

# Stigma, Barriers, and Outcomes for Patients Treated with LAIs

**Kristin Waters, PharmD, BCPS, BCPP**  
University of Connecticut  
Associate Clinical Professor

1

## Disclosures

Dr. Waters is a consultant with Johnson & Johnson and Teva. She will discuss all drugs without bias. All financial interests with ineligible companies (as noted) have been mitigated.

2

## Learning Objectives

- Describe the impact of stigma within the healthcare system and utilize non-stigmatizing terminology when talking to and about patient with psychiatric and/or substance use disorders
- Identify patient barriers to obtaining appropriate treatment for psychiatric and/or substance use disorders
- Explain the potential impact of LAI medications on patient health outcomes

3



But first, let's  
review...

4

## Audience Question 1

Which of the following is a positive symptom of schizophrenia?

- A. Flat affect
- B. Lack of motivation
- C. Delusional beliefs
- D. Impaired concentration

5

## Audience Question 1

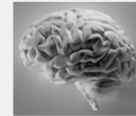
Which of the following is a positive symptom of schizophrenia?

- A. Flat affect
- B. Lack of motivation
- C. Delusional beliefs**
- D. Impaired concentration

6

## Schizophrenia: Clinical Features

Positive Symptoms	Negative Symptoms	Cognitive Symptoms
Hallucinations Delusions Disorganized speech Grossly disorganized or catatonic behavior	<p><b>Blunted affect:</b> Reduction in intensity of affect</p> <p><b>Allogia:</b> Inability to speak</p> <p><b>Avolition:</b> Lack of desire or motivation to pursue reasonable goals</p> <p><b>Anhedonia:</b> Inability to experience pleasurable emotions</p> <p><b>Amotivation:</b> Inability or unwillingness to participate in normal social situations</p> <p><b>Depression is NOT a negative symptom of schizophrenia.</b> <i>Depression = a mood symptom</i></p>	<p>Difficulty maintaining attention</p> <p>Deficits in working memory and long-term memory</p> <p>Deficits in executive function</p>



Jauhar S, et al. *Lancet*. 2022;399:473-86 Diagnostic and Statistical Manual of Mental Disorders: DSM-5. 5th ed. American Psychiatric Association, 2013

7

## Bipolar Disorder: Clinical Features

Mania	Hypomania	Depression
<p>Elevated, expansive or irritable mood with increase in goal-directed activity or energy</p> <ul style="list-style-type: none"> <li>• Grandiosity</li> <li>• Decreased need for sleep</li> <li>• Pressured speech</li> <li>• Flight of ideas</li> <li>• Easily distracted</li> <li>• Psychomotor agitation</li> <li>• Engaging in risky activities</li> </ul>	<p>Similar to mania but with less significant impairment</p>	<p>Depressed mood</p> <p>Decreased interest/pleasure</p> <p>Change in weight/appetite</p> <p>Changes in sleep</p> <p>Psychomotor changes</p> <p>Fatigue</p> <p>Guilt</p> <p>Decreased concentration</p> <p>Recurrent thoughts of death</p>

**Recall:** Most people with bipolar disorder spend the majority of time in a **euthymic** or **depressed** state

Diagnostic and Statistical Manual of Mental Disorders: DSM-5. 5th ed. American Psychiatric Association, 2013

8

## SUDs: Clinical Features

- Cluster of cognitive, behavioral and physiological symptoms
- Continued use of substance despite significant problems
  - Taking **larger amount** or for **longer** period
  - Desire to regulate use
  - Spending **time** obtaining, using, recovering
  - **Craving**
  - Impaired **performance**
  - Giving up activities
  - Hazardous situations
  - Tolerance
  - Withdrawal

Diagnostic and Statistical Manual of Mental Disorders: DSM-5. 5th ed. American Psychiatric Association, 2013

9

## Treatment of Schizophrenia & Bipolar Disorder

	Schizophrenia	Bipolar Disorder <sup>Ω</sup>
First-line treatment	<ul style="list-style-type: none"> <li>• First-generation antipsychotic (FGA)</li> <li>• Second-generation antipsychotic (SGA)*</li> </ul>	<ul style="list-style-type: none"> <li>• Mood stabilizers               <ul style="list-style-type: none"> <li>• Lithium, valproic acid, lamotrigine</li> </ul> </li> <li>• SGAs*</li> </ul>
Second-line treatment	<ul style="list-style-type: none"> <li>• Alternate first-line treatment</li> <li>• FGA</li> <li>• SGA*</li> </ul>	<ul style="list-style-type: none"> <li>• Alternate first-line treatment</li> <li>• Carbamazepine</li> <li>• Haloperidol</li> </ul>

