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A Treatment Journey for Patients with Mental Health Illness

A Focus on the Jail System

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This program is paid for by Otsuka Pharmaceutical Development & Commercialization, Inc. (OPDC) and Lundbeck, LLC.

Speakers are paid consultants for Otsuka Pharmaceutical Development & Commercialization, Inc.

Objectives

- Review evolution of antipsychotic treatments
- Compare evidence supporting oral and long-acting injectables
- ong-Acting Injectables: An Option for Patients with Psychotic Illness
- Discuss Mental Health in the Jail System
- Discuss the transition of jail to the community
- Review what a Certified Community Behavioral Health Clinic is (CCBHC)

Review Evolution of Antipsychotic Treatments

Typical and Atypical APs Have Been Studied for >70 Years

Introduction of 1st vs 2nd Generation APs 1950s

- Phenothiazines first used in clinical practice[1]
- Allowed patient discharge; shift from custodial care[2]

Additional 1st Gen APs and introduction of 2nd Gen APs 1960s-1990s

- Additional 1st Generation APs introduced[3]
- First LAI introduced[2]
- Molecular targets of pharmacological agents expanded to DA, 5-HT, and NE[1]
- First 2nd Generation AP approved in Europe in 1989[4] and in the United States in 1990[3]

Addition of new formulations and treatment modalities 1990s-present

- Additional oral 2nd Generation APs introduced[3]
- First 2nd Generation LAI introduced[5]
- Development of novel formulations, including oral disintegrating, sublingual, transdermal APs,[6] subcutaneous LAI injections,[7] and digital medicine[8]

AP, antipsychotic; DA, dopamine; 5-HT, serotonin; LAI, long-acting injectable; NE, norepinephrine.

1. Lehmann and Ban. *Can J Psychiatry.* 1997;42:152-162. 2. Johnson. *Br J Psychiatry Suppl.* 2009;195:S7-S12. 3. Tandon. *J Clin Psychiatry.* 2011;72(suppl 1):4-8. 4. Ayano. *J Schizophr Res.* 2016;3:1027. 5. Patel et al. *Br J Psychiatry Suppl.* 2009;52:S1-S4. 6. Citrome et al. *J Clin Psychiatry.* 2019;80:18nr12554. 7. Karas et al. *P.T.* 2019;44:460-466. 8. Papola et al. *Epidemiol Psychiatr Sci.* 2018;27:227-229.

Comparison of Typical and Atypical APs

	1st Generation AP medications	2nd Generation AP medications
 Mechanism	• D_2-receptor antagonism[1]	• D_2-receptor antagonism[1] • D_2-receptor partial agonism[1] • 5-HT_{2A} antagonism[1] • 5-HT_{1A} partial agonism[1]
 Benefits	• Reduce frequency and severity of psychotic episodes[2] • Improve functional capacity[2]	• Reduce frequency and severity of psychotic episodes[2] • Improve functional capacity[2] • Reduce risk of tardive dyskinesia[3] • Improve relapse prevention[4] and treatment adherence[5]
 Limitations	• Adverse events (eg, extrapyramidal symptoms, hyperprolactinemia)[2]	• Adverse events (eg, weight gain, sedation, agranulocytosis[6])

AP, antipsychotic; D_2, dopamine receptor 2; 5-HT, serotonin.

1. Horacek et al. *CNS Drugs*. 2006;20:389-409.
2. Haller et al. *F1000 Prime Rep*. 2014;6:57.
3. Carbon et al. *World Psychiatry*. 2018;17:330-340.
4. Kishimoto et al. *Mol Psychiatry*. 2013;18:53-66.
5. Dolder et al. *Am J Psychiatry*. 2002;151:103-108.
6. Lehman et al. *Practice Guideline for the Treatment of Patients With Schizophrenia Second Edition*. 2010.

AP Efficacy Must Be Balanced With Side Effects

Examples of clinical benefits

Efficacious for positive, negative, and cognitive symptoms[1]

Reduces risk of relapse[2]

Improves stability[3]

Improves quality of life[4]

Examples of side effects*

EPS (eg, akathisia, tardive dyskinesia)[5-7]

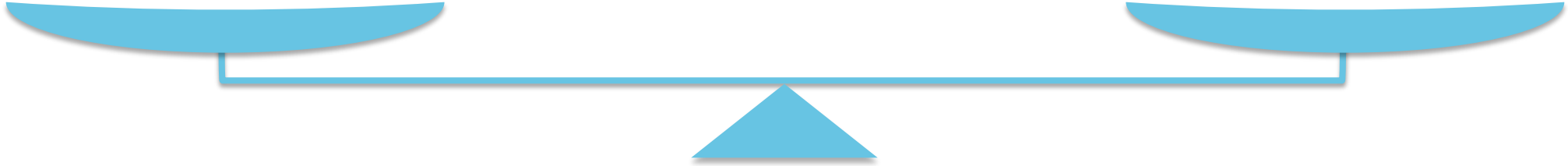
Sedation[5]

Weight gain[5]

Metabolic effects[5]

Hyperprolactinemia[5]

Sexual side effects[5]



Because APs vary in both clinical efficacy and side-effect profiles,[5] treatment decisions may need to change based on disease stage as well as tolerability[6]

AP, antipsychotic; EPS, extrapyramidal symptoms.

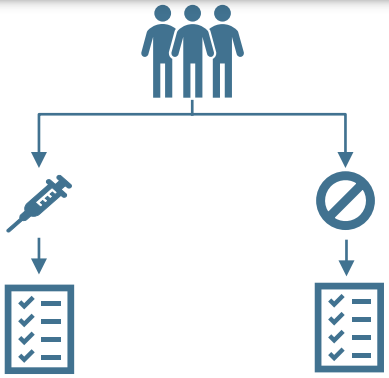
*Prevalence depends on class of AP being used.[5]

1. Naber et al. *Schizophr Res*. 2001;50:79-88.
2. Csernansky et al. *CNS Drugs*. 2002;16:473-484.
3. Kay and Lindenmayer. *Comp Psychiatry*. 1991;32:28-35.
4. Briggs et al. *Health Qual Life Outcomes*. 2008;6:105.
5. Leucht et al. *Lancet*. 2013;382:951-962.
6. Lehman et al. *Practice Guideline for the Treatment of Patients With Schizophrenia Second Edition*. 2010.
7. Carbon et al. *World Psychiatry*. 2018;17:330-340.

Compare Evidence Supporting Oral and Long-Acting Injectables

Evidence Supporting Use of Oral or LAI AP Medication Depends on Study Design

RCTs[1]



Compare data from patients receiving investigational therapy vs placebo/active control

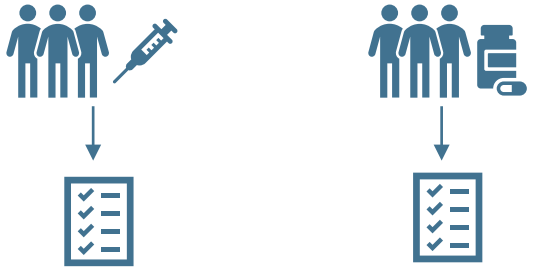
- Several RCTs reported no superiority of LAIs over OAPs; however, RCTs may inadvertently support adherence (eg, appointment reminders)[2]
- RCTs also tend to enroll patients with less severe symptoms[2]

Mirror studies[2]

Compare data from when patients were receiving OAP vs when they were receiving LAI

- A meta-analysis of mirror studies found superiority of LAIs over OAPs
- Expectation bias is a limitation of these studies as patients are unblinded to the treatment they receive

Parallel cohorts[2]



Compare data from patients receiving LAI vs those receiving OAP

- A meta-analysis of parallel-cohort studies found superiority of LAIs over OAPs in reducing hospitalizations and increasing adherence
- Design is limited by patient selection bias (eg, clinicians may administer LAIs to more severely ill patients)

AP, antipsychotic; LAI, long-acting injectable; OAP, oral AP; RCT, randomized controlled trial.

1. Kabisch et al. *Dtsch Arztebl Int*. 2011;108:663-668.
2. Kishimoto et al. *Schizophr Bull*. 2018;44:603-619.

Oral APs Are Effective But May Face Adherence Challenges

Advantages

- Effective[1]
- Many generics available[2]
- Extensive clinical experience[1]
- Flexibility[3]
- Short duration of action[3]

Disadvantages

- Daily administration[4]
- Potential for misuse[3]
- Influenced by first-pass metabolism[5]
- Adherence rates can be inaccurate unless ingestion of the medication is closely monitored[6]

AP, antipsychotic.

1. Citrome. *Expert Opin Pharmacother*. 2012;13:1545-1573.
2. Albright. https://www.psychcongress.com/article/three-key-antipsychotics-lose-patent-protection. Accessed March 3, 2020.
3. Burton. *Psychiatry*. 2010.
4. Bera. *J Clin Psychiatry*. 2014;75(suppl 2):30-33.
5. Zhornitsky and Stip. *Schizophr Res Treatment*. 2012;2012:407171. 6
6. Velligan et al. *Schizophr Res*. 2020;215:17-24.

