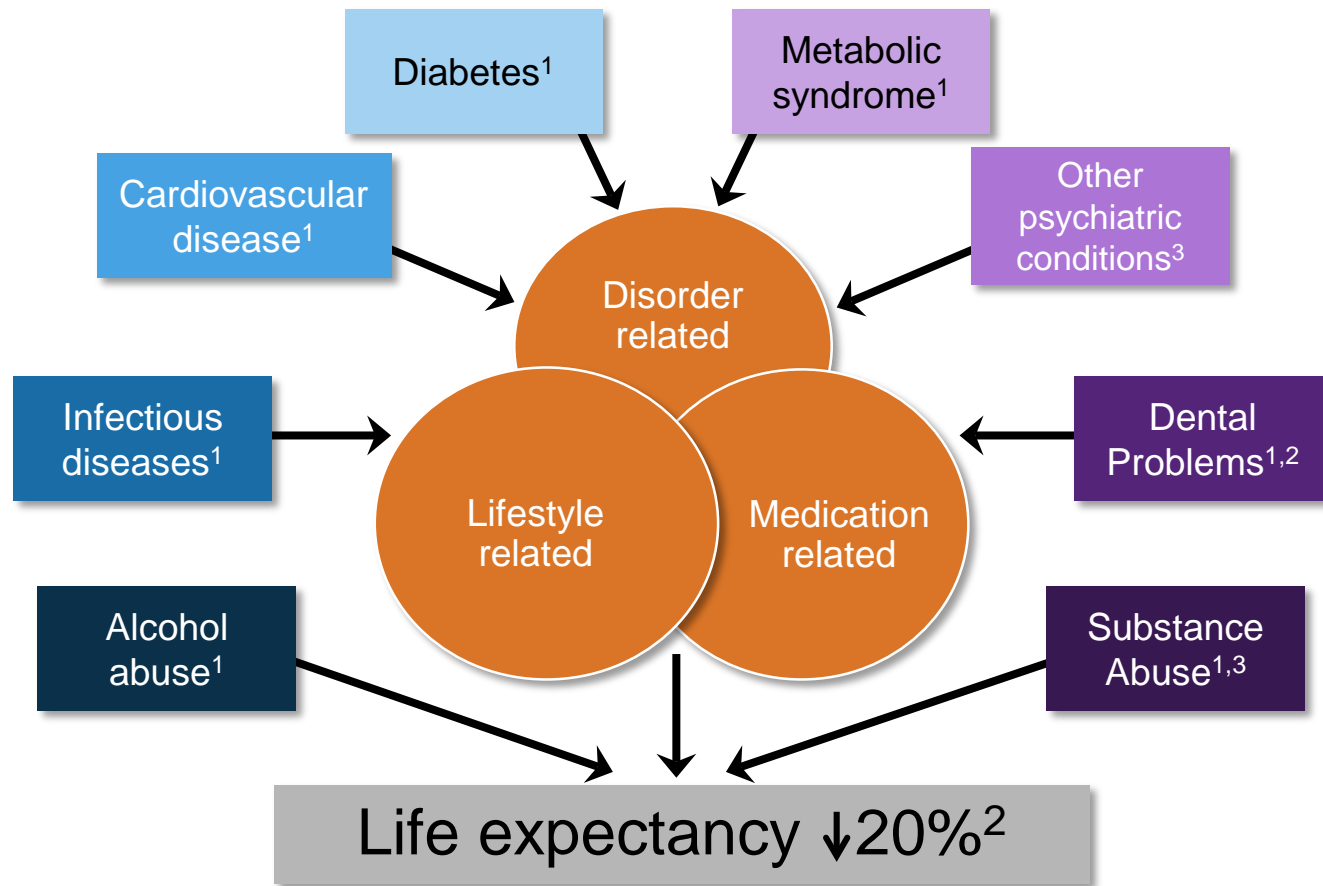
# Relapses Can Negatively Impact a Patient With Schizophrenia



1. Lieberman JA et al. *Neuropsychopharmacology*. 1996;14(3 suppl):13S-21S;
2. Emsley R et al. *Schizophr Res*. 2012;138(1):29-34;
3. Almond S et al. *Br J Psychiatry*. 2004;184:346-351.



# Patients With Schizophrenia Have Comorbid Conditions That Increase Morbidity and Mortality



1. Leucht S et al. *Acta Psychiatr Scand.* 2007;116(5):317-333;
2. Perese EF, Wu Y-WB. *Int J Psychosoc Rehab.* 2010;14(2):43-56;
3. Buckley PF et al. *Schiz Bull.* 2009;35:383-402.



# DISCUSSION


# TRANSITION OF CARE FOR PATIENTS WITH SCHIZOPHRENIA: CURRENT STATE

**Brooke Kempf, PMHNP**

# Many Patients With Schizophrenia Fail to Transition From Inpatient Settings to CMHCs



Nearly two-thirds of patients did not attend their initial outpatient appointment<sup>1</sup>



~40% of patients did not receive any outpatient visits within 30 days of discharge<sup>2</sup>

CMHCs, community mental health centers.