\*Exception = clozapine, third-line for schizophrenia

<sup>Ω</sup>Different recommendations depending on mood episode

10

<b>Currently Available LAI Antipsychotics</b>	
<b>Generic Name</b>	<b>Brand Name</b>
<b>First-generation antipsychotics</b>	
<b>Fluphenazine decanoate</b>	Prolixin Decanoate
<b>Haloperidol decanoate</b>	Haldol Decanoate
<b>Second-generation antipsychotics</b>	
<b>Aripiprazole lauroxil</b>	Aristada Aristada Initio
<b>Aripiprazole monohydrate</b>	Abilify Maintena Abilify Asimtufii
<b>Olanzapine pamoate</b>	Zyprexa Relprevv
<b>Paliperidone palmitate</b>	Invega Sustenna Invega Trinza Invega Hafyera Erzofri
<b>Risperidone</b>	Risperdal Consta Uzedy

11

## Treatment of OUD & AUD

	<b>OUD</b>	<b>AUD</b>
<b>First-line treatment</b>	Methadone Buprenorphine +/- naloxone	Naltrexone Acamprosate
<b>Second-line treatment</b>	Naltrexone	Disulfiram
<b>Available in LAI formulation</b>	Buprenorphine (Sublocade, Brixadi) Naltrexone (Vivitrol)	Naltrexone (Vivitrol)

12

# LAI Treatment Outcomes

13

## LAI and Patient Outcomes: Schizophrenia

- LAI antipsychotics may result in reduction in:
  - Relapse rate
  - Hospitalization rate
  - All-cause inpatient visits (including ED)
  - Length of stay
  - Mortality
- Increased adherence rates
- One study demonstrated significant decrease in all-cause total costs following LAI initiation despite higher medication costs
  - Higher med costs substantially offset by decrease in total healthcare costs

Fu AZ, et al. *BMC Psychiatry*. 2022;22:250  
Lin D, et al. *CNS Drugs*. 2021;35:469-81 Fang S-C, et al. *J Clin Psychiatry*. 2022;83:21r14153

14

## LAI and Patient Outcomes: Bipolar Disorder

- Less data than with schizophrenia
- Non-adherence also a concern with bipolar disorder (~40%)
- LAIs have been shown to:
  - Prevent relapses in maintenance treatment of bipolar disorder
    - Especially relapses to mania
  - Prevent re-hospitalizations
  - Decrease length of hospital stay
  - Improve functionality

Lähteenvuo M, et al. *JAMA Psychiatry*. 2018;75:347-55  
 Calabrese JR, et al. *J Affect Disord*. 2018;227:649-56 Özgüven HD, et al. *Noro Psikiyatrs Ars*. 2021;58:S47-52

15

## LAI and Patient Outcomes: SUDs

- Less robust data
  - Trials may be retrospective/observational, rely on patient self-report of substance use
- Observational study: Patients with OUD reported higher abstinence rates when treated with LAI buprenorphine
  - Also lower levels of pain, fewer withdrawal symptoms, higher employment
- Retrospective studies in AUD:
  - LAI naltrexone associated with longer time to relapse compared with oral naltrexone
  - May not impact hospitalization rate

