Improving the Continuity of Care for Patients With Schizophrenia: A Case Study Approach

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Disclosures

- D. Zubek is an employee of Otsuka America Pharmaceutical, Inc.

This presentation represents the opinions and research of the presenter only and not Otsuka America Pharmaceutical, Inc.

Won’t admit he has a problem. Won’t even admit he’s the patient.

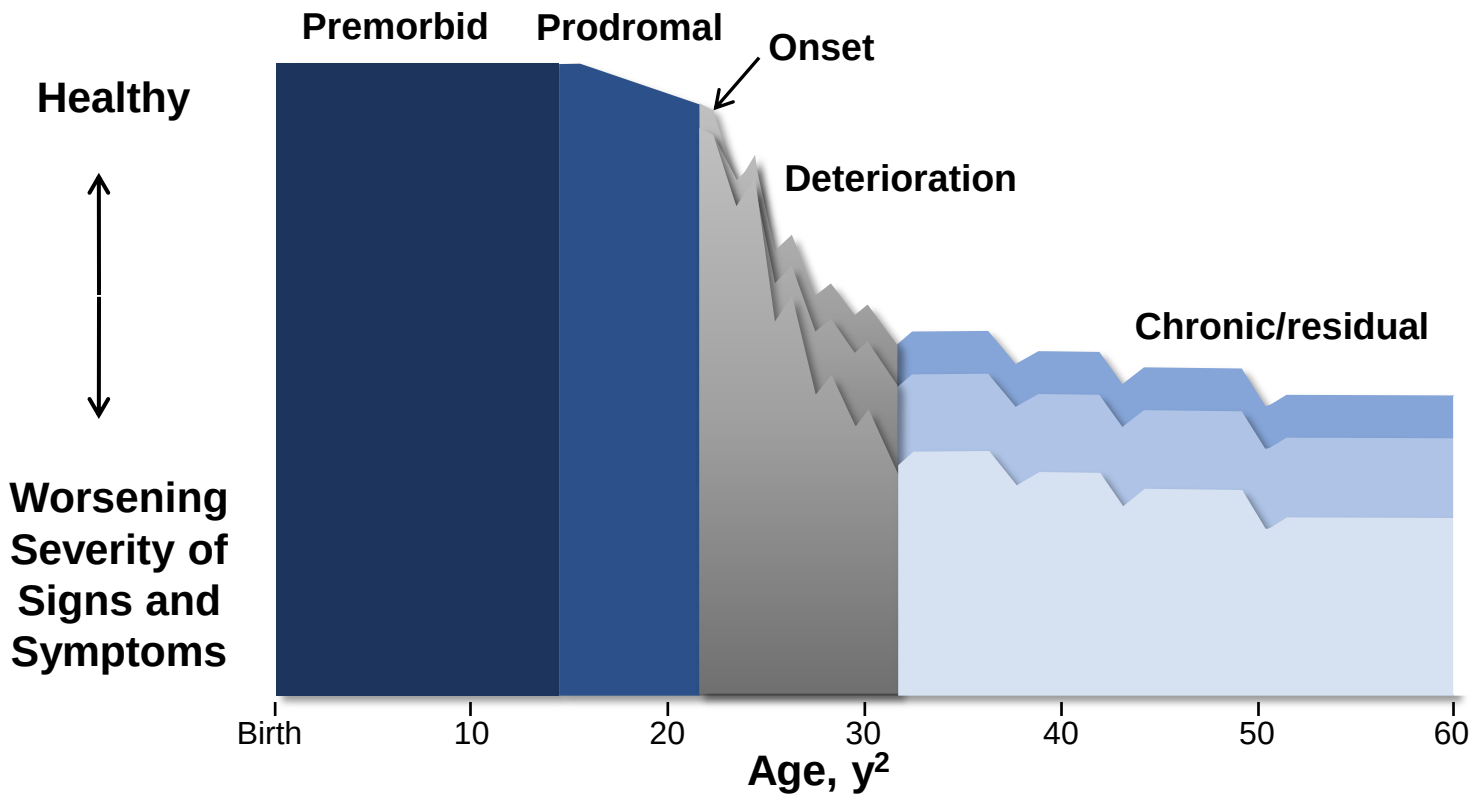
Educational Objectives

- **Review current challenges** faced by case managers and treatment team members during the transition from hospital discharge to the community care setting for patients with schizophrenia
- **Highlight published data on** outcomes related to patient relapse, outpatient visit attendance, re-hospitalization and the value of clinical bridging strategies
- **Propose evidence-based interventions** to assist in discharge planning
- **Discuss antipsychotic medications** and adherence issues

Schizophrenia Background

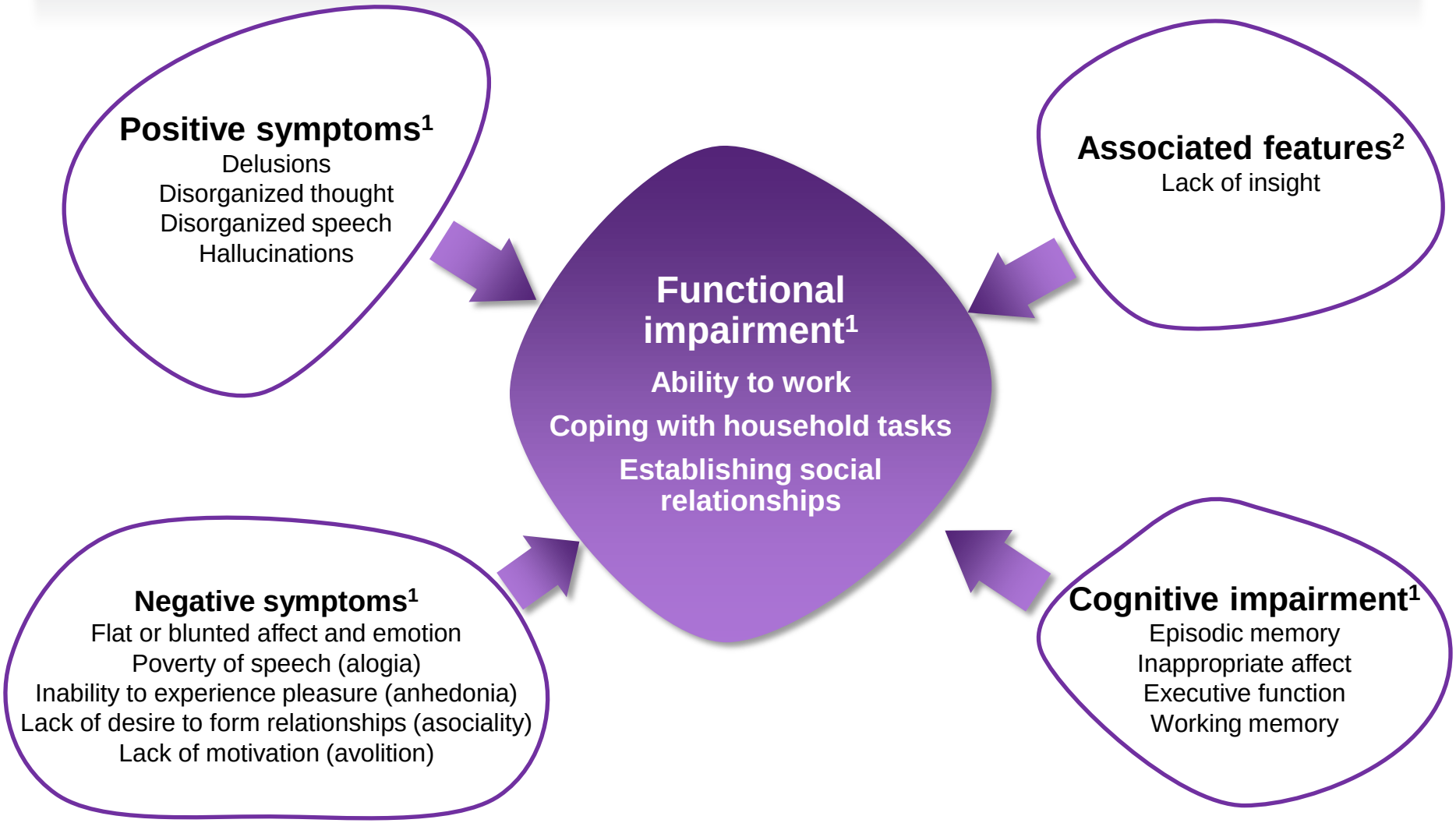
Schizophrenia Is a Deteriorating and Cyclical Disease Characterized by Multiple Psychotic Relapses