1. Boyer CA et al. *Am J Psychiatry*. 2000;157(10):1592-1598;
2. Olfson M et al. *J Clin Psychiatry*. 2010;71(7):831-838.

# Risk Factors Associated With Increased Missed CMHC Appointments/Disengagement With Services\*

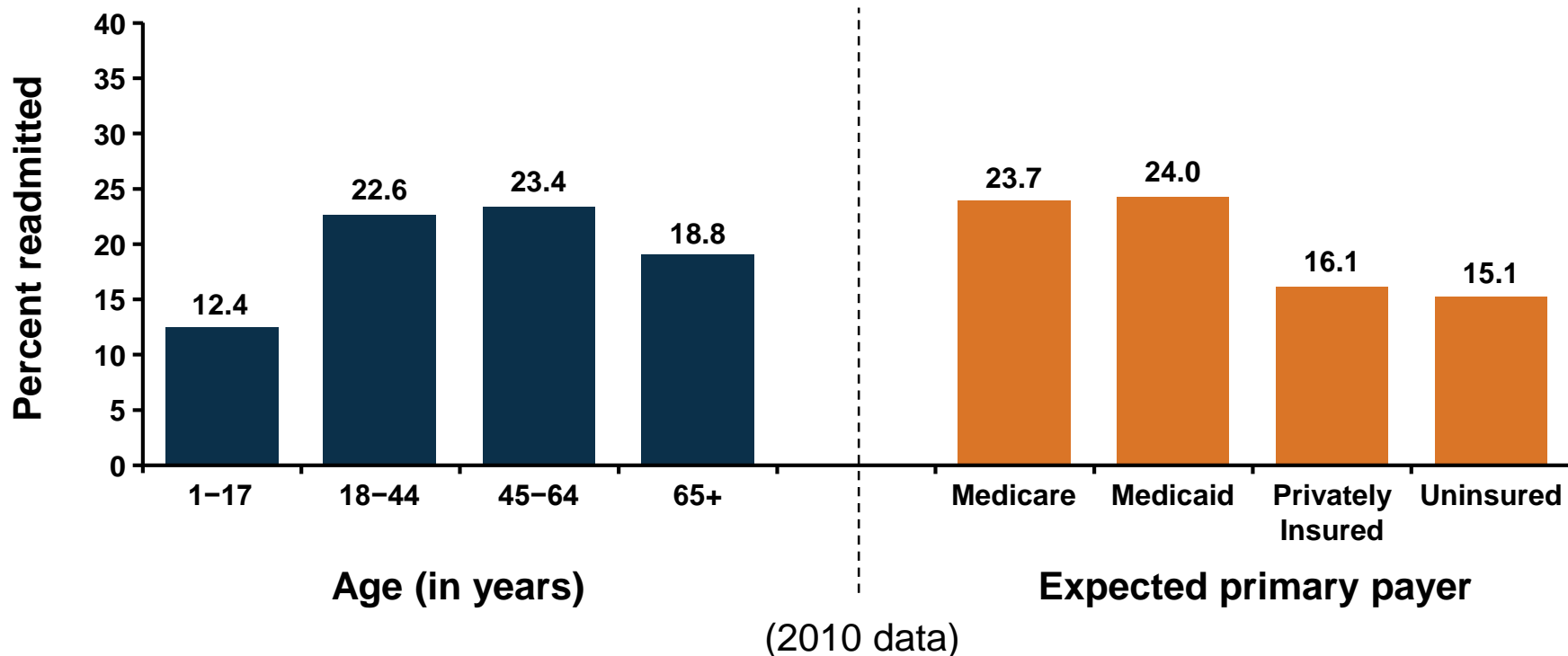
- Lack of established outpatient clinician<sup>1</sup>
- Lack of prior outpatient mental health care<sup>2</sup>
- Short inpatient stay<sup>2</sup>
- Ethnicity<sup>3</sup>
- Involuntary patient admission<sup>3</sup>
- Poverty<sup>2</sup>
- Discharge against medical advice<sup>3</sup>
- Substance abuse<sup>3</sup>
- Lack of involvement in treatment decisions<sup>4</sup>
- Transportation difficulties<sup>5-7</sup>

\*Patients were diagnosed with various mental disorders, including schizophrenia.  
CMHC, community mental health center.

1. Compton MT et al. *Psychiatr Serv.* 2006;57(4):531-537; 2. Olsson M et al. *J Clin Psychiatry.* 2010;71(7):831-838; 3. Stein BD et al. *Psychiatr Serv.* 2007;58(12):1563-1569; 4. Priebe S et al. *Br J Psychiatry.* 2005;187:438-443; 5. Carrion PG et al. *Psychiatric Serv.* 1993;44(8); 6. Leo RJ et al. *CNS Spectrums.* 2005;12(6):33-39; 7. Fleischacker WW et al. *J Clin Psychiatry.* 2003;64(Suppl 16):10-13.