LAIs Promote Adherence But May Have Negative Perceptions

Advantages

- Promotion of treatment adherence[1-3]
- Transparency of adherence[2]
- Ease of administration[4]
- Reduced peak-trough plasma levels[2]
- Improved patient outcomes[2]
- Improved patient and physician satisfaction[2]
- Lowered relapse rate[2,5]
- Decreased rehospitalizations[6]

Disadvantages

- Patient concerns regarding potential pain of injection[7]
- Slow dose titration and longer time to reach steady state[4]
- May prolong side effects[4]
- Difficult to adjust small doses[7]
- Limited number of available formulations[7]
- Potential for small amount to leak into subcutaneous tissue[4]
- Association with involuntary hospitalization and related trauma[8]
- Perception that treatment is punitive or forced by clinicians without consideration of patient feelings or rights[9]

LAI, long-acting injectable.

1. Patel et al. *Br J Psychiatry Suppl*. 2009;195:S1-S4. 2. Geerts et al. *BMC Psychiatry*. 2013;13:58. 3. Lang et al. *Psychiatr Serv*. 2010;61:1239-1247. 4. Agid et al. *Expert Opin Pharmacother*. 2010;11:2301-2317. 5. Zhornitsky and Stip. *Schizophr Res Treatment*. 2012;2012:407171. 6. Lafeuille et al. *BMC Psychiatry*. 2013;13:221. 7. Jeong and Lee. *Clin Psychopharmacol Neurosci*. 2013;11:1-6. 8. Iyer et al. *Can J Psychiatry*. 2013;58(5 suppl 1):14S-22S. 9. Brissos et al. *Ther Adv Psychopharmacol*. 2014;4:198-219..

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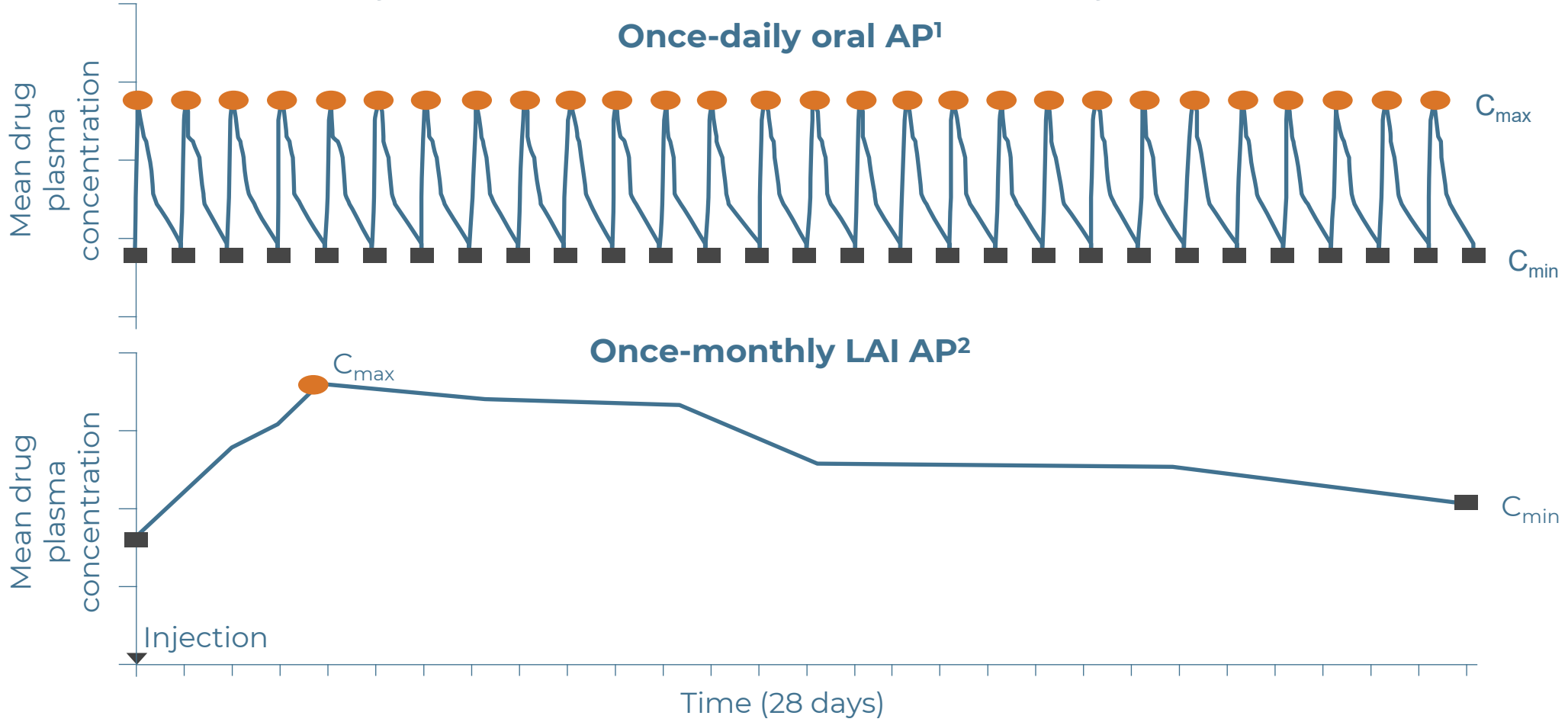
Hypothetical Steady-State Plasma Levels Over 1 Month With Once-Daily Oral and Once-Monthly LAI APs



AP, antipsychotic; C_{max}, maximum plasma concentration; C_{min}, minimum plasma concentration; LAI, long-acting injectable.

Modeled data are based on the recommended starting dose of an actual daily oral AP,[1] with variations expected between the pharmacokinetic parameters of different daily oral APs.[1,3] Some long-acting formulations require overlapping dosing of oral AP treatment at initiation[4]; modeled data are based on the recommended starting dose of a once-monthly LAI AP,[2] with variations between the pharmacokinetic parameters of different once-monthly LAI APs.[2,3]

1. Mallikaarjun et al. *J Clin Pharmacol*. 2004;44:179-187. 2. Mallikaarjun et al. *Schizophr Res*. 2013;150:281-288. 3. Sheehan et al. *Innov Clin Neurosci*. 2012;9(7-8):17-23. 4. Kane et al. *Eur Neuropsychopharmacol*. 1998;8:55-66.

Potential Reasons for Low LAI Use in Early-Phase Schizophrenia

Challenges in perception

- Overestimate of adherence
- Bias against injections
- Perception of inappropriate in early-phase disease

Challenges in education

- Poor understanding of LAI benefit
- Lack of LAI training
- Inadequate training in shared decision-making
- Communication strategies needed

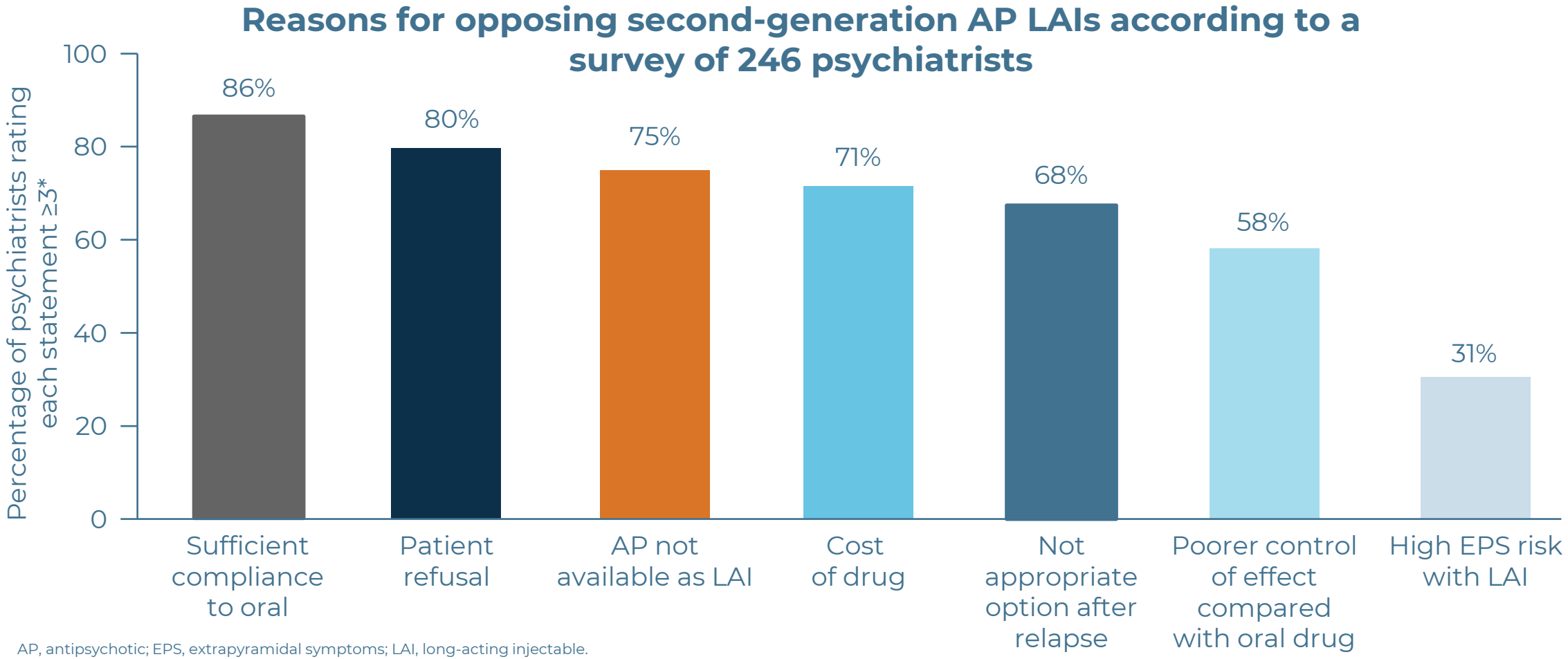
Challenges in clinical use

- Impact on therapeutic alliance
- Inadequate implementation by inpatient referrals
- Insufficient caregiver involvement
- Mixed results of oral vs LAI trials

LAI, long-acting injectable.