Deterioration is most predominant during the early phase of the illness[1]



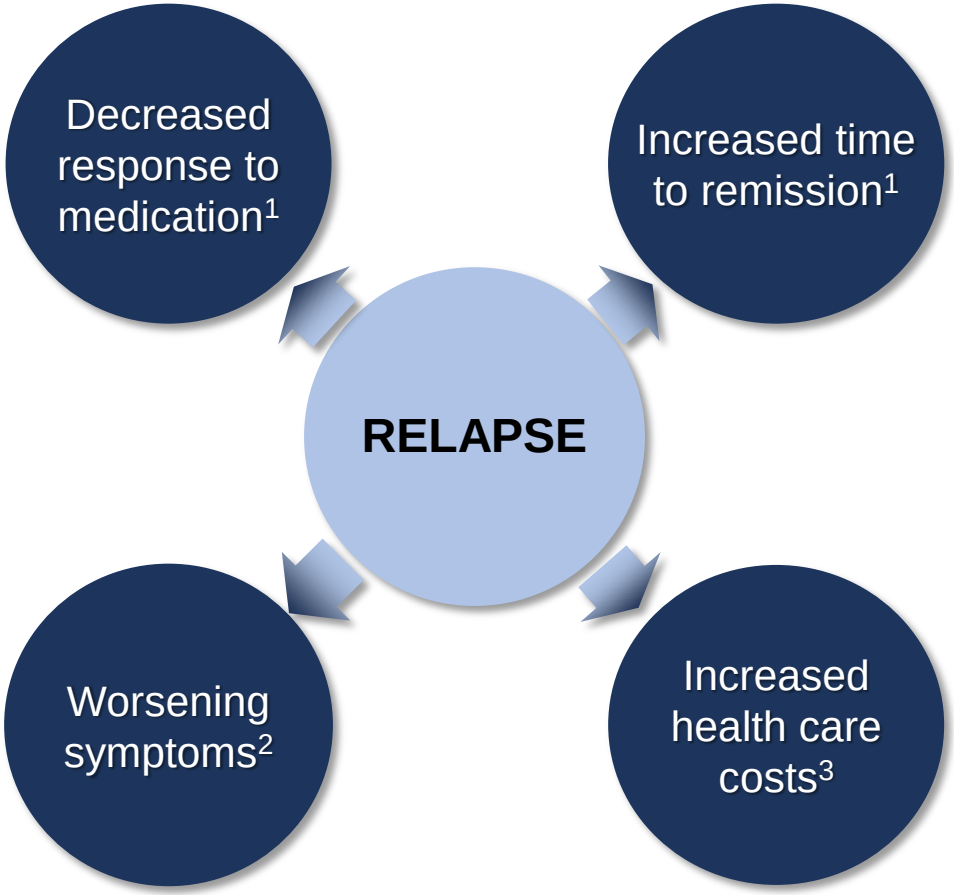
1. Lieberman JA et al. *Biol Psychiatry.* 2001;50(11):884-897. 2. Lewis DA, Lieberman JA. *Neuron.* 2000;28(2):325-334.

A Variety of Symptom Clusters Contribute to Functional Impairment



1. Tandon R et al. *Schizopher Res*. 2009;110(1-3):1-23. 2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*. Washington, DC: American Psychiatric Association; 2000.

Every Relapse Can Negatively Impact a Patient With Schizophrenia



1. Lieberman JA et al. *Neuropsychopharmacololy.* 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.

Poor Insight as Response Predictor

Lack of insight predisposes individuals to nonadherence, higher relapse rates, and increased hospitalization

"A majority of individuals with schizophrenia have poor insight regarding the fact that they have a psychotic illness"[1]

Poor insight is a manifestation of the illness, rather than a coping strategy[1]

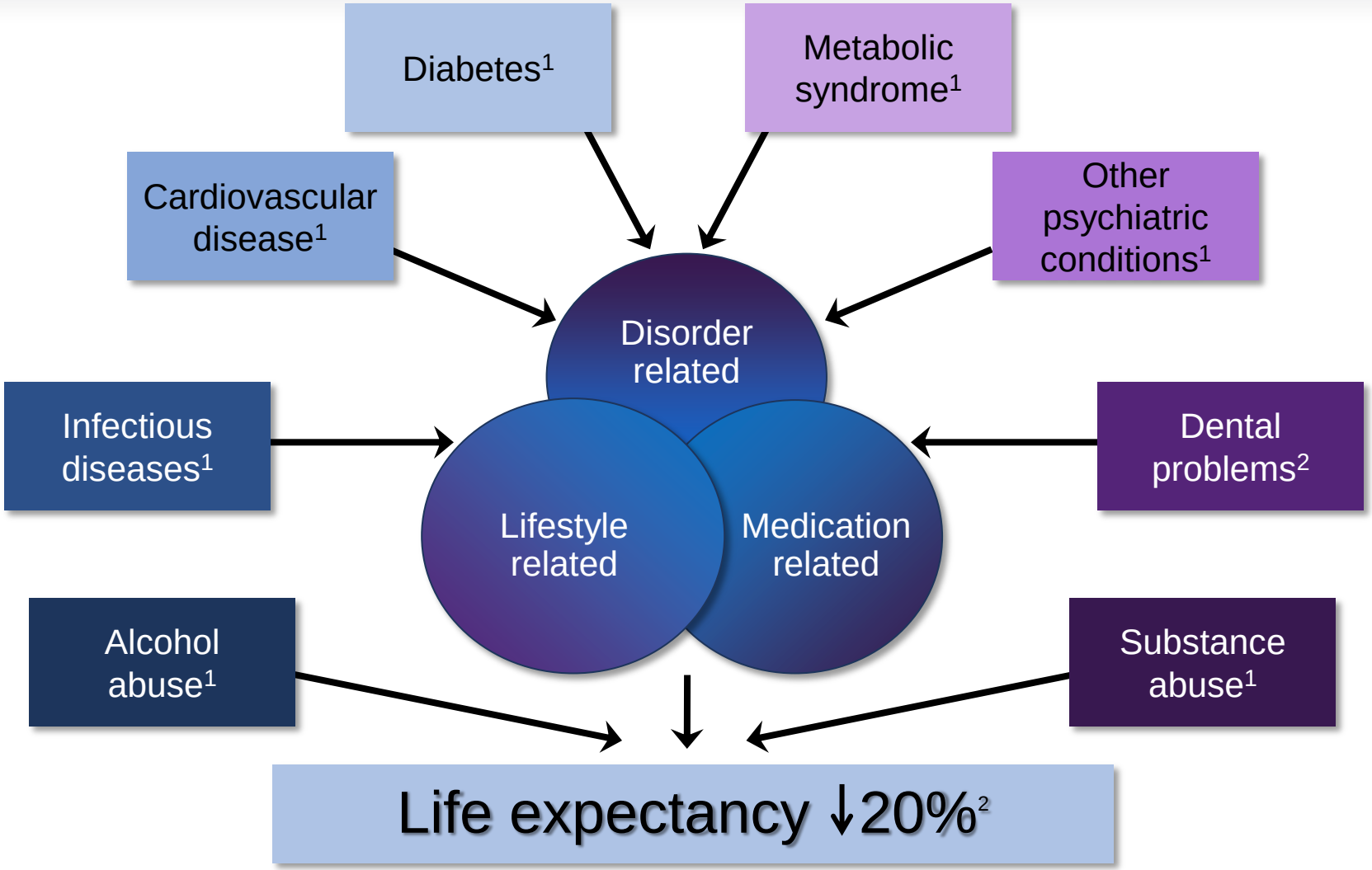
Poorer insight was associated with missed medical appointments[2]:

- Patients were twice as likely not to adhere to medication and not to attend follow-up visits with HCPs

HCP=health care provider.