# DISCUSSION

# Rehospitalization Within 30 Days for a Psychiatric Condition Is Common (2010)



- Highest readmission rates were seen for patients aged 18–44 years and 45–64 years
- Readmission rates for Medicare and Medicaid patients were approximately 50% higher than for other patients

1. Elixhauser A, et al. Statistical Brief #153. April 2013. Available at: <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb153.pdf>. Accessed August 12, 2014.

# ADDRESSING TRANSITION OF CARE NEEDS AT TIME OF HOSPITALIZATION

**James McCreath, PhD**



# HEDIS 2014 Measures Related to Assessment of Patients With Schizophrenia<sup>1</sup>

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- Follow-up after hospitalization for mental illness
- Diabetes screening for people with schizophrenia who are using antipsychotic medications
- Diabetes monitoring for people with diabetes and schizophrenia
- Cardiovascular monitoring for people with cardiovascular disease and schizophrenia
- Adherence to antipsychotic medication usage for individuals with schizophrenia
- Annual monitoring for patients on persistent medications
- Medication reconciliation postdischarge

HEDIS, Healthcare Effectiveness Data and Information Set.

1. HEDIS 2014 Web site. <http://www.ncqa.org/HEDISQualityMeasurement/HEDISMeasures/HEDISDataSubmission.aspx>. Accessed April 2014.

# DISCUSSION

# The Discharge Plan Should Start at Hospital Admission

- Should be a collaborative process between hospital staff, the patient, the family, and the community aftercare agencies<sup>1</sup>
- Services that are needed can include<sup>2</sup>:
  - Assistance with finding adequate housing
  - Obtaining referrals for patients to enter vocational / prevocational planning
  - Obtaining referrals for patients into programs that offer social activities
- Recovery planning is a vital part of the discharge plan<sup>3</sup>
- Based on 1 study, patient involvement in outpatient programs while still in the hospital had a significant impact on patients keeping scheduled appointments for outpatient services<sup>4</sup>
- Identifies the patient's plans and support that the patient and caregiver would require after discharge from the inpatient unit<sup>1</sup>

1. Alghzawi HM. *Int Scholarly Research Network*. 2012;article ID 638943;

2. Olsson M, Walkup J. *N Dir Ment Health Serv*. 1997;73:75-85;

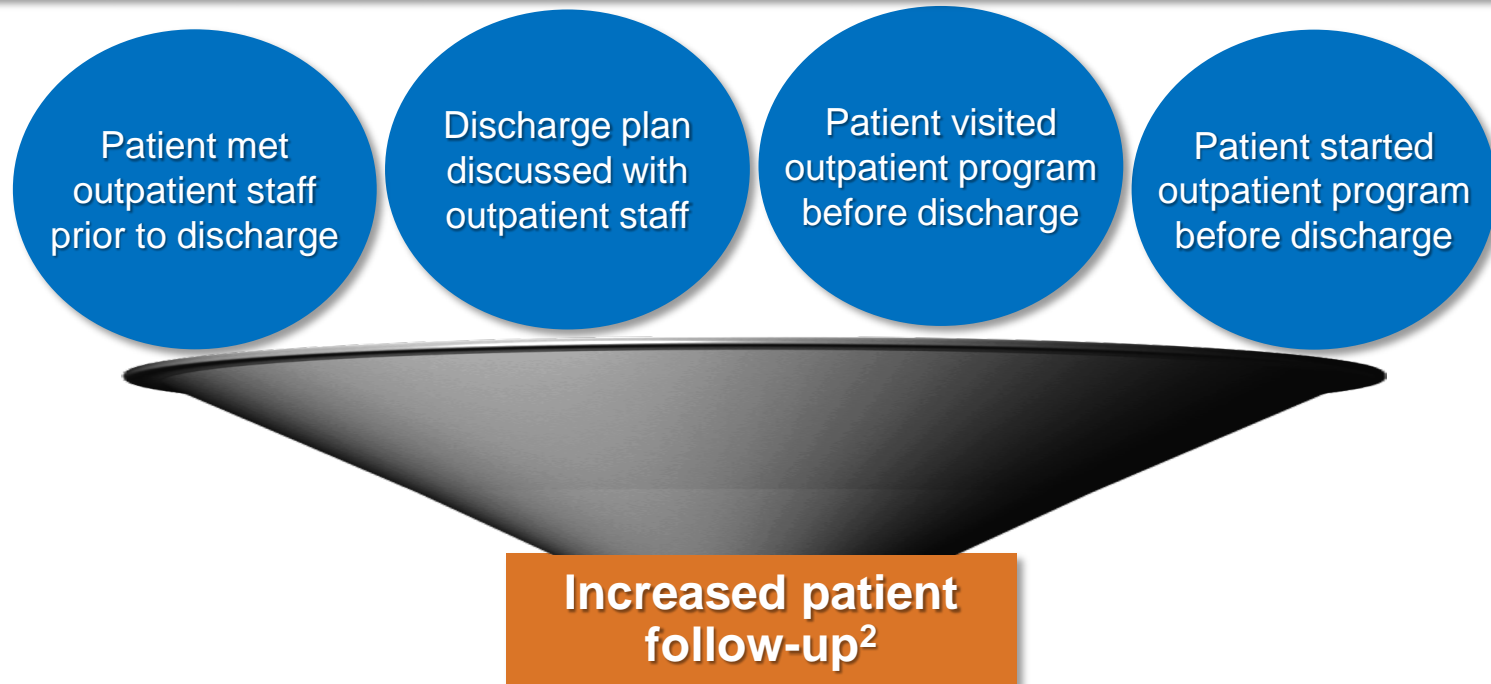
3. Reducing Avoidable Readmissions Effectively. Recommended Actions for Improved Care Transitions: Mental Illnesses and/or Substance Use Disorders. Available at: [http://www.rarereadmissions.org/documents/Recommended\\_Actions\\_Mental\\_Health.pdf](http://www.rarereadmissions.org/documents/Recommended_Actions_Mental_Health.pdf). Accessed Dec 15, 2015;