1. Kane and Correll. *J Clin Psychiatry.* 2019;80:IN18031AH1C.

Sufficient Compliance With Oral APs Is the Leading Factor for Psychiatrists Opposing LAIs



AP, antipsychotic; EPS, extrapyramidal symptoms; LAI, long-acting injectable.
*Based on scale of 0-5, with 3 being "sometimes" and 5 being "very frequently."

1. Heres et al. *J Clin Psychiatry*. 2006;67:1948-1953.

Long-Acting Injectables: An Option for Patients with Psychotic Illness

LAI Underutilization

- ***In a survey of psychiatrists*****,** patient refusal was cited as a primary reason for not prescribing LAIs[1]
- ***However***, in a survey of patients without LAI experience:
  - 80% cited having never been informed about the option by their psychiatrist[2]
  - 75% of psychiatrists felt that they informed the patient, but 68% of psychiatrists believe that patients are not sufficiently informed about the different methods of administrating antipsychotic drugs[2]
- ***Moreover***, in a survey of patients with >3 months of LAI experience:
  - Injectable antipsychotics were the preferred formulation[3]
  - 70% of patients felt better supported in their illness by virtue of regular contact with the doctor or nurse who administered their injection[3]

1. Heres S, et al. *J Clin Psychiatry*. 2006;
2. Jaeger M, Rossler W. *Psychiatry Res*. 2010
3. Caroli F, et al. *Patient Prefer Adherence*. 2011.

Patients Tend to View LAIs Favorably

As recorded in focus groups, patients reported that LAIs were easier to use and noted the advantage of consistent dosage[2]

A survey of 206 patients with ≥3 months of experience with a LAI formulation found that injectable APs were the preferred formulation, with 70% reporting that the added benefit of regular contact with a doctor or nurse administering treatment made them feel more supported[3]

Many studies have found that patients prefer LAI over oral medication[1]

In a separate study of 83 patients with schizophrenia, only 21% of patients who were naive to LAI treatment reported receiving information about LAIs from their psychiatrist[4]

LAI, long-acting injectable.

1. Walburn et al. *Br J Psychiatry*. 2001;179:300-307. 2.
2. Iyer et al. *Can J Psychiatry*. 2013;58(5 suppl 1):14S-22S. 3
3. Caroli et al. *Patient Prefer Adherence*. 2011;5:165-171.
4. Jaeger and Rossler. *Psychiatry Res*. 2010;175(1-2):58-62.

However, Clinicians May Generally Believe Patients Do Not View LAIs Favorably

Clinicians generally viewed LAIs as being less acceptable to patients[1]

Clinicians should self-reflect on their own beliefs as negative assumptions about patient preferences may result in a pessimistic style of delivering information[1]

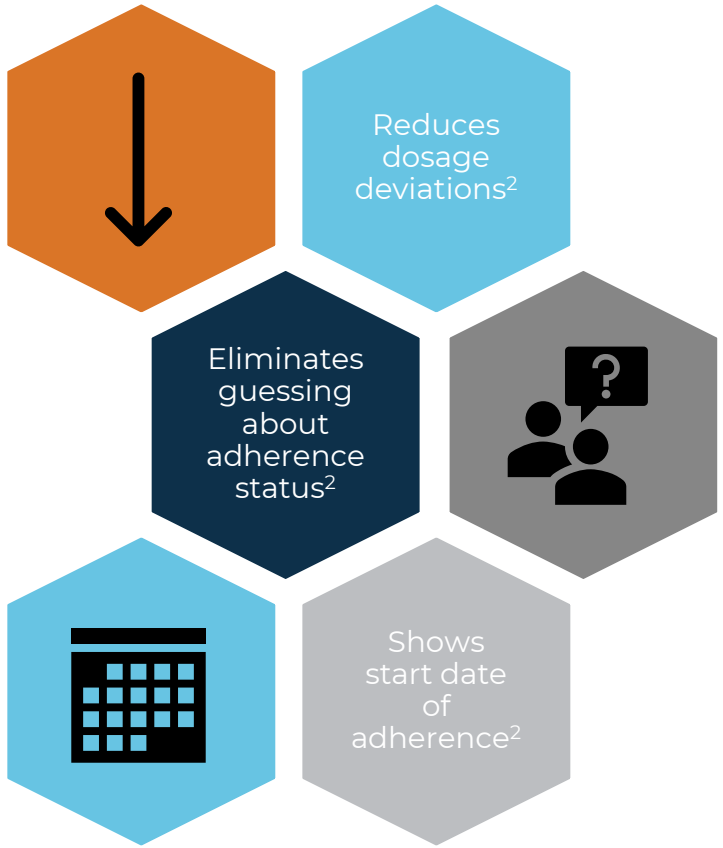
In a survey of 102 consultant psychiatrists, 33% believed patients always prefer oral medications over LAIs[1]

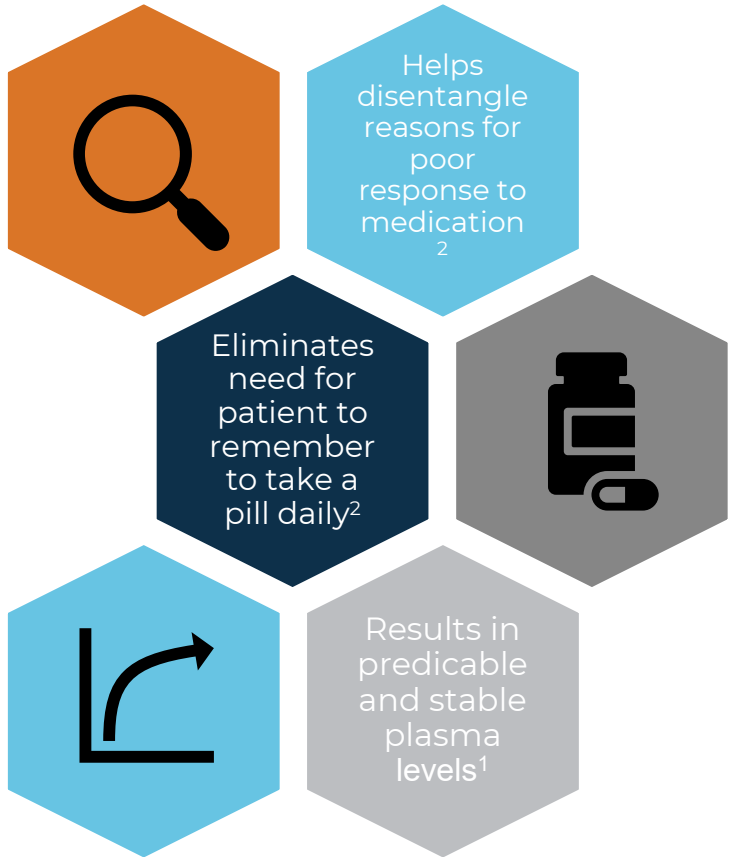
In a survey of 83 patients with schizophrenia and 81 psychiatrists, 75% of psychiatrists felt that they informed the patient about LAIs, but only 33% of patients felt informed[2]

LAI, long-acting injectable.