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition, Text Revision*. Washington, DC; American Psychiatric Association 2000. 2. Novak-Grubic V, Tavcar R. *Eur Psychiatry*. 2002;17(3):148-154.

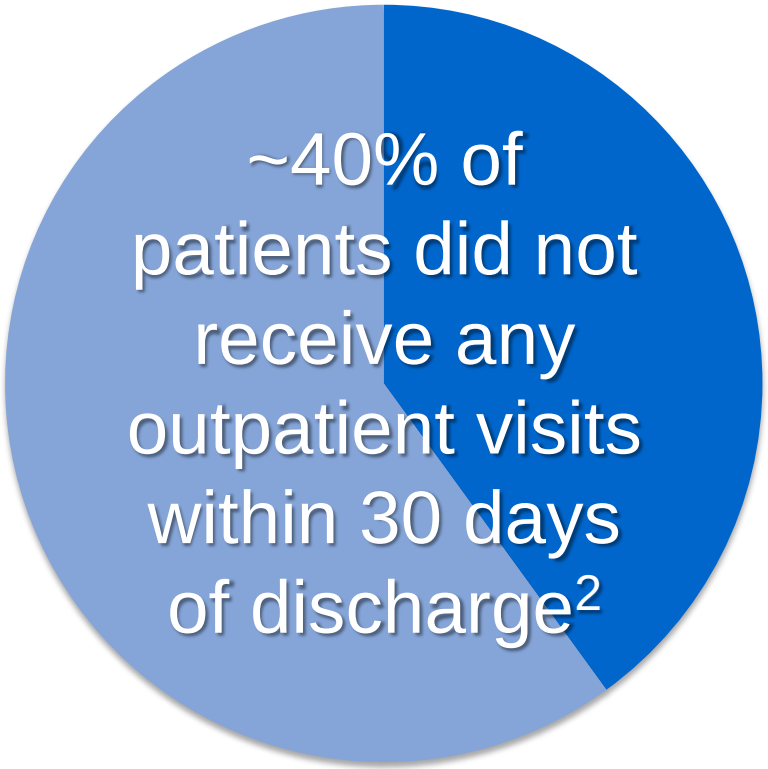
Patients with Schizophrenia have Comorbid Conditions that Increase Morbidity & Mortality



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.

Continuity of Care: Current State

Many Patients With Schizophrenia Fail to Transition From Inpatient Settings to CMHC*s



CMHC=community mental health center.

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.

Multiple Risk Factors Lead to Increased Risk of Missing CMHC* Appointments

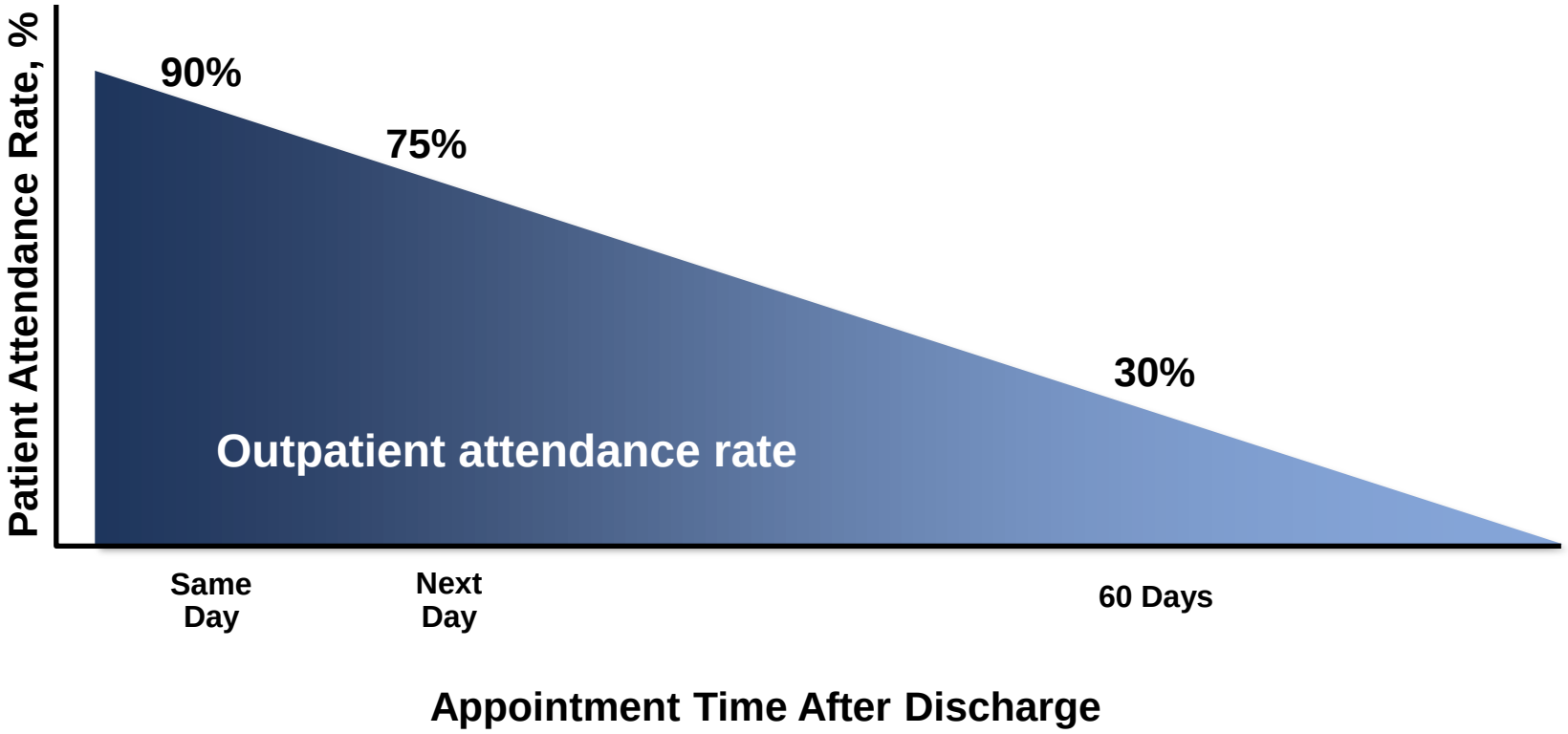
- Lack of established outpatient clinician[1]
- Lack of prior outpatient mental health care[2]
- Short inpatient stay[2]
- Ethnicity[2,3]
- Involuntary patient admission[3]
- Poverty[2]
- Discharge against medical advice[3]
- Substance abuse[3]
- Lack of involvement in treatment decisions[4]
- Lack of transportation[5]

*CMHC = Community Mental Health Center

1. Compton MT et al. *Psychiatr Serv.* 2006;57(4):531-537. 2. Olfson 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. K. Morton, PN, BSN, personal communication, October 2012.