4. Boyer CA et al. *Am J Psychiatry*. 2000;157(10):1592-1598.



# Direct Patient Involvement in the Discharge Plan Improved Patient Follow-up

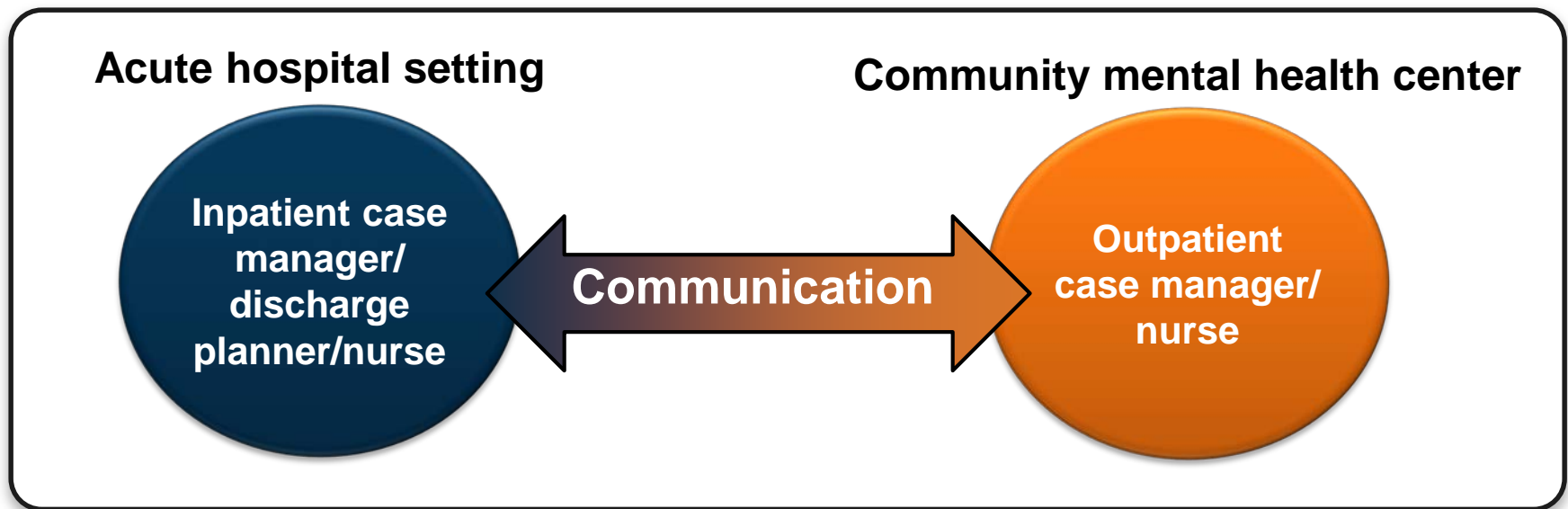
Implementing a discharge plan, providing education, and ensuring follow-up increased the self-care abilities of patients with schizophrenia<sup>1</sup>



1. Khankeh H et al. Iran J Nurs Midwifery Res. 2011;16(2):162-168;
2. Boyer CA et al. Am J Psychiatry. 2000;157(10):1592-1598.

# Effective Communication May Improve the Clinical Bridging of Patients From Acute to Outpatient Settings

Based on a study of 229 inpatients with a primary psychiatric diagnosis: Patients whose discharge plans were discussed by inpatient and outpatient clinicians were more than twice as likely to keep their initial outpatient appointment (43% vs. 19%)<sup>1</sup>