1. Patel et al. *J Psychopharmacol*. 2010;24:1473-1482.
2. Jaeger and Rossler. *Psychiatry Res*. 2010;175(1-2):58-62.

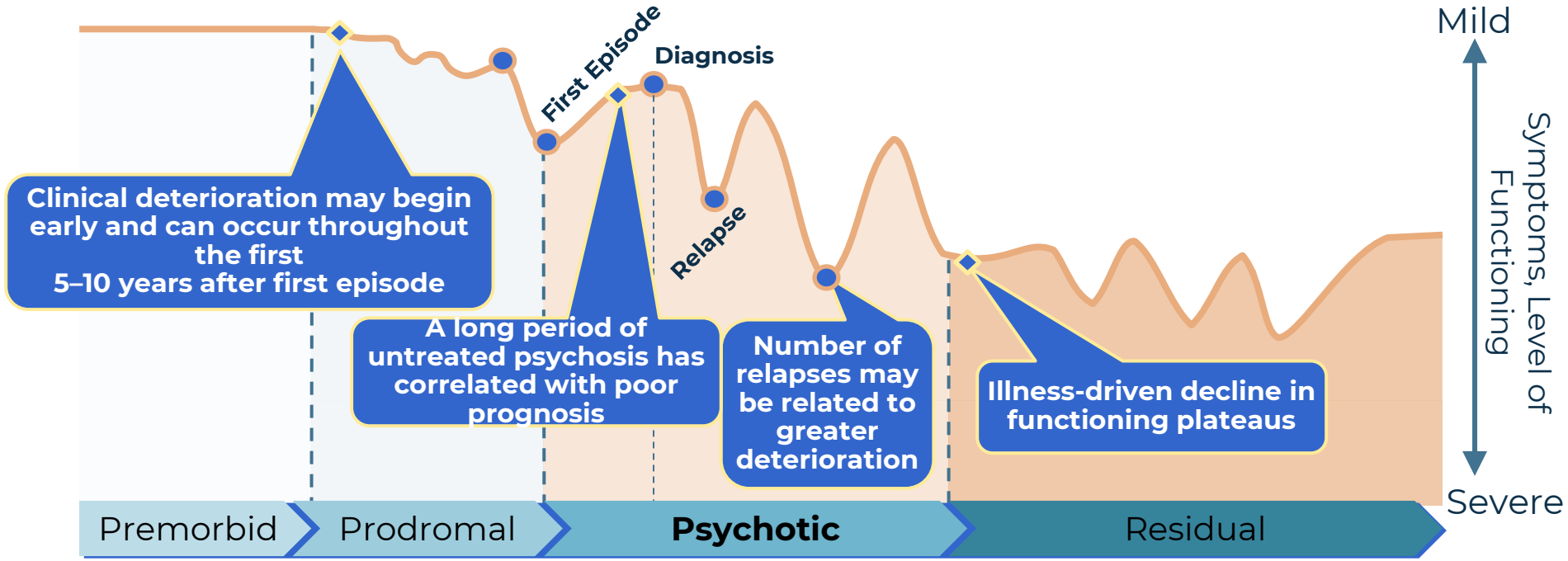
Potential Advantage of LAI





1. McEvoy JP. *J Clin Psychiatry*. 2006.
2. Brissos et al. *Therapeutic Advances in Psychopharmacology*. 2014..

The Theoretical Course of Schizophrenia Progression May Lead to Functional Decline[1-4]



Childhood

- Functional impairment occurs and is difficult to distinguish from other causes
- Events may trigger disease development

Adolescence to early adulthood

Approximately 2-5 y

- Negative symptoms usually develop first, followed by slight positive symptoms

Critical years

Approximately 5 y

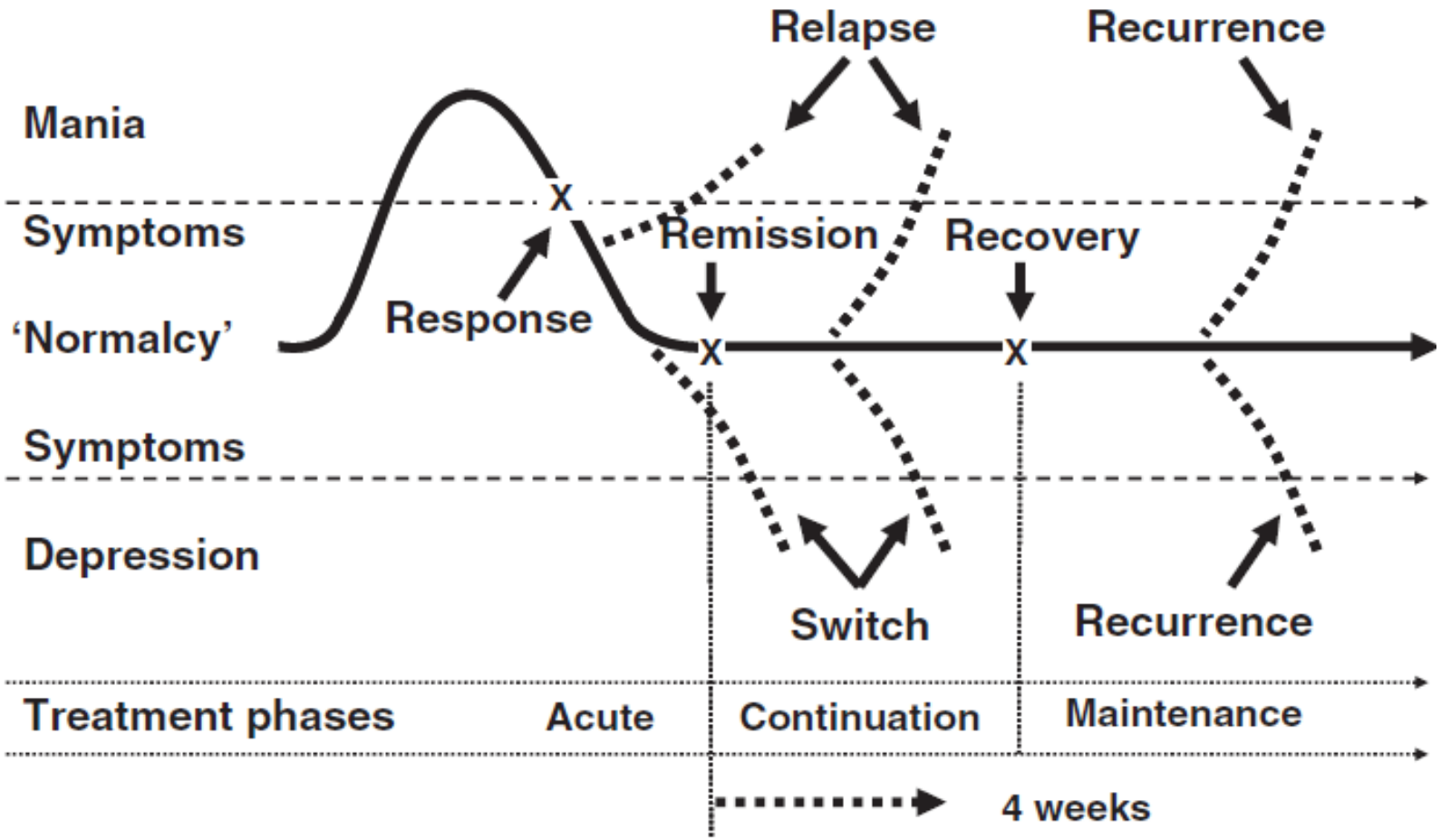
- Majority of clinical deterioration occurs
- High risk of relapse

Remainder of life

- Disease severity and level of functioning vary; risk of relapse

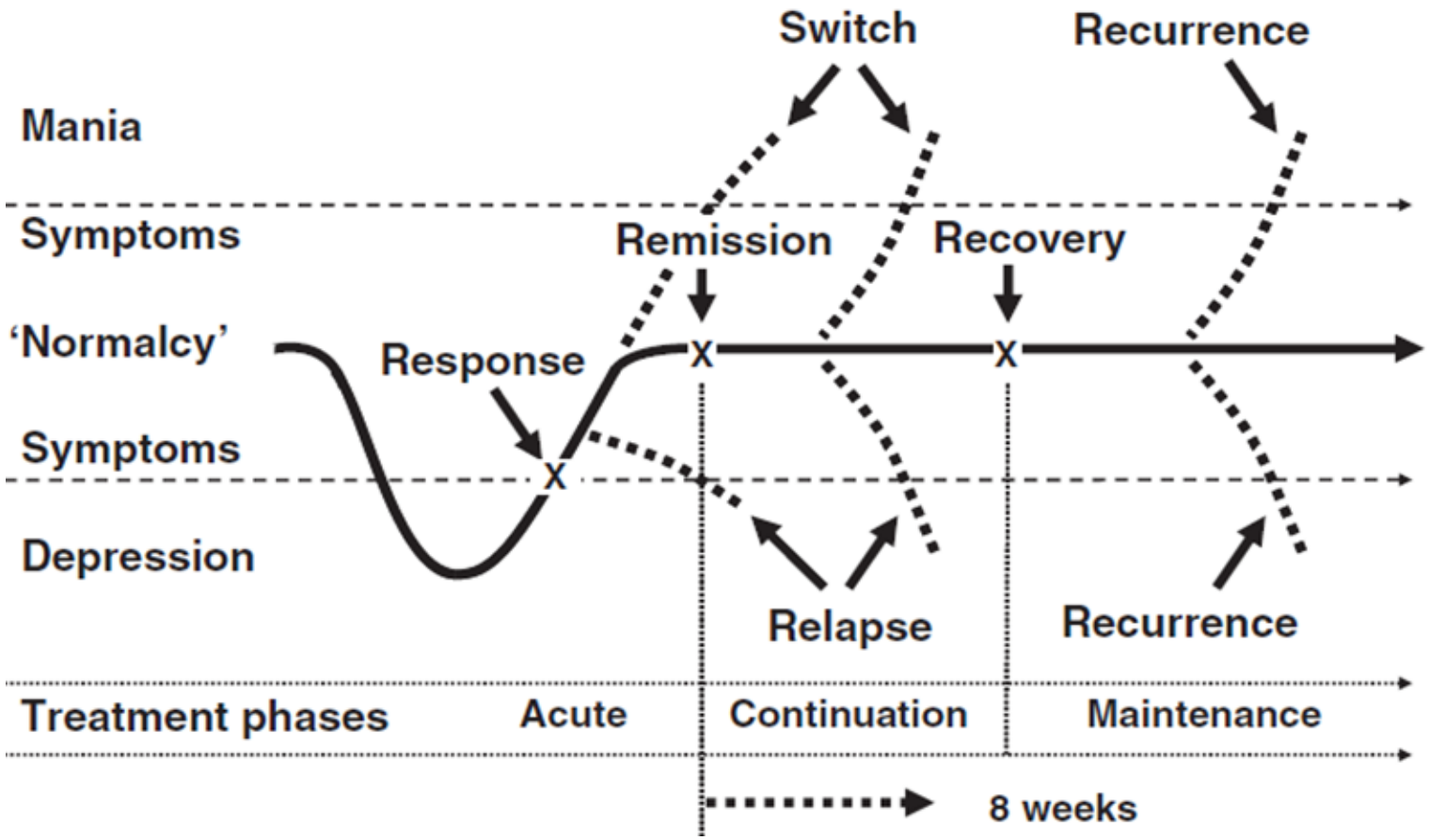
1. Lieberman JA, et al. *CNS Spectr*. 2007;12(10)(suppl 18):1-16;
2. Emsley R, et al. *BMC Psychiatry*. 2013;13:50;
3. McGlashan TH. *Schizophr Bull*. 1988;14(4):515-542;
4. Lehman AF. *Am J Psychiatry*. 2004;161(suppl 2):1-56.