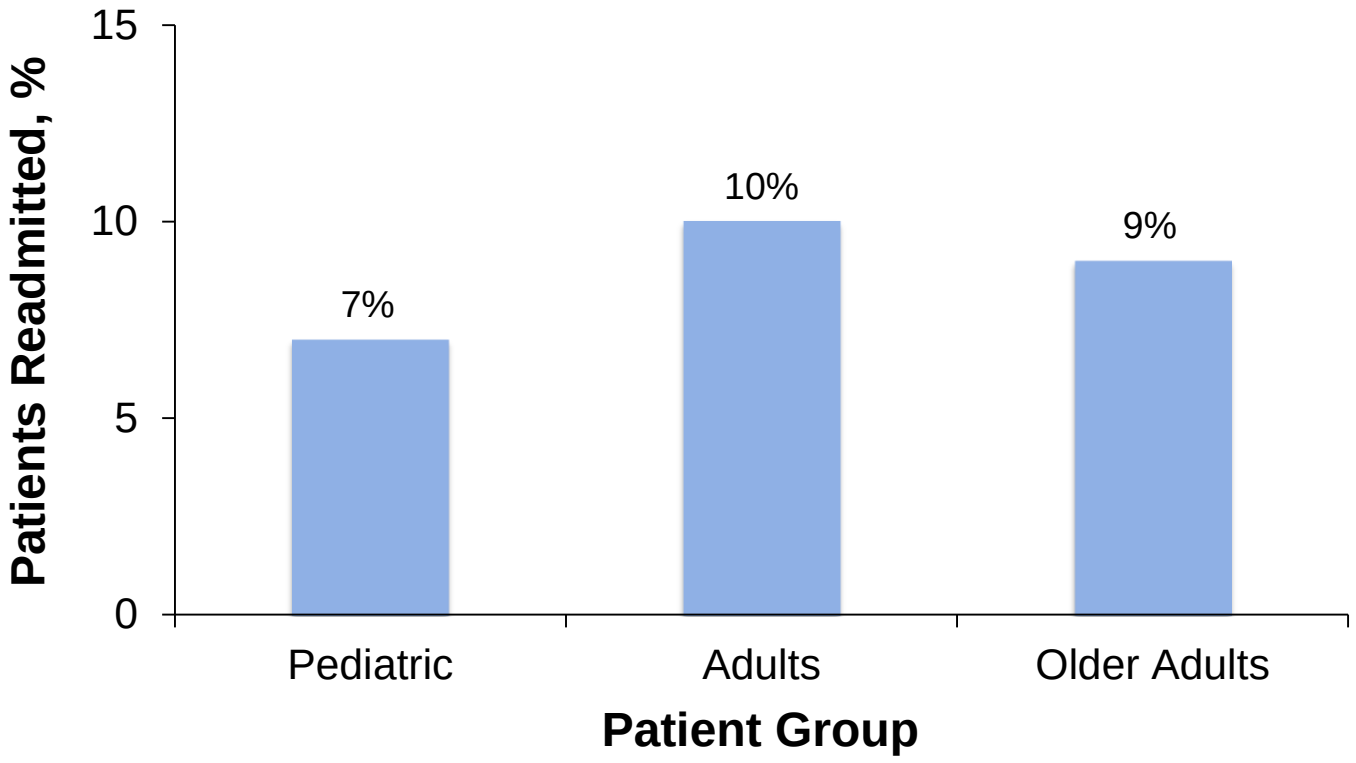
The Importance of Timely Outpatient Appointments

As the wait time for outpatient appointments increases, the attendance rate decreases



National Council for Community Behavioral Healthcare 2012.

Rehospitalization Within 30 Days for a Psychiatric Condition Is Common



Additionally, patients with shorter hospitalization (≤4 days) were associated with a 25% higher rate of 30-day readmission

Zoler ML. Short psychiatric hospitalizations linked to higher readmissions. Clinical Psychiatry News Web site. Published May 8, 2012. Accessed October 9, 2012.

The Discharge Plan

Working Toward Recovery

Recovery could be defined as the development of new meaning and purpose as one grows beyond the catastrophe of mental illness[1]

- Self direction[2]
  - Patient defines his or her own life goals and designs a path to these goals
- Individualization[2]
  - Based on an individual's unique strengths, needs, and preferences
- Empowerment[2]
  - Patients have authority to choose from a range of options
- Holistic[2]
  - Encompasses an individual's whole life, including mind, body, and spirit
- Nonlinear[2]
- Strengths based[2]
- Peer support[2]
- Respect[2]
- Responsibility[2]
- Hope[2]
  - People can and do overcome the barriers and obstacles that confront them

1. Kelly M, Gamble C. *J Psychiatr Ment Health Nurs.* 2005;12(2):245-251. 2. Frese FJ et al. *Schizophr Bull*. 2009;35(2):370-380.

The Discharge Plan Starts at Hospital Admission

- Creates a strong therapeutic alliance between patient, caregiver, and staff[1]
- Improves patient quality of life[2]:
  - Secures adequate housing
  - Helps with financial planning
  - Refers patients for educational and/or social activity programs
- Provides patient with sense of involvement in his or her own care
  - Improves compliance[3]
- Establishes continuity of care from the acute setting to the community setting[1]

1. R. Myers, PhD, personal communication, October 2012. 2. Olfson M, Walkup J. *N Dir Ment Health Serv.* 1997;73:75-85. 3. Boyer CA et al. *Am J Psychiatry.* 2000;157(10):1592-1598.

Components of the Discharge Plan

Living arrangements

- Housing, food, clothing, transportation (bus passes), social support

Financial needs, legal requirements

- Financial aid, contact numbers for social services
- Possible justice system issues

Daily activities

- Employment, cooking, cleaning, budgeting

Medication plan

- Prescription information, medication options, contact information at CMHC

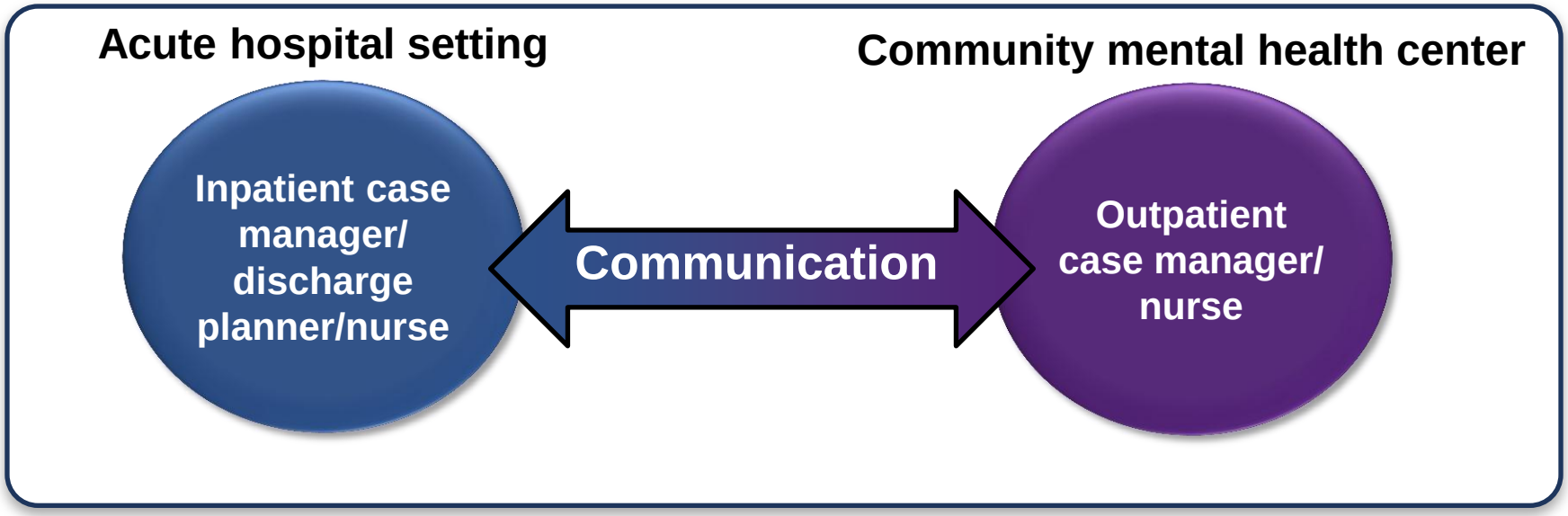
Community treatment plan

- Appointments with case manager, contact numbers, patient's attitude toward adherence, follow-up psychiatric and vocational rehabilitation services, assessment for other nonpsychiatric medical services

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

Effective Communication Will Improve the Clinical Bridging of Patients from Acute to Outpatient Settings

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%)