1. Boyer CA et al. Am J Psychiatry. 2000;157(10):1592-1598.

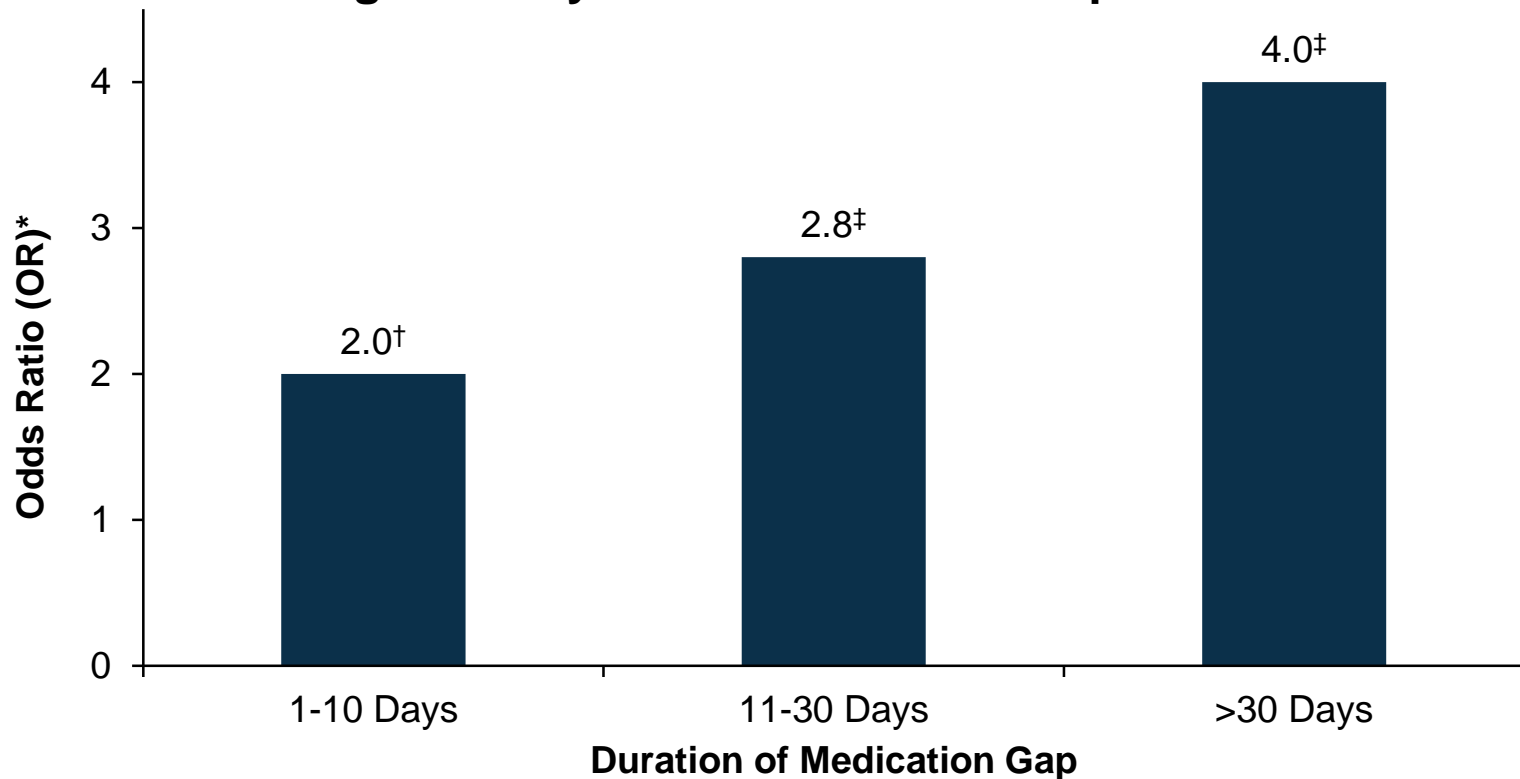
# DISCUSSION

# PHARMACOTHERAPY AND ADHERENCE

**Brooke Kempf PMHNP**

# Even Small Gaps in Antipsychotic Medication Increases the Risk of Hospitalization

Missing medication for as little as 1–10 days significantly raised the risk of hospitalization



\*Risk of hospitalization relative to patients with no medication gap;