Defining Relapse (Manic Episode)



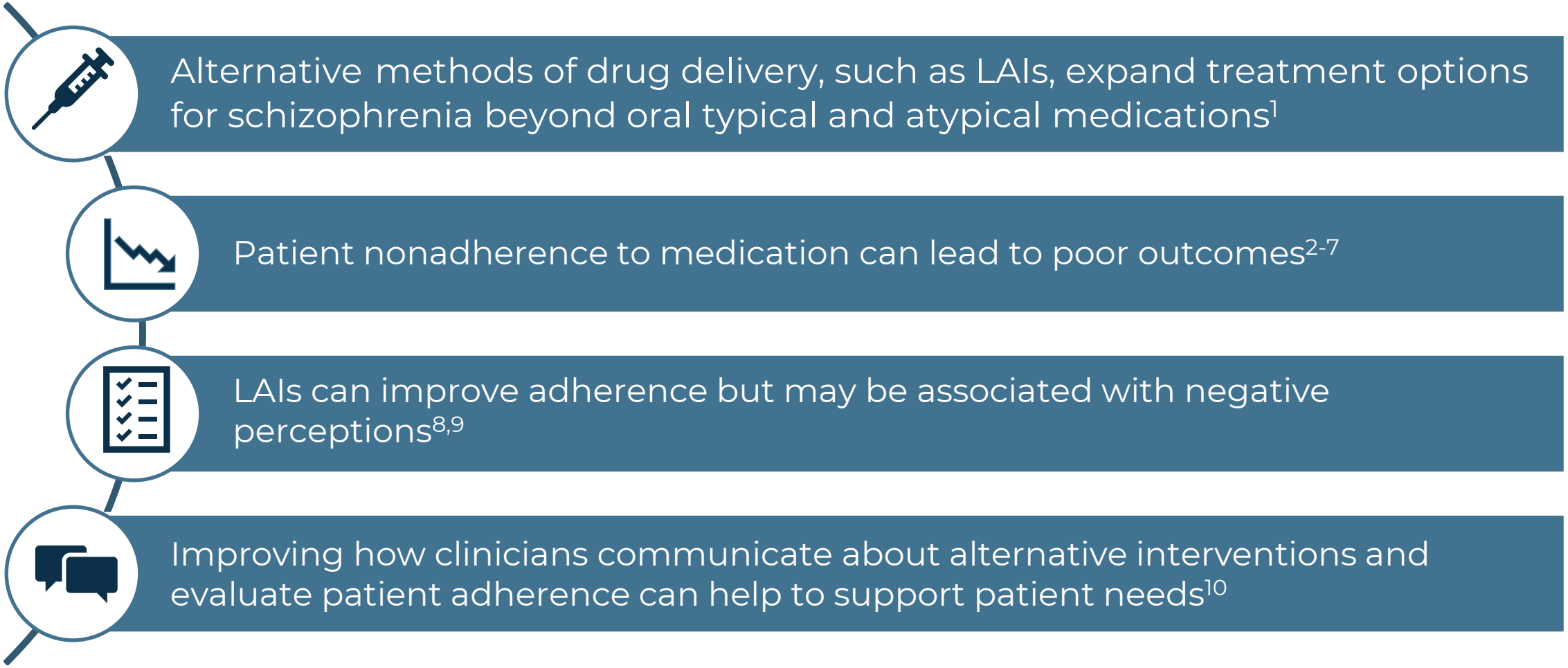
1. Tohen et al. *Bipolar Disord.* 2009;11:453-473.

Defining Relapse – Bipolar Depressive Episode



1. Tohen et al. *Bipolar Disord.* 2009;11:453-473

Summary



LAI, long-acting injectable.

1. Karas et al. *P.T.* 2019;44:460-466. 2. Velligan et al. *J Clin Psychiatry*. 2009;70(suppl 4):1-46. 3. Ascher-Svanum et al. *BMC Res Notes*. 2009;2:6. 4. Sun et al. *Curr Med Res Opin*. 2007;23:2305-2312. 5. Morken et al. *BMC Psychiatry*. 2008;8:32. 6. Higashi et al. *Ther Adv Psychopharmacol*. 2013;3:200-218. 7. Novick et al. *Schizophr Res*. 2009;108:223-230. 8. Patel et al. *Br J Psychiatry Suppl*. 2009;52:S1-S4. 9. Brissos et al. *Ther Adv Psychopharmacol*. 2014;4:198-219. 10. Kane and Correll. *J Clin Psychiatry*. 2019;80:IN18031AH1C.

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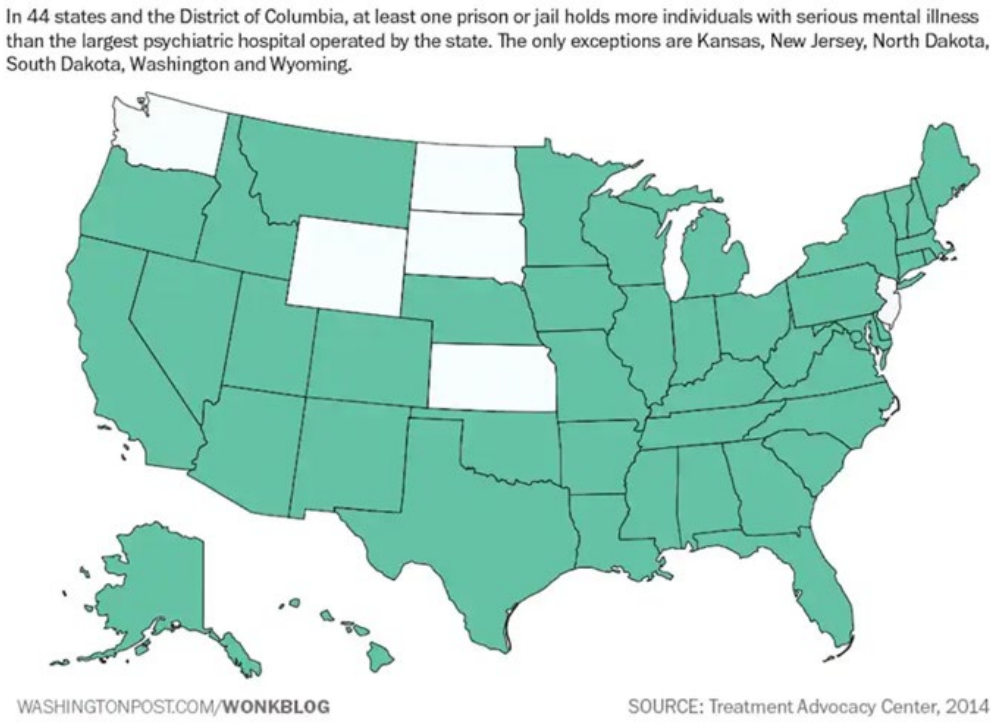
Mental Health in the Jail System

More Individuals with Mental Health Disorders are in Jail than in Hospitals

- How many people are locked up in the U.S.?
  - The U.S. locks up more people per capita than any other nation[1]
  - 698 per 100,000 residents
- 2.3 million people are held within the American criminal justice system[1]
  - 1,291,000 in state prisons
  - 631,000 in local jails
  - 226,000 in federal prisons & jails
- Jail Churn: Every year, over 600,000 people enter prison gates, but people go to jail 10.6 million times each year[1]
- Nationwide, it is estimated that 1.7 million people with serious mental illnesses are booked into jails annually[2]



1. Sawyer, W. & Wagner, P. Prison Policy Initiative. Accessed on 7/14/2021 at: https://www.prisonpolicy.org/reports/pie2020.html.
2. Leifman, S. Eleventh Judicial Circuit Criminal Mental Health Project. 2020.

Mental Illness and Criminal Justice System

66% of women in prison are reported to having a history of MI, almost two times the rate of men in prison

Suicide is the leading reason of death for people held in local jails

Around **4,000 people** with SMI are held in solitary confinement inside US prisons.