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

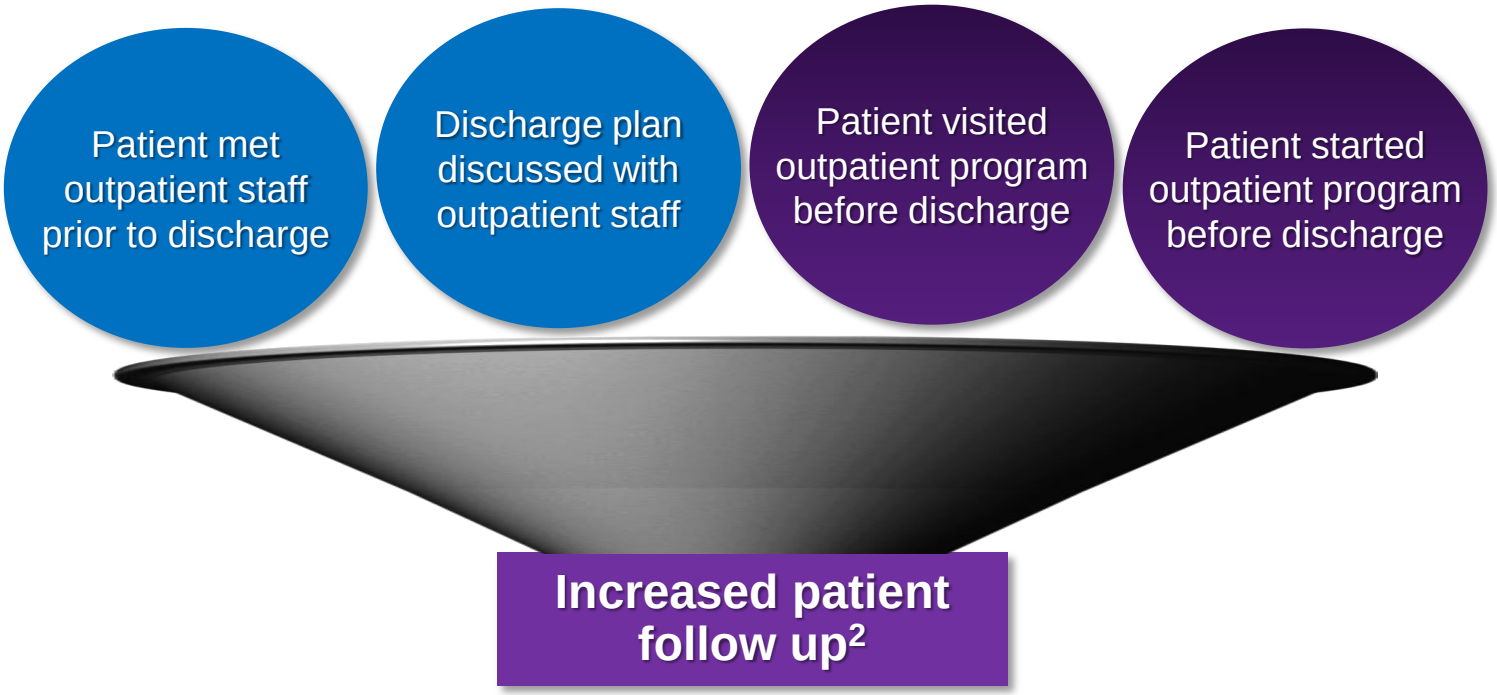
Sample Checklist for Hospital Discharge Plan

Discharge plan for:		Date:
At hospital discharge		
√		Patient understands why he/she is taking each medication, how to take it, timing and dose of medication
√		Next appointment is:
√		Patient living arrangements:
√		Does the patient need a bus pass? Is it valid?
√		Need and eligibility for financial aid
√		Name and phone number of patient's family member or caregiver
√		Case manager name and phone number
Y	N	Need referrals to day programs, support groups, alcohol/drug abuse programs?
Y	N	Need referrals to additional medical services?
Y	N	Need to meet with parole officer?
√		Assess work situation

L. Bleecker, unpublished data, 2012.

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[1]



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 Transitioning Decreases Risk of Rehospitalization

Patients attending a single outpatient appointment were
6 times
less likely to be readmitted to the hospital within 90 days

Lin HC, Lee HC. *Am J Orthopsychiatry.* 2008;78(4):494-497.

Patient Case Study I

This case study does not represent a single patient, but is based on a collection of patient data.

Bob Davis–Profile and History

- Bob Davis, age 25 years, diagnosed at age 17 with paranoid schizophrenia
- Lives with his family, who is afraid of him, and has little understanding of his illness
- Mr. Davis required 16 previous admissions to local crisis units
- Delusions have become increasingly more bizarre and fixed over past 2 years
- Employment unstable
- Several drug regimens tried, minimal success
  - Current medications include:
    quetiapine (Seroquel®), haloperidol (Haldol®),
    benztropine (Cogentin®), and trazodone (Desyrel®) for sleep

- Mr. Davis is now hospitalized, stable on a new antipsychotic medication and will be discharged soon

This case study does not represent a single patient, but is based on a collection of patient data.

Questions:

What is most important to include in Mr. Davis's discharge plan from the nursing and case manager perspectives?

Would you advocate for Mr. Davis to initiate a long acting injectable antipsychotic? Why or why not?

This case study does not represent a single patient, but is based on a collection of patient data.

Interventions for Bob Davis

Inpatient Hospital Nurse

- New medication education:
  - Role, actions, adverse effects, dosing, administration, adherence issues
- Education on medical health concerns and pertinent lab results
- Focus on Family education:
  - Disease state: symptom recognition to identify when Mr. Davis starts to relapse (indicators), role of medication
- Reinforce need for follow-up visit in community
- Contact outpatient nursing staff at CMHC

Inpatient Case Manager

- Determine living situation—Is the patient returning to home with family?
- Communicate discharge instructions with outpatient staff (fax/phone); inc. initial visit, assess transportation needs
- Coordinate outpatient services: Have Mr. Davis meet outpatient staff prior to discharge – set specific goals
- Provide peer support contacts, list of anger management groups, client-centered social and work groups
- Include family members in plan
- Provide educational materials; refer family to support groups (NAMI)
- Medication access check – insurance, where/when fill Rx?

This case study does not represent a single patient, but is based on a collection of patient data.

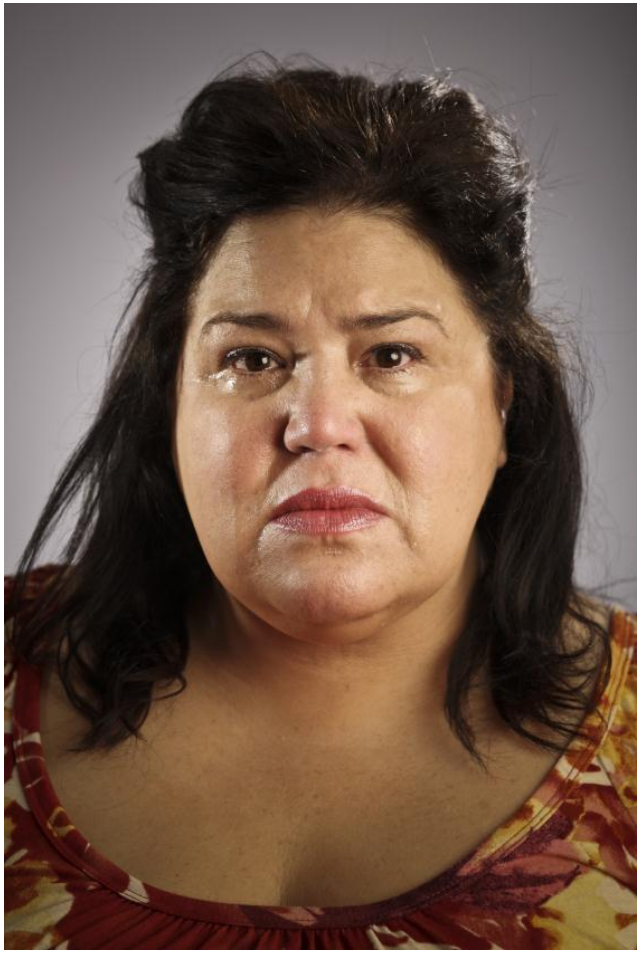
NAMI=National Alliance on Mental Illness.

Patient Case Study II

This case study does not represent a single patient, but is based on a collection of patient data.