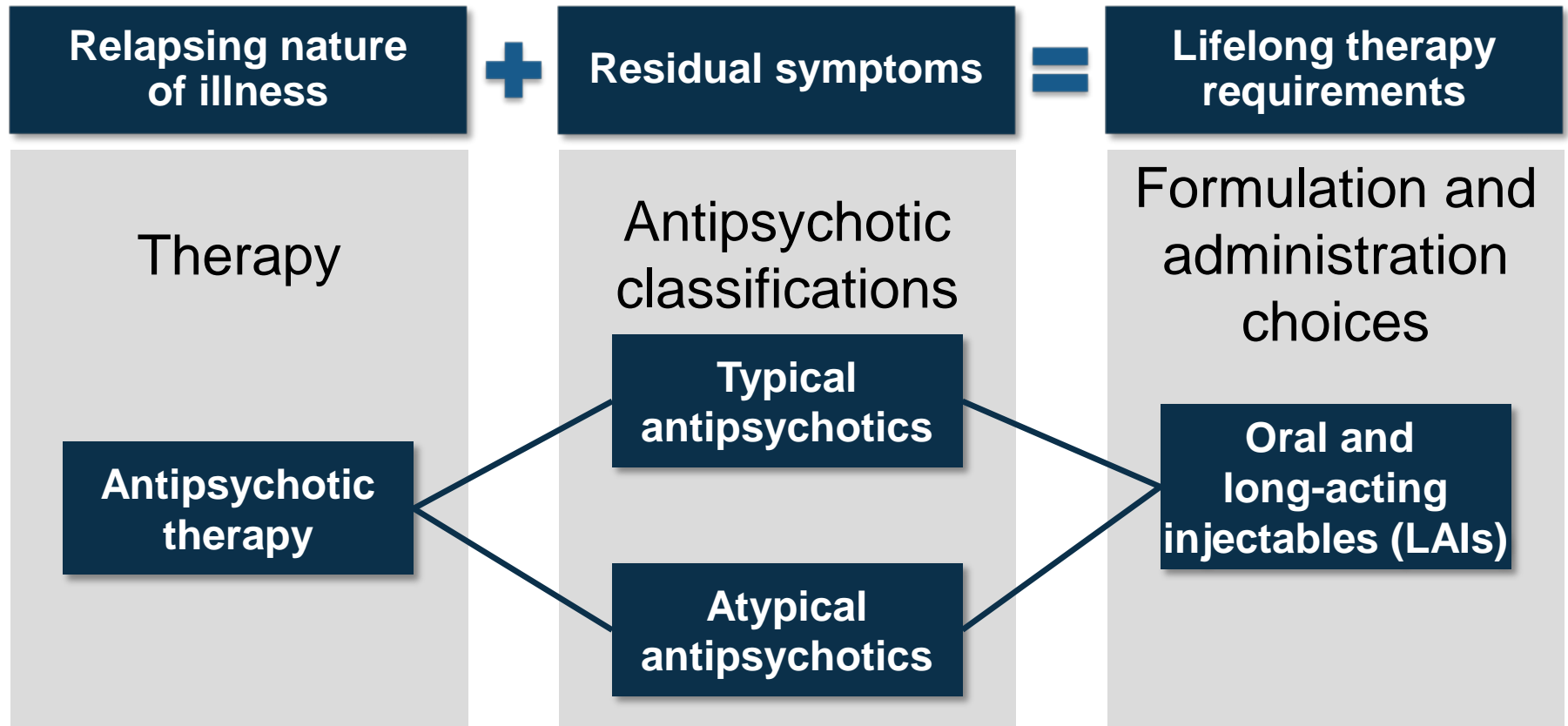
† $P=0.004$ ;

‡ $P<0.001$ .

1. Weiden PJ et al. *Psychiatr Serv.* 2004;55(8):886-891.



# The Need for Lifelong Medication



1. Melrose S. *J Pract Nurs.* 2009;59(2):3-4.

# Considerations for Oral Antipsychotic Utilization

## Oral Antipsychotics

### Pros

- Effective<sup>1</sup>
- Many generics available<sup>2</sup>
- Extensive clinical experience<sup>2</sup>
- Flexibility<sup>3</sup>
- Short duration of action<sup>3</sup>

### Cons

- Daily administration<sup>4</sup>
- Potential for misuse<sup>3</sup>
- Influenced by first-pass metabolism<sup>5</sup>

1. Citrome L. *Expert Opin Pharmacother.* 2012;13:1545-1573;
2. Albright B. *Behav Healthcare.* 2011;1-4; \
3. Burton N. *Psychiatry* (Second edition). Wiley-Blackwell; 2010;
4. Bera RB. *J Clin Psychiatry.* 2014;75(Suppl 2):30-33;
5. Zhornitsky S and Stip E. *Schizophrenia Res Treat.* 2012;2012:ID407171 [Epub 2012 Feb 15].

# Considerations for LAI Antipsychotic Utilization

## Long-acting Injectable Antipsychotics

### Pros

- Promote treatment adherence<sup>1-3</sup>
- Transparency of adherence<sup>2</sup>
- Ease of administration<sup>4</sup>
- Reduced peak-trough plasma levels<sup>2</sup>
- Improved patient outcome<sup>2</sup>
- Improved patient and physician satisfaction<sup>2</sup>
- Lower relapse rate<sup>2,5</sup>
- Decreased rehospitalizations<sup>6</sup>

### Cons

- Patients' concerns regarding potential pain of injection<sup>7</sup>
- Slow dose titration and longer time to reach steady state<sup>4</sup>
- May prolong side effects<sup>4</sup>
- Difficult to adjust small doses<sup>7</sup>
- May give patients feeling of being controlled<sup>7</sup>
- Limited number of available formulations<sup>7</sup>
- Potential for small amount to leak into subcutaneous tissue<sup>4</sup>

LAI, long-acting injectable.