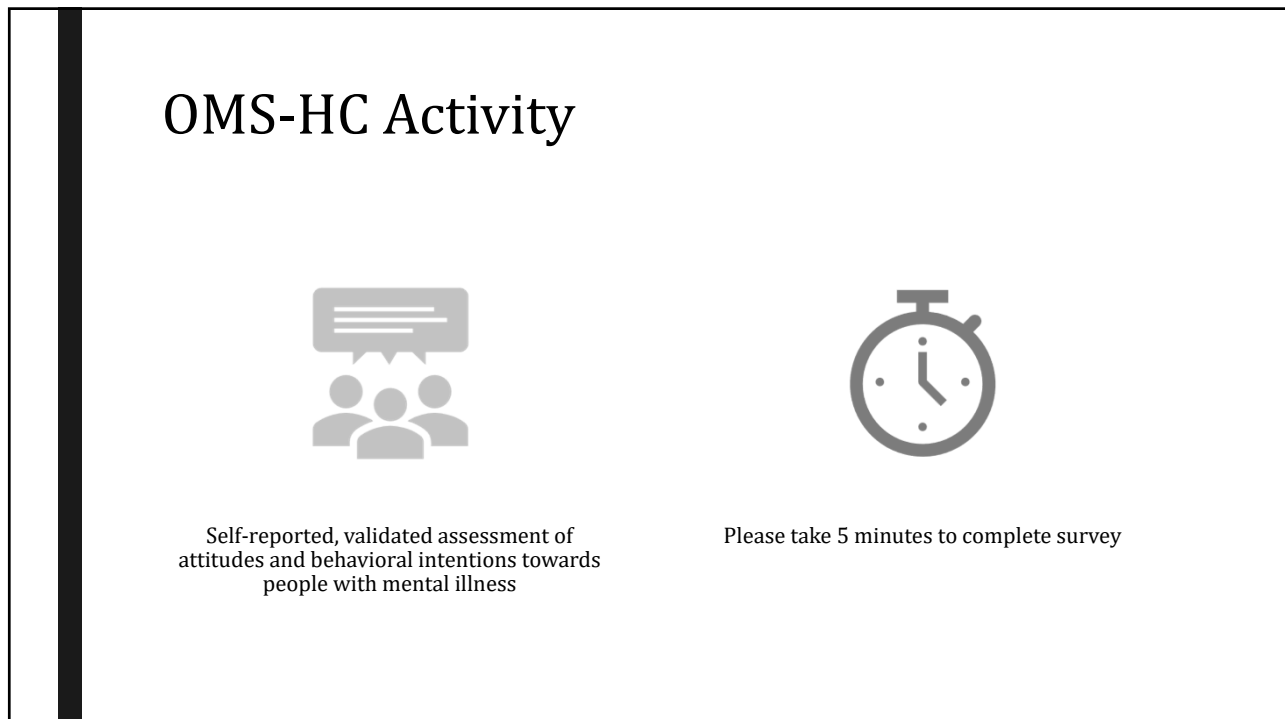
Ling W, et al. *J Addict Med*. 2020;14:e233-e240 Leighty AE, et al. *Ment Health Clin*. 2019;9:392-96

16


The slide features a decorative background on the left side consisting of a pattern of overlapping triangles in various shades of gray. On the right side, there is a large, light gray L-shaped graphic element. The main text is centered on the right side of the slide.

## Opening Minds Stigma Scale For Health Care Providers (OMS-HC)


17

The slide has a vertical black bar on the left side. The title is centered at the top. Below the title, there are two columns of content. The left column contains an icon of three people with a speech bubble above them, and text describing the activity. The right column contains an icon of a stopwatch and text indicating the survey duration.

## OMS-HC Activity



Self-reported, validated assessment of attitudes and behavioral intentions towards people with mental illness



Please take 5 minutes to complete survey

18

## Scoring OMS-HC Activity


- Most questions scored as follows:
  - Strongly disagree = 1
  - Disagree = 2
  - Neither agree nor disagree = 3
  - Agree = 4
  - Strongly agree = 5
- 5 items require **reverse scoring: 2, 6, 7, 8, 14**
  - Strongly disagree = 5
  - Disagree = 4
  - Neither agree nor disagree = 3
  - Agree = 2
  - Strongly agree = 1

19

## OMS-HC Factors

	Factor 1: Attitudes of health care providers	Factor 2: Disclosure/help-seeking	Factor 3: Social distance	Total
Description	Beliefs or views about mental illness	Telling others about their own mental illness	Desired proximity between oneself and another person in a social situation	
Items included from OMS-HC 15	1 9 10 11 13 15	3 4 5 8	2 6 7 12 14	All items
Score Range	6-30	4-20	5-25	15-75