Maria Lopez- Profile & History

- Maria Lopez, age 45 years; diagnosed at age 24 with schizophrenia
- Former teacher; was married with 2 children
- Currently divorced, unemployed for 5 years, on SSDI; children were removed
- Ms. Lopez has had 40 crisis unit admissions and multiple arrests
- History of alcohol & drug abuse
- Type II diabetes
- History of non-adherence
- Limited financial resources; lacks support
- Pays rent in a rooming house
- Hospital admission medications: risperidone, metformin, trazodone



This case study does not represent a single patient, but is based on a collection of patient data.

SSDI=social security disability insurance.

Clinical Question:

What actions can you put into the discharge plan to help improve Ms Lopez' quality of life?

How can her adherence be increased to minimize future hospital admissions?

This case study does not represent a single patient, but is based on a collection of patient data.

Interventions for Maria Lopez

Switch the patient to a long-acting injectable antipsychotic and stabilize in hospital setting

Inpatient Hospital Nurse

- Administer first long acting antipsychotic injection
- Coordinate with case manager and reinforce next steps for follow-up community care for her injections
- Injectable medication education (actions, potential adverse side effects, dosing regimen, interactions, importance of adherence)
- Assess knowledge on diabetes course, metformin use, adherence, diet, exercise, general wellness, diabetes management and outcomes

Inpatient Case Manager

- Explore available supports—health coach or consider moving Ms. Lopez to a higher level of integrated case management, such as ACT (Assertive Community Team)
- Discharge plan discussed with CMHC and have community staff review with Ms. Lopez
- Order home health care visits
- Arrange meeting with substance abuse program personnel while inhospital
- Investigate local diabetes-specific and/or weight management programs

This case study does not represent a single patient, but is based on a collection of patient data.

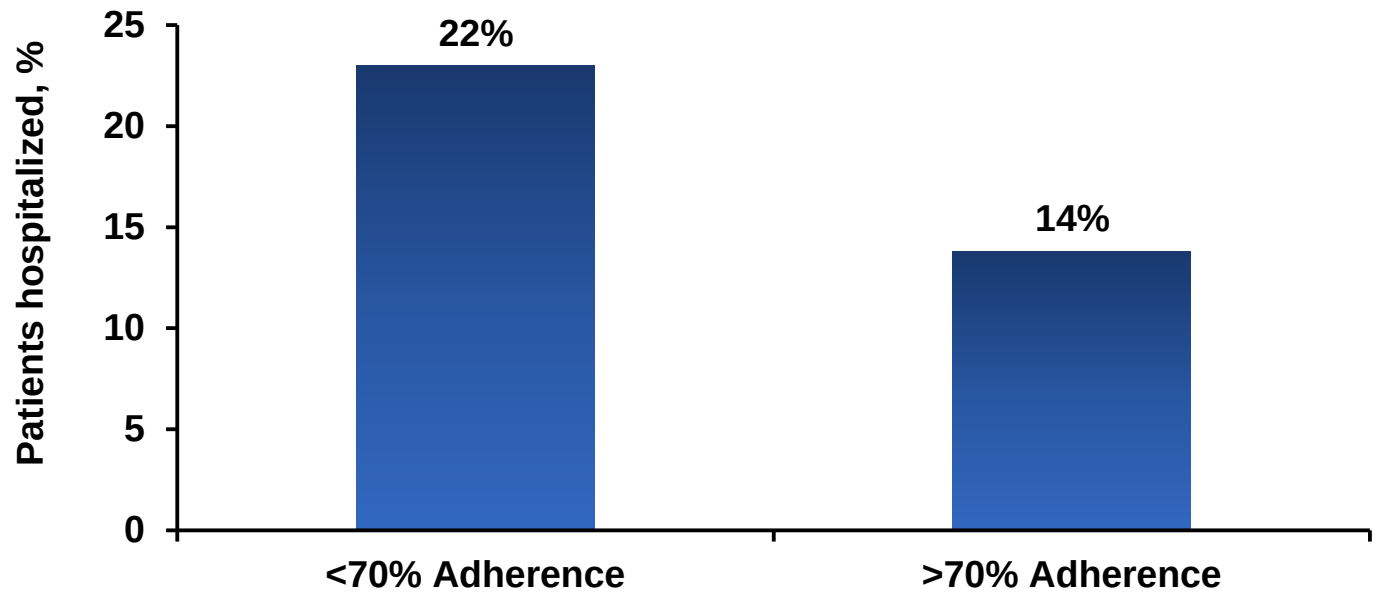
Pharmacotherapy and Adherence


My meds spoke to me this morning.
What did they say?
"The meds aren't working."
Streeter

Poor Adherence Is Prominent in Patients With Schizophrenia

- The average rate of adherence in schizophrenia is 51%-70%[1]
- 75% of patients are nonadherent within 2 years of discharge[1]

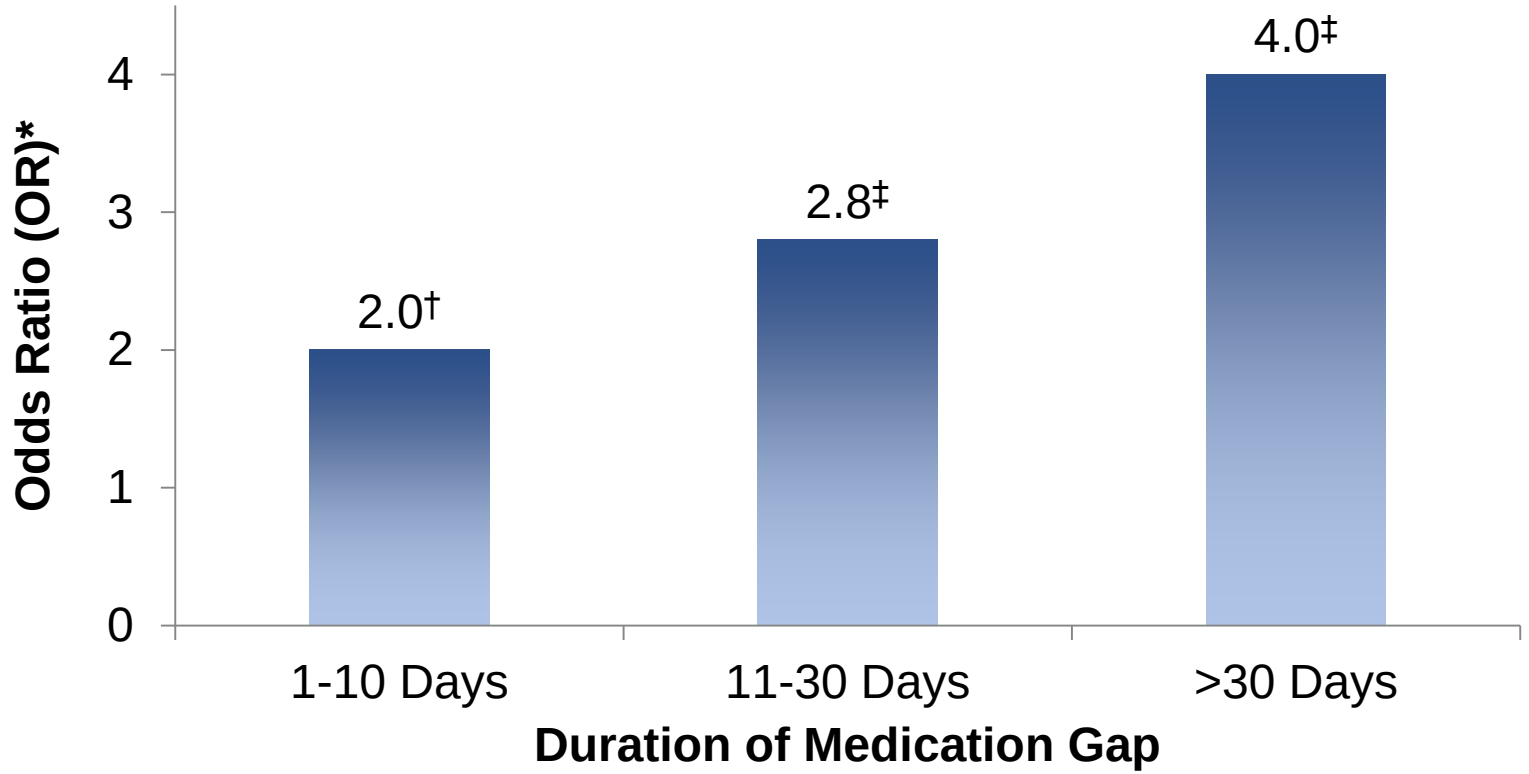
Nonadherent patients were more likely to be hospitalized[2]



1. Velligan DI et al. *J Clin Psychiatry.* 2009;70(suppl 4):1-48. 2. Weiden PJ et al. *Psychiatr Serv*. 2004;55(8):886-891.