1. Patel M et al. *BJPsych*. 2009;195:s1-s4;
2. Geerts P et al. *BMC Psychiatry*. 2013;13:58.
3. Lang K et al. *Psychiatr Serv*. 2010;51;1230-1247;
4. Agid O et al. *Expert Opin Pharmacother*. 2010;11:2301-2317;

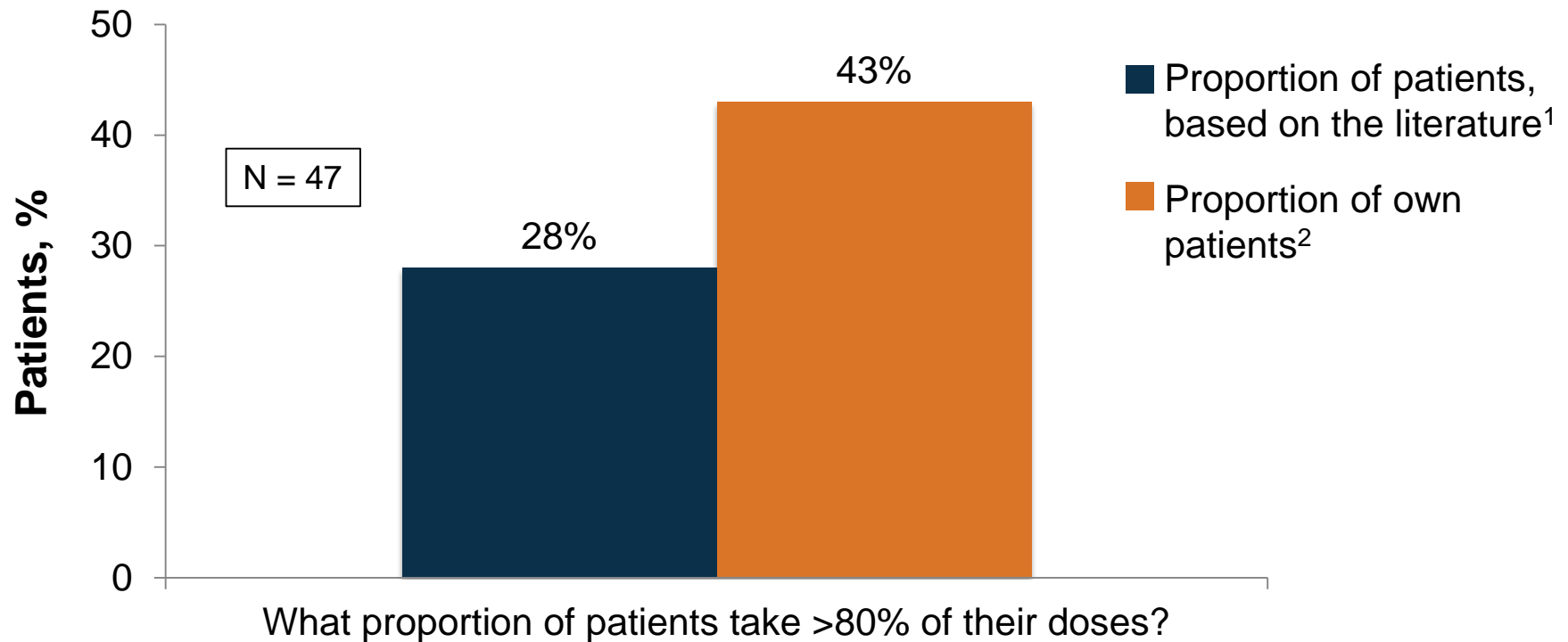
5. Zornitzky S and Stip E. *Schizophrenia Res Treatment*. 2012;2012:407171;
6. Lafeuille M-H et al. *BMC Psychiatry*. 2013;13:221;
7. Jeong H-S. *Clin Psychopharm Neurosci*. 2013;11:1-6.