2 in 5 people who are incarcerated have a history of SMI (**44%** in local jails and **37%** in state and local prison)

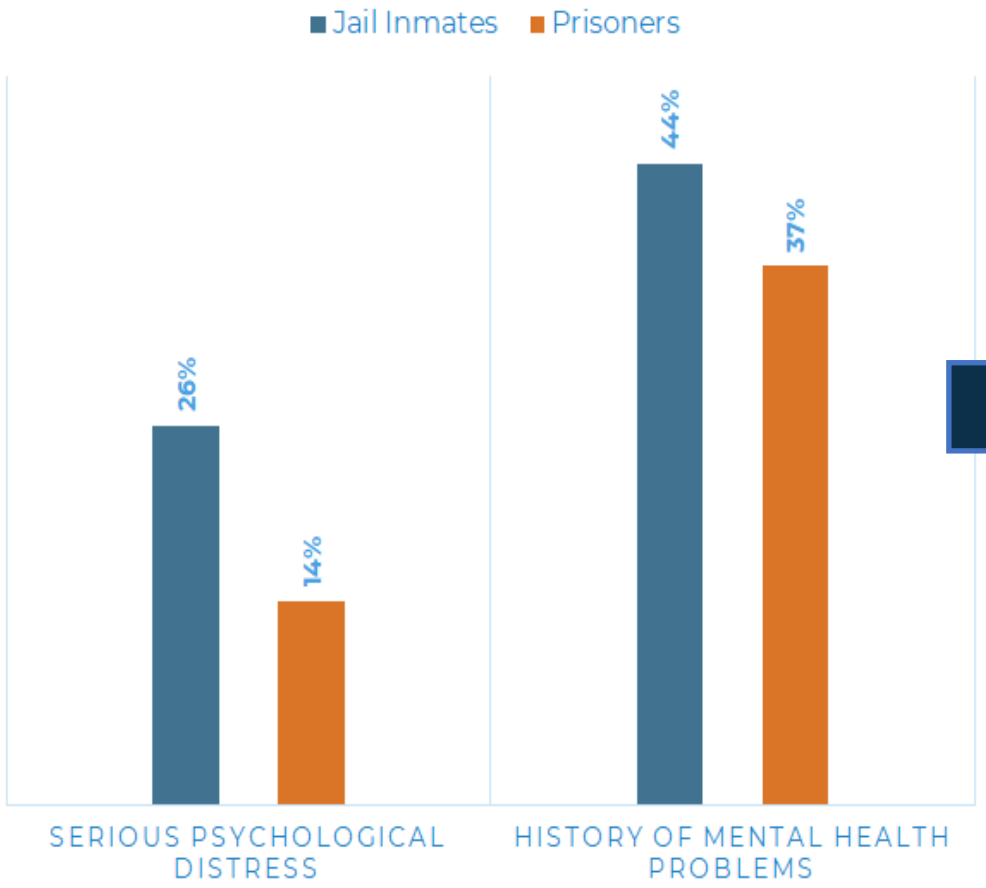
70% of youth in juvenile system have a diagnosable mental health condition

People with SMI enters jail

about 2 million times per year

1. Mental Health By the Numbers | NAMI: National Alliance on Mental Illness

Many Prisoners and Jail Inmates Suffer from Poor Mental Health



History of a mental health problem	Prisoners	Jail inmates
Major depressive disorder	24.2%	30.6%
Bipolar disorder	17.5	24.9
Schizophrenia/other psychotic disorder	8.7	11.7
Post-traumatic stress disorder	12.5	15.9
Anxiety disorder	11.7	18.4
Personality disorder	13.0	13.5

1. Bronson, J. & Berzofsky, M. The Bureau of Justice Statistics, 2017, 1-7.

Indicators of Mental Health Problems Reported by Prisoners & Jail Inmates

- **Sex**:[a]
  - Females [prison (20%) or jail (32%)] vs. Males [prison (14%) or jail (26%)]
- **Race**:[a]
  - White [prison (17.3%) or jail (31%)] vs. Black [prison (12.5%) or jail (22.3%)] or Hispanic [prison (11.5%) or jail (23.2%)]
- **Education**:[b]
  - College degree [prison (40.7%) or jail (49.8%)] vs. high school graduates [prison (32.1%) or jail (38.8%)]
- **Age:**[a]
  - Prisoners ages 18 to 64 (15%) vs. age 65 or older (10%)
- **Marital status:**[a]
  - Prisoners with other marital status (15-18%) vs. married (12%)
- **Lifetime number of arrests:**[b]
  - More than one arrest [prison (32-48.9%) or jail (36.7-55.9%)] vs. one arrest [prison (27%) or jail (30.8%)]
- **Total time in a correctional facility prior to current facility:**a
  - Prisoners who spent 5 years or more previously incarcerated (16.5%) vs. no prior time served (13.4%)

1. a, met threshold for serious psychological distress; b, have a history of mental health problems
2. Bronson, J. & Berzofsky, M. The Bureau of Justice Statistics, 2017, 1-7.

Mental Health Disorders in Inmates can Lead to Negative Outcomes

- Inmates with a mental health disorder:[1]
  - Remain in jail longer than other inmates
  - Present behavioral management problems that may result in their isolation
  - Are at higher risk for being assaulted and injured
  - Have difficulty following jail/prison rules
  - Are at higher risk of returning to incarceration
- Inmates with a mental health disorder are more likely to complete suicide[2]
  - Between 2013 and 2014 the number of suicides in state prisons increased by 30% (from 192 to 249 deaths)

1. Treatment Advocacy Center Serious Mental Illness Prevalence in Jails and Prisons. Available at: https://www.treatmentadvocacycenter.org/evidence-and-research/learn-more-about/3695.
2. United States Department of Justice Office of Justice Programs Mortality in State Prisons, 2001-2014. Available at: https://www.bjs.gov/content/pub/pdf/msp0114st.pdf.

Jail Mental Health Stats*

Recidivism Rate

- Over 75% of Missouri Inmates with SMI have a history of contacts with the criminal justice system[2]
- Between 2005-2009, 15% of offenders released possessed a MI[2]
- Of this 15%, an estimated 57% returned to prison within 3 years of their release date[2]
- Those who return to prison often have been unable to comply with conditions of probation or parole due to mental illness factors

Substance Abuse

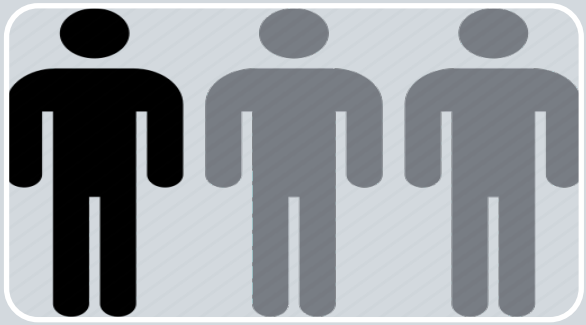
- Over 75% of prisoners with serious mental illness also have a SUD[3]
- The prevalence of SUD in prisoners with schizophrenia is 50%, bipolar 60%, and PTSD 60-80%[3]

1. Eddy, J. (2010). Director, Budget, Research & Evaluation. Missouri Department of Corrections. Email correspondence.
2. MRP Steering Teams. (2010). Updated Baseline Outcome Results & Sentencing County Analysis Releases July 1, 2004 to June 5, 2009. Retrieved October 1, 2010 from www.doc.mo.gov/documents.mrp/BaselineResults.pdf-2010-01-13.
3. Lewis, C.E., MD. (n.d.). Dual Diagnosis. Power Point Presentation.

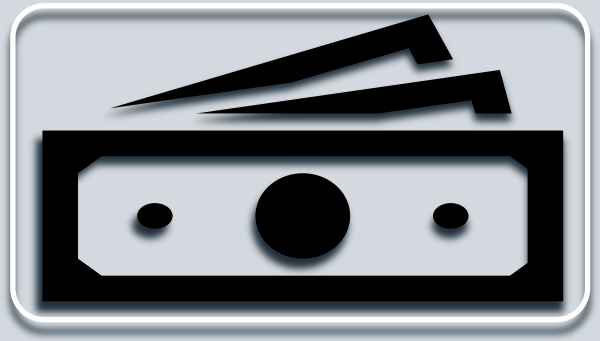
Information from the state of Missouri

Recidivism

In 2005, a released prisoner had an average of 5 arrests during a 9-year period (1).



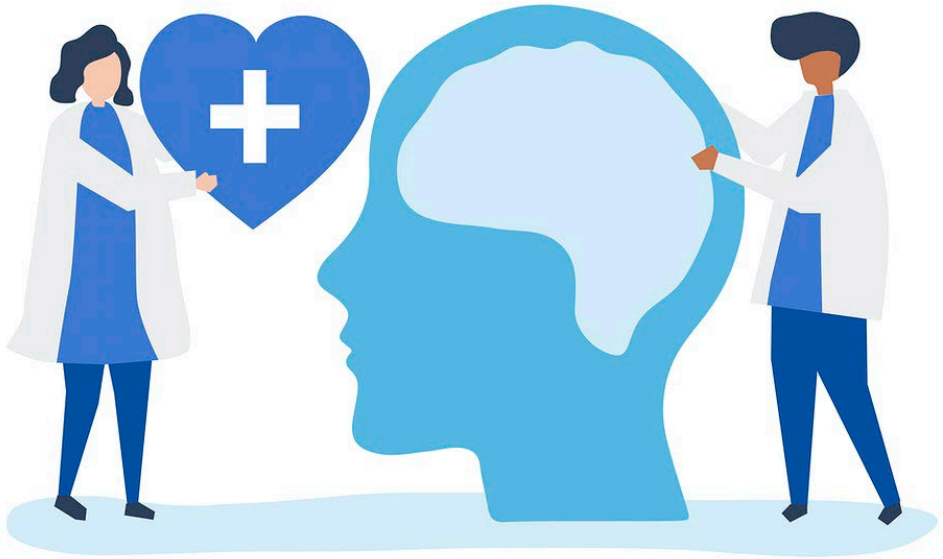
More than two thirds of inmates released from prison will be arrested within the first 3 years and 83% will be returned to jail system within 9 years (1).



Cost of incarceration have societal and financial burden (3).