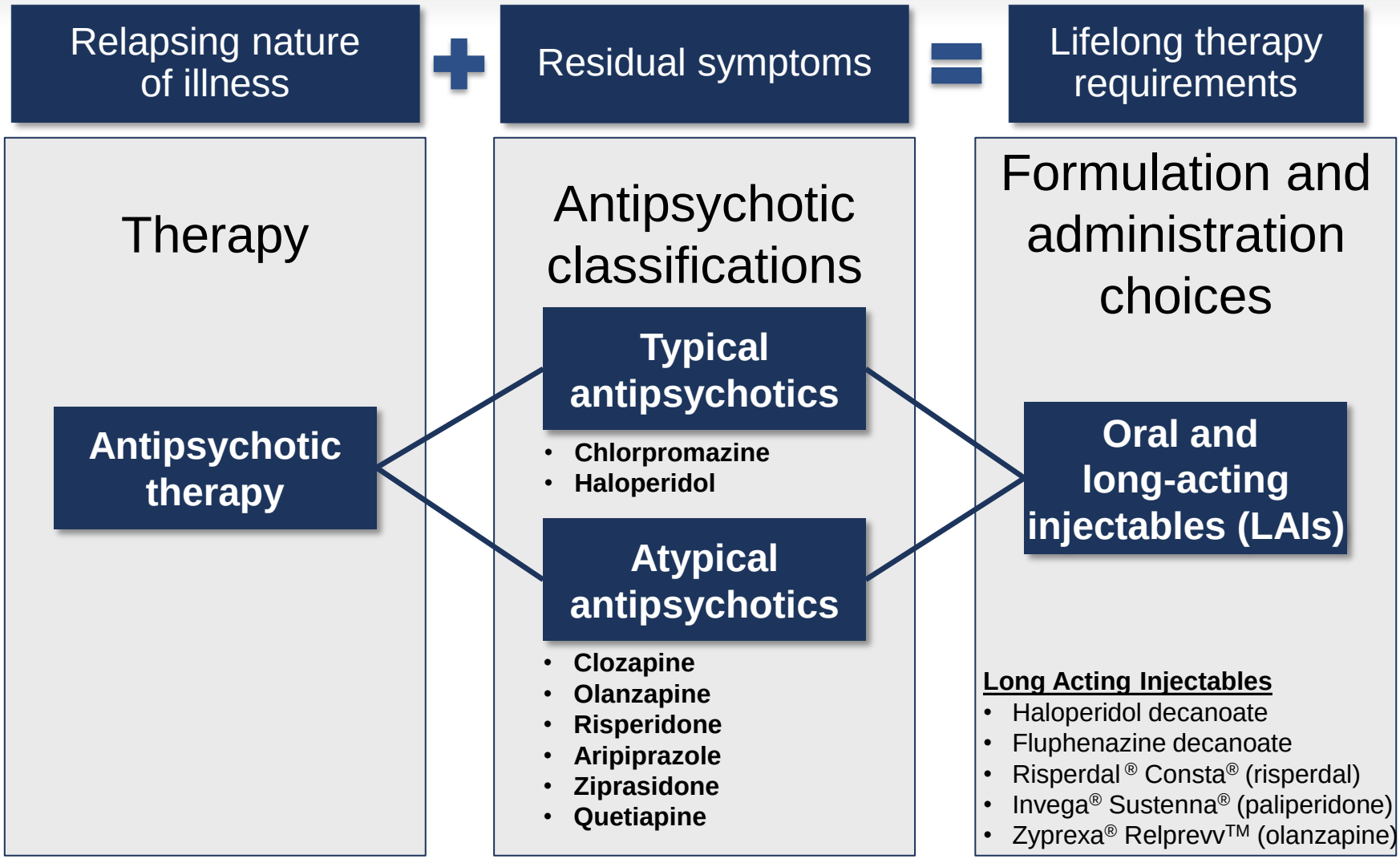
Even Small Gaps in Antipsychotic Medication Increases The Risk of Hospitalization

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



* Risk of hospitlization relative to patients with no medication gap; †*P*=.004; ‡*P*<.001.
Weiden PJ et al. *Psychiatr Serv*. 2004;55(8):886-891.

The Need for Lifelong Medication



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

Considerations for Oral Antipsychotic Utilization

Oral Antipsychotics

Advantages

- Patient feels control over treatment[1]
- Medication can be discontinued relatively quickly
- Some may find oral more convenient and easily taken
- Historical standard of medication delivery

Disadvantages

- Potential for accidental or deliberate overdose
- Administration is more “public”[2]
- Monitoring adherence is a challenge[2]
- Potentially lost or stolen[3]

1. Nasralla HA. *Acta Psychiatr Scand*. 115:260-267. 2. Robinson DG. *Am J Psychiatry.* 2011;168(3):240-242. 3. K. Morton, PN, BSN, personal communication, October 2012.

Considerations for LAI Antipsychotic Utilization

Long-acting injectable antipsychotics

Advantages

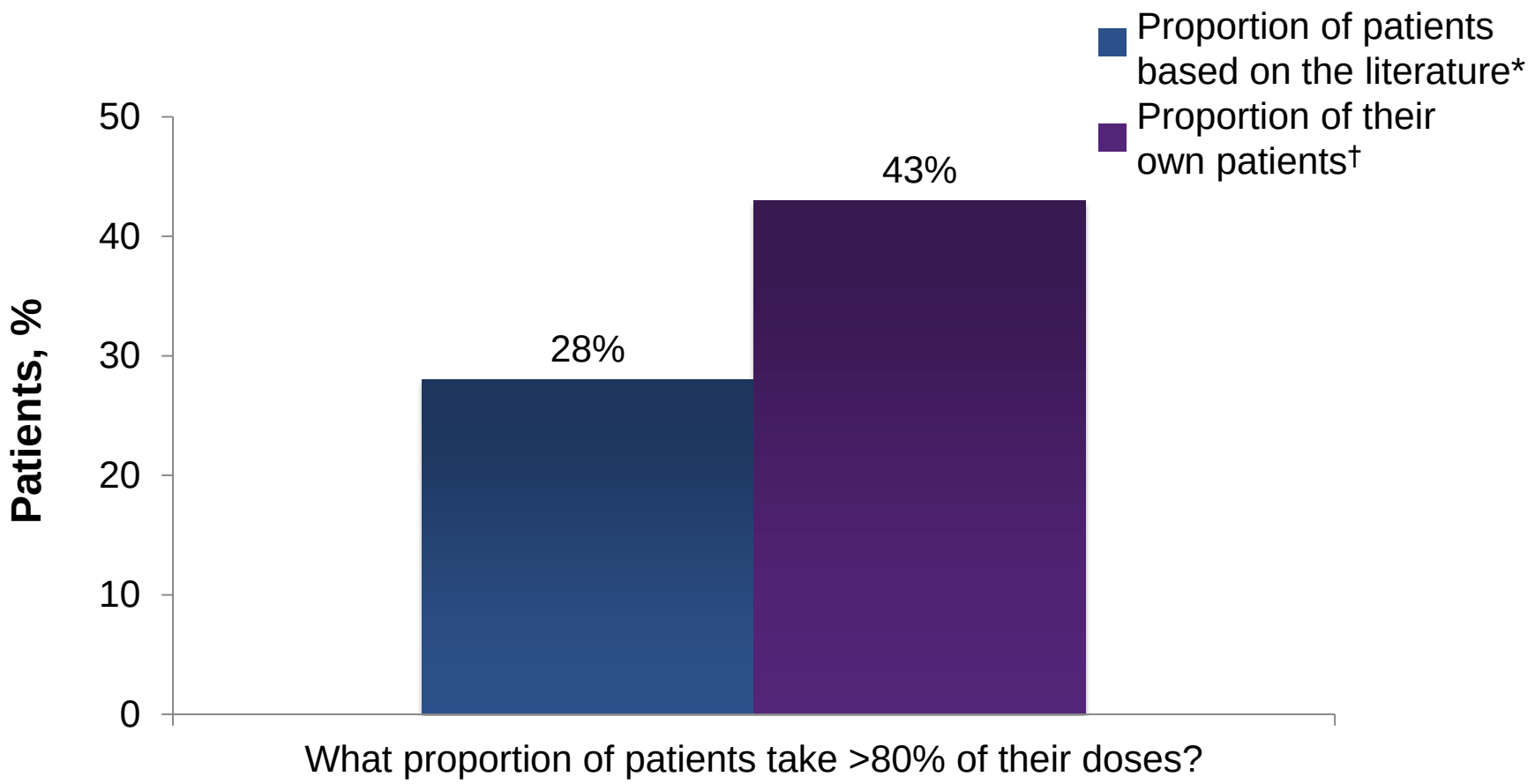
- Eliminates covert nonadherence[1,2]
- Convienence[1]
- Reduced variability in absorption[1]
- Enable a lower effective dose to be used[1]
- Reasons for nonadherence can be instantly addressed[2]
- Type of administration enhances confidentiality[2]
- Distinguishes between nonadherence and nonresponse[3]
- Regular contact with clinician[3]