# DISCUSSION

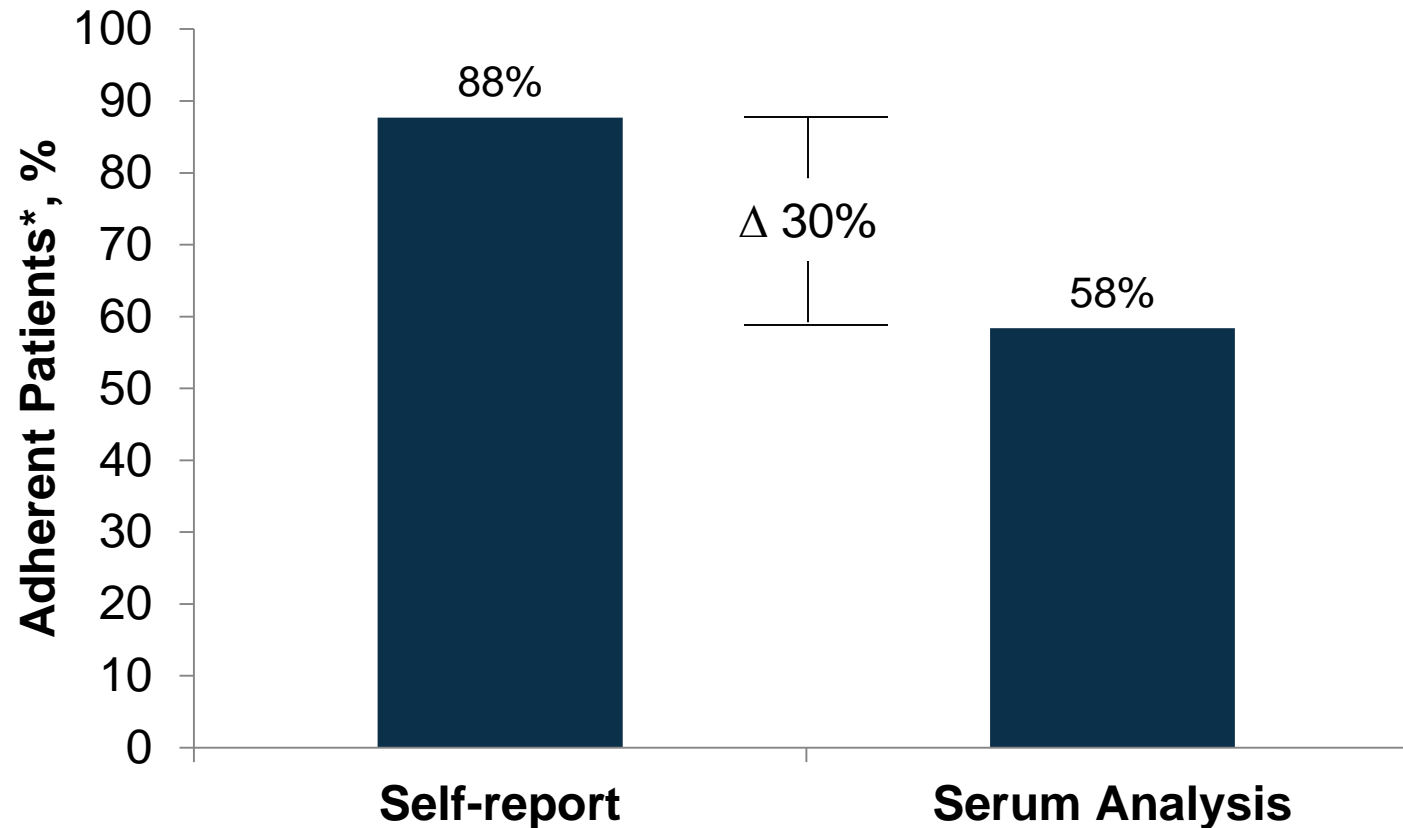
# Clinicians Overestimate Medication Usage in Their Patients With Schizophrenia

1. What proportion of patients with schizophrenia do you believe to be adherent, based on your reading of the literature?
2. What proportion of your patients with schizophrenia are adherent?



1. Expert survey results and guideline references. *J Clin Psychiatry*. 2003;64 (suppl 12):52-94.

# Patients Overestimate Their Medication Usage



\*N=255 patients with mental illness, of which 154 (58%) patients were diagnosed with schizophrenia.

1. Jónsdóttir H et al. J Clin Psychopharmacol. 2010;30(2):169-175.

# Poor Medication Adherence Can Be Common Following Hospital Discharge

Based on one study (n=68):



1. Velligan DI et al. *Psychiatr Serv.* 2003;54(5):665-667.

# Adherence Barriers to Overcome

## Patient-related

- Cultural and religious beliefs<sup>1</sup>
- Language skills<sup>2</sup>
- Stigma<sup>3</sup>
- Lack of social support<sup>3</sup>
- Cognitive deficits<sup>3</sup>
- Lack of insight<sup>4,5</sup>
- Comorbidities<sup>6</sup>

## Medication-related

- Efficacy<sup>6</sup>
- Side effects—actual or fears<sup>3,5</sup>
- Complex medication regimen<sup>5</sup>
- Lack of perceived benefits<sup>4</sup>
- Poor therapeutic alliance<sup>5</sup>

Willingness to take medication

Adherence

1. Borras L et al. *Schiz Bull.* 2007;33(5):1238-1246.
2. Gilmer TP et al. *Psychiatr Serv.* 2009;60(2):175-182.
3. Hudson TJ et al. *J Clin Psychiatry.* 2004;65(2):211-216.
4. Lacro JP et al. *J Clin Psychiatry.* 2002;63(10):892-909.
5. Kazadi NJB et al. *SAJP.* 2008;14:52-62.
6. Velligan DI et al. *J Clin Psychiatry.* 2009;70(supple 4):1-48.



# Conclusions

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- Patients with schizophrenia being discharged from the hospital to the community setting possess unique challenges that need to be addressed by the treatment teams that work with them
- Many patients fail to effectively connect to the needed outpatient treatment and services due to various disease state, administrative, and socioeconomic issues, increasing the risk of rehospitalization
- The most meaningful and successful transition of care strategies often involve direct patient engagement by outpatient treatment team members prior to and during the discharge planning phase
- Antipsychotic therapy is the cornerstone of modern schizophrenia treatment and is a key component managing the symptoms of the illness; however, nonadherence is extremely common and solving this problem is multifaceted

# QUESTIONS

# CLOSING

# A Collaborative Approach To Care Coordination For Patients With Schizophrenia: Perspectives From Nursing & Social Work

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