1. Alper (2018). *2018 Update on Prisoner Recidivism: A 9-Year Follow –up Period.* Retrieved on April 18, 2022 from 2018 Update on Prisoner Recidivism: A 9-year Follow-up Period (2005-2014) (ojp.gov)
2. Van Deinse, T. B., Crable, E. L., Dunn, C., Weis, J., & Cuddeback, G. (2021). Probation Officers' and Supervisors' Perspectives on Critical Resources for Implementing Specialty Mental Health Probation. *Administration and policy in mental health*, *48*(3), 408–419. https://doi.org/10.1007/s10488-020-01081-8
3. Zgoba, K. et al. Journal of the American Academy of Psychiatry and the Law Online Feb 2020, JAAPL.003913-20; **DOI:** 10.29158/JAAPL.003913-20

Mental Health Problems Often Go Untreated in Prisons and Jails



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- Prisoners (54%) who had a mental health indicator were more likely than jail inmates (35%) to have received mental treatment since admission
  - 46% (prison) and 30% (jail) received prescription medication
  - 42% (prison) and 18% (jail) received counseling or therapy
  - 34% (prison) and 13% (jail) received prescription medication and counseling or therapy
- **Only about 1/3 of prisoners and inmates with a mental health indicator were currently receiving treatment**

1. Bronson, J. & Berzofsky, M. The Bureau of Justice Statistics, 2017, 1-7.

Transition from Jail to the Community

Challenges After Released and Upon Return to Community

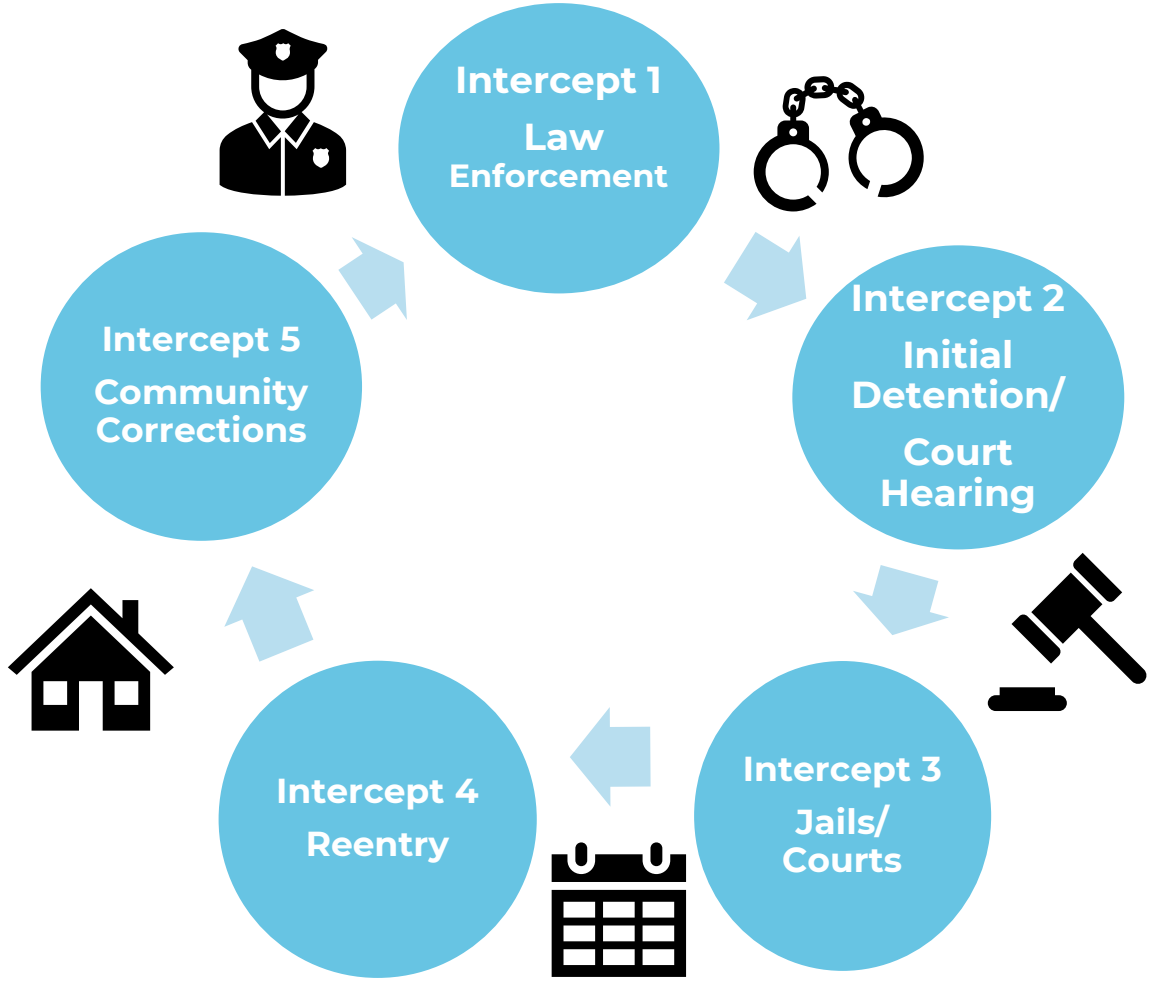
1. Lewis, C.E., MD. (n.d.). Dual Diagnosis. Power Point Presentation.

Identifying Barriers to Mental Health Treatment and Medication Continuity in Prison

- 2004 Survey of Inmates in State and Federal Correctional Facilities
  - 14, 499 state and 3686 federal prisoners were surveyed
- Assessed the continuity of pharmacotherapy used in prison
- Results:
  - Most prevalent mental health conditions – Depression, Mania, Anxiety, PTSD
  - One fourth of inmates received mental diagnosis during their lifetime
  - 18% were taking medication for a mental health conditions at admission to prison
  - Less than 50% of those reported taking medications at intake reported not receiving medication for the same condition while in prison
  - Screening was strongly correlated with having seen a medical profession while in prison on both state or federal facilities

1. Reingle Gonzalez, J. M., & Connell, N. M. (2014). Mental health of prisoners: identifying barriers to mental health treatment and medication continuity. *American journal of public health*, *104*(12), 2328–2333. https://doi.org/10.2105/AJPH.2014.302043353535

Sequential Intercept Model



1. *The Sequential Intercept Model (SIM).* (n.d.). Www.samhsa.gov. https://www.samhsa.gov/criminal-juvenile-justice/sim-overview

Transition Planning From Jail

- Examined a Midwest county jail with a face to face in-reach program led by a social worker who coordinates transition planning and Mental health services upon community entry
  - Is MH Service coordination associated with utilization of post-release MH treatment services, CoC, and rearrest?
  - What factors are associated with post release treatment engagement, CoC, and rearrest?
- 161 participants – 56.99% male, 74.2% white, 35 years old – mean age
- Results:
  - 82.8% enrolled by program coordinator
  - Participants engaged in the program who were provided with a warm hand-of to community-based services and had additional follow up had 11 times greater odds of maintaining CoC, which is a critical period for stabilizing and maintaining care
  - 23% decrease in number of participants in jail stays after the program
  - 3 times longer delayed return to jail when an individual maintained CoC compared to those who did not receive CoC

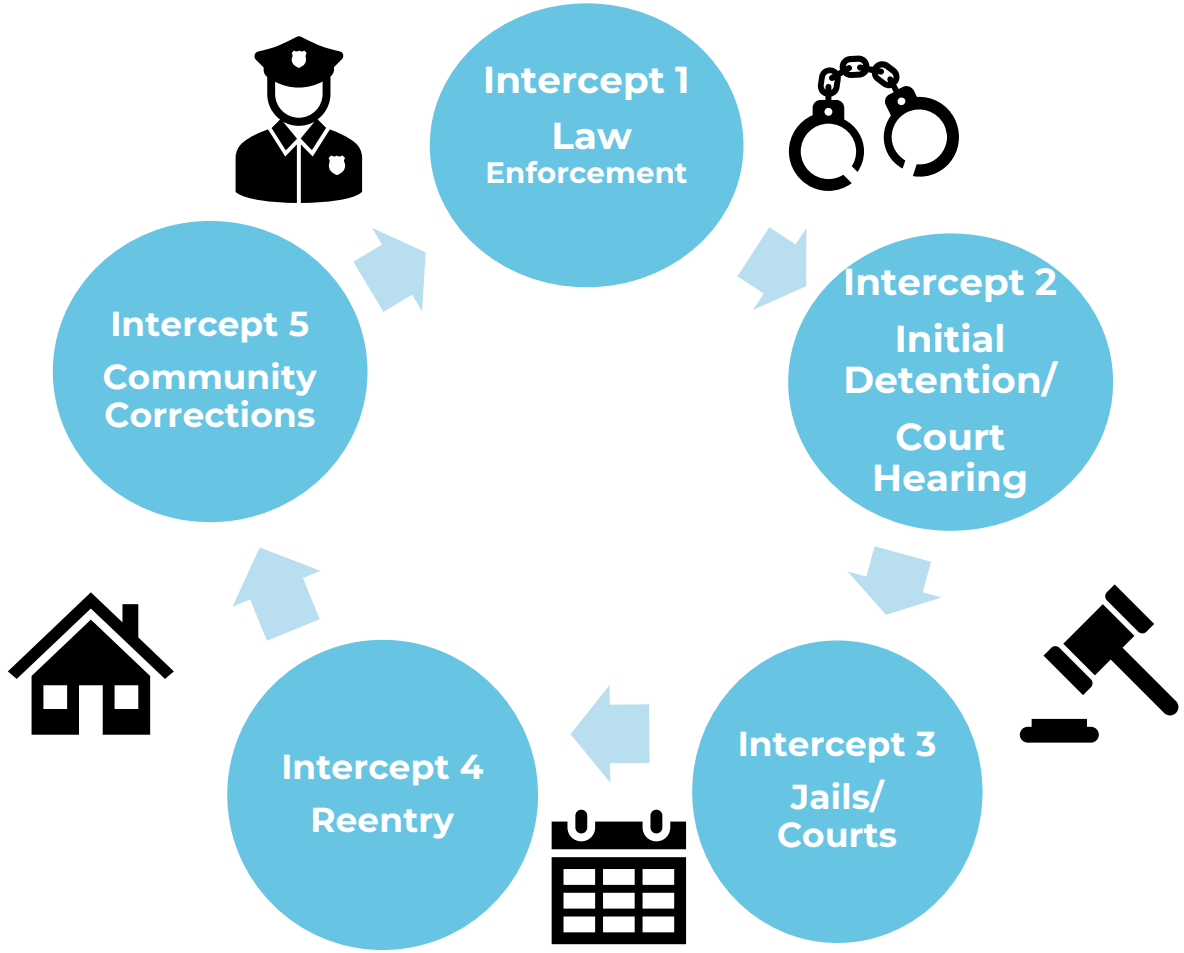
1. Hicks, D. L., Comartin, E. B., & Kubiak, S. (2021). Transition Planning from Jail; Treatment Engagement, Continuity of Care, and Rearrest. *Community Mental Health Journal*. https://doi.org/10.1007/s10597-021-00820-x