Disadvantages

- Requires longer time to steady state[3]
- Acute treatment requires rapid dose titration[3]
- Oral supplements may add to complexity of titration process[3]
- Discomfort at injection site[3]
- Side effects may persist beyond treatment termination[3]
- Potential logistic challanges[4]
- Cost of branded atypical LAI are higher than generic options

1. Kane JM. *J Clin Psychiatry.* 2006;67(supple 5):9-14. 2. Robinson DG. *Am J Psychiatry.* 2011;168(3):240-242. 3. Agid O et al. *Exp Opin Pharmacother.* 2010;11(14):2301-2317. 4. K. Morton, PN, BSN, personal communication, October 2012.

Clinicians Overestimate Medication Usage in Their Patients With Schizophrenia



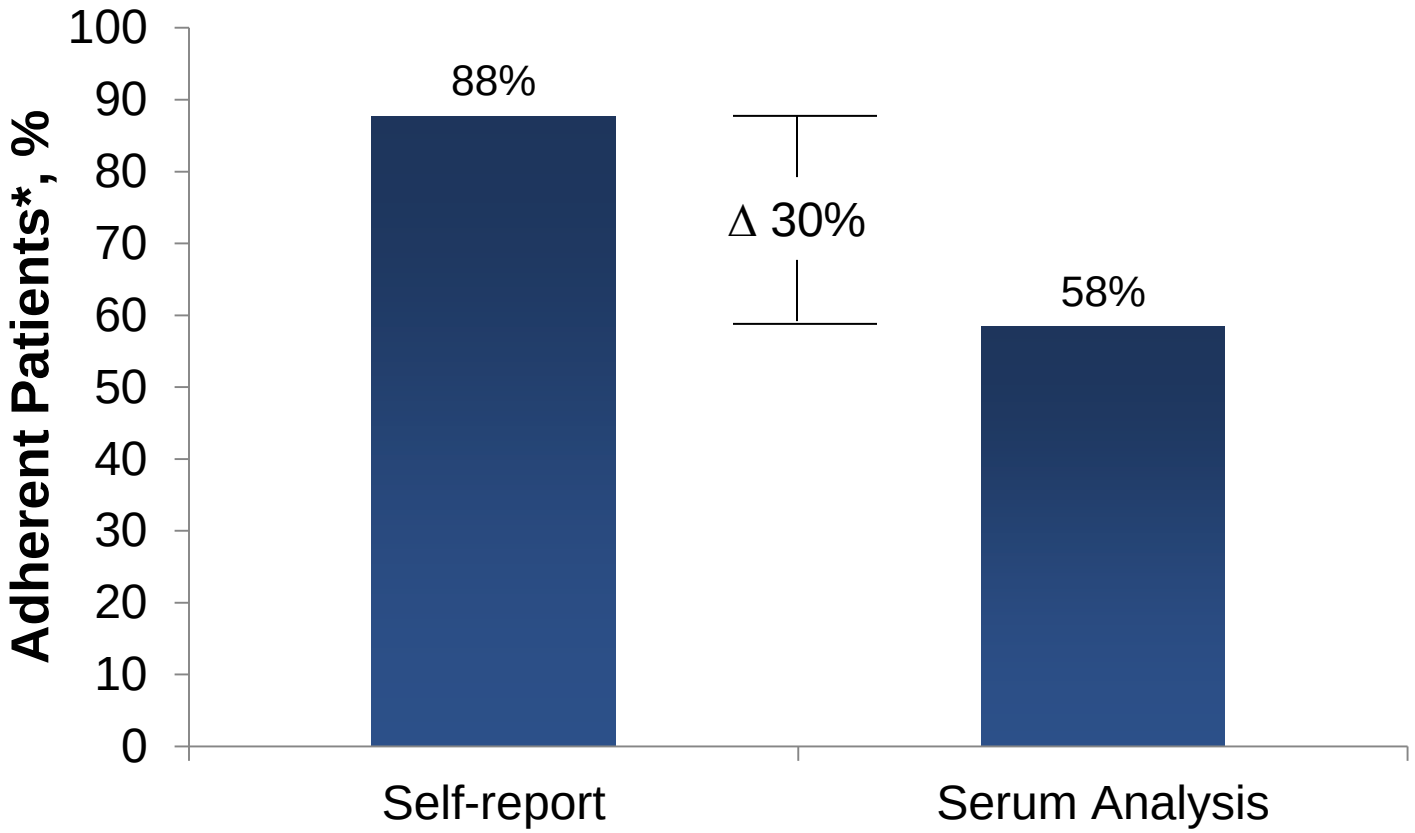
N=47

* Please indicate the proportion of patients with schizophrenia you believe to be adherent, based on your reading of the treatment literature.

† What proportion of your patients with schizophrenia are adherent?

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 diagnosied with schizophrenia.
Jónsdóttir H et al. *J Clin Psychopharmacol*. 2010;30(2):169-175.

Poor Medication Adherence Is Common Following Hospital Discharge

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

Adherence Barriers to Overcome

Patient-Related

- Cultural and religious beliefs[1]
- Language skills[2]
- Stigma[3]
- Cognitive deficits[3]
- Lack of social support[3]
- Comorbidities[6]
- Lack of insight[4,5]

Medication-Related

- Poor therapeutic alliance[5]
- Complex medication regimine[5]
- Lack of perceived benefits[4]
- Lack of disease and medication education[5]
- Side effects[3,5]
- Medication efficacy[6]

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.* 2009;14:52-62. 6. Velligan DI et al. *J Clin Psychiatry.* 2009;70(supple 4):1-48.

Conclusions

- Patients with schizophrenia transitioning from the acute psychiatric care setting to the community possess unique and individualized challenges for case management
- Many may fail to effectively connect to community care due to various disease state, clinical practice and socioeconomic issues, increasing the risk of re-hospitalization and decreasing quality of life
- The most meaningful and successful linkage strategies involves patient engagement in discharge planning
- Antipsychotic therapy is the cornerstone of the modern management of schizophrenia and is a key component of the discharge plan; however, non-adherence is extremely common and solving this problem is multi-faceted

Contact Information

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Questions to Pose to the Group

Discussion

What are some characteristics of continuity of care successes—that you have seen?

Discussion

What do you think are the most important elements of a discharge plan?

Discussion

What can you do to improve a discharge plan when the patient does not have a caregiver?