Summary

- Inmates face challenges after released and upon return to community
- Continuity of care is a barrier to mental health treatment in prisons
- Sequential intercept model details how individuals with mental health and SUD can be intervened with community-based actions to increase diversion from criminal justice system
- Transition planning from Jail showed 3 times longer delayed return to jail when an individual maintained CoC compared to those who did not receive CoC

Certified Community Behavioral Health Centers

Sequential Intercept Model



1. The Sequential Intercept Model (SIM). (n.d.). Www.samhsa.gov. https://www.samhsa.gov/criminal-juvenile-justice/sim-overview

CCBHC Scope of Services

- Screening, Assessment, Diagnosis and Risk Assessment
- Primary Health Screening and Monitoring
- Community Based Mental Health Care for Veterans
- Case Management
- Psychiatric Rehabilitation
- Peer, Family Support and Counselor Services
- Patient-centered Treatment Planning
- Outpatient Mental Health Services or Substance Use Disorder
- Crisis Intervention Services

1. Certified Community Behavioral Health Clinics (CCBHCs). (n.d.). Www.samhsa.gov. https://www.samhsa.gov/certified-community-behavioral-health-clinics

CCBHC's Role in the Crisis Continuum

Prevention

- Engagement in care early
- Crisis prevention and planning
- Outreach and Support Outside the Clinic

Crisis Response

- 24/7 Mobile teams
- Crisis stabilization
- Suicide prevention
- Detox
- Law enforcement and hospital coordination

Post crisis care

- Discharge/release planning, support and coordination
- Comprehensive Outpatient Mental Health and Substance use disorder care

1. Improving Access to Treatment Services for Mental Illness and Substance Use Disorders Certified Community Behavioral Health Centers (CCBHC). (n.d.). https://www1.nyc.gov/assets/citiesthrive/downloads/pdf/CCBHC-Presentation.pdf#:~:text=36%25%20of%20CCBHCs%20operate%20a%20crisis%20drop-in%20facility%2C

Impact of CCBHC on Increased Care Access

Nevada: 250% increase from year 1 to year 3 in patients served

Missouri: 27% increase in client care access in the first 4 years of the program

Texas: no wait lists at any CCBHC in 2 years

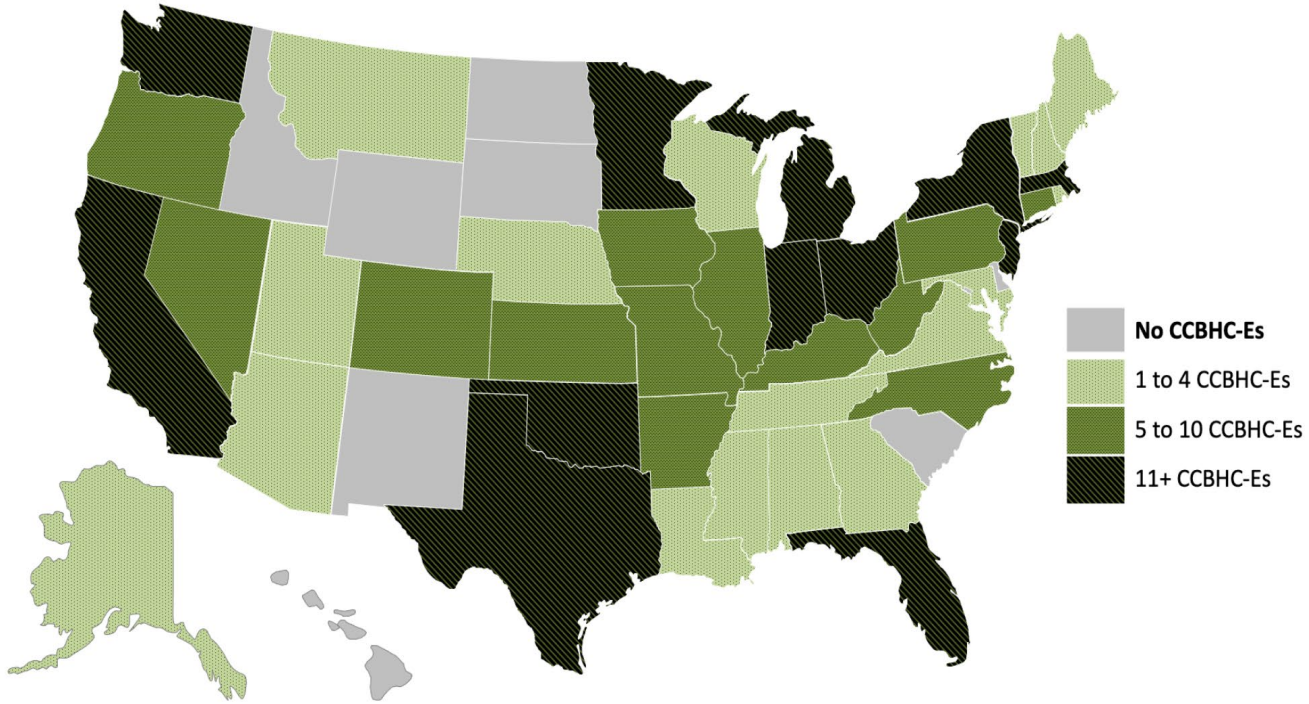
Oregon: 17% increase in patients with serious mental illness served

New York: 21% increase in patients served in the first year

1. Improving Access to Treatment Services for Mental Illness and Substance Use Disorders Certified Community Behavioral Health Centers (CCBHC). (n.d.). https://www1.nyc.gov/assets/citiesthrive/downloads/pdf/CCBHC-Presentation.pdf#:~:text=36%25%20of%20CCBHCs%20operate%20a%20crisis%20drop-in%20facility%2C

CCBHC Expansion Grant Sites Per State

- There are over 400 CCBHC across the country



1. Certified Community Behavioral Health Clinics (CCBHCs). (n.d.). Www.samhsa.gov. https://www.samhsa.gov/certified-community-behavioral-health-clinics

CCBHCs' Impact on Missouri

Pre-release screening, referrals, or other activities ensuring continuity of care upon re-entry to the community from jail provided by 72% pf CCBHC

20% decrease in hospitalizations after 3 years

36% decrease in emergency room visits

23% overall increase in Behavioral health services in 3 years

19% increase in veteran services

55% decrease in justice involvement with behavioral health populations

1. *Improving access to Treatment Services for Mental Illness and Substance Use Disorders Certified Community Behavioral Health Centers (CCBHC).* (n.d.). https://medicaid.ms.gov/wp-content/uploads/2022/02/Dr.-Parks-CCBHC-Handouts.pdf

*Missouri was a pilot state for the CCBHC model

CCBHC Positive Impacts

- Increased MAT for Substance abuse in Missouri and Oklahoma
- 70% no further law enforcement involvement for care engagement at six months in Missouri
- 40% increased patient treated for cooccurring SUD and SMI in Texas
- Oklahoma's Grand Lake Mental Health drop-in centers produced 99% reduction in emergency psychiatric hospitalizations
- Missouri's Family Guidance Center's Law Enforcement Center Liaison provided discharge planning to individuals who are set to be released from incarceration
- North Carolina's Monarch launched an EMS Rapid Opioid Overdose team that provided support to 120 people who had experienced overdose over a 2-year period

1. *Improving Access to Treatment Services for Mental Illness and Substance Use Disorders Certified Community Behavioral Health Centers (CCBHC).* (n.d.). https://www1.nyc.gov/assets/citiesthrive/downloads/pdf/CCBHC-Presentation.pdf#:~:text=36%25%20of%20CCBHCs%20operate%20a%20crisis%20drop-in%20facility%2C

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A Treatment Journey for Patients with Mental Health Illness

A Focus on the Jail System

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