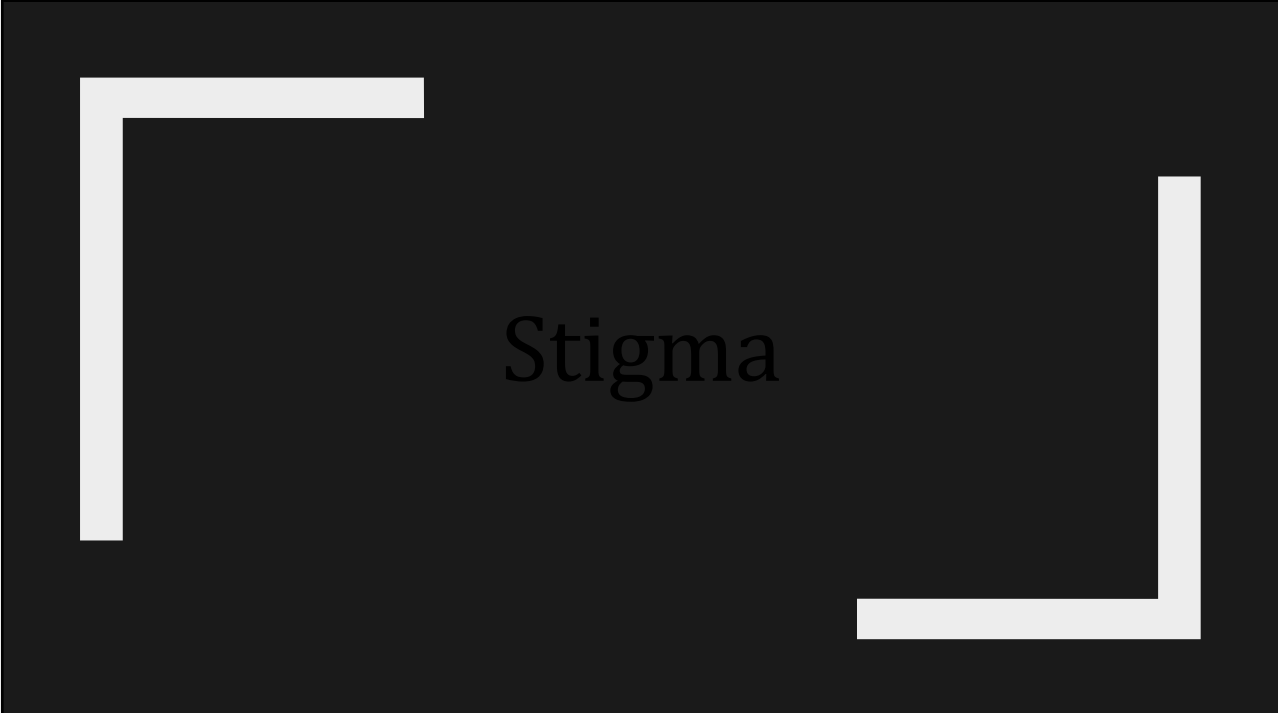
20



## Reflection

- For which factor was your score the highest (compared with total possible score for that factor)?
- What surprised you most about your results?
- Which item was the most difficult to answer truthfully?

21



# Stigma

22

## Stigma Definition

- "A set of negative and unfair beliefs that a society or group of people have about something."
- "A mark of shame or discredit"
- May occur at different levels in society

Knaak S, et al. *Healthcare Manage Forum*. 2017;30:111-16



23

## Stigma and Mental Illness

- >50% of people with a mental illness do not seek help
  - Commonly cited reason is fear of being treated differently or losing job
- May be subtle or overt
- May have cultural component
- Media representation

Corrigan PW, et al. *Psychol Sci Public Interest*. 2014;15:37-70  
 American Psychiatric Association, 2020. Available from: [psychiatry.org/patients-families/stigma-and-discrimination](https://www.psychiatry.org/patients-families/stigma-and-discrimination)

24

## Stigma and Mental Illness

Types of Stigma			
	Public	Self	Institutional
<b>Stereotypes &amp; Prejudices</b>	<b>People with mental illness are:</b> <ul style="list-style-type: none"> <li>• Dangerous</li> <li>• Incompetent, irresponsible</li> <li>• Unable to make their own decisions</li> <li>• To blame for their disorder</li> <li>• Unpredictable</li> </ul>	<b>I am:</b> <ul style="list-style-type: none"> <li>• Dangerous</li> <li>• Incompetent</li> <li>• To blame</li> <li>• Unpredictable</li> </ul>	<ul style="list-style-type: none"> <li>• Embodied in laws and other institutions</li> <li>• More likely to be criminalized than offered healthcare services</li> </ul>
<b>Discrimination</b>	<ul style="list-style-type: none"> <li>• Less likely to be hired</li> <li>• Landlords avoid renting</li> <li>• Lower standard of care in healthcare system</li> </ul>	<ul style="list-style-type: none"> <li>• Lowered self-esteem</li> <li>• Feeling unworthy of health, housing, employment, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Intended and unintended loss of opportunity</li> </ul>

Corrigan PW, et al. *Psychol Sci Public Interest*. 2014;15:37-70 American Psychiatric Association, 2020. Available from: [psychiatry.org/patients-families/stigma-and-discrimination](https://www.psychiatry.org/patients-families/stigma-and-discrimination); National Alliance on Mental Illness. StigmaFree Me. Available from: [nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me](https://www.nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me)

25



## Stigma in the Healthcare System

- People with mental illness report feeling **devalued, dismissed, and dehumanized** by many healthcare professionals
  - Excluded from health-related decisions
  - Coercive treatment
  - Long wait times when seeking help
  - Given insufficient information about condition or treatment options
  - Being spoken to or about using stigmatizing language

Knaak S, et al. *Healthcare Manage Forum*. 2017;30:111-16

26

## Stigma in the Healthcare System

Structural Stigma	Interpersonal Stigma	Intraindividual Stigma
<ul style="list-style-type: none"> <li>• Investment of resources</li> <li>• Quality of care standards</li> <li>• Organizational culture</li> </ul>	<ul style="list-style-type: none"> <li>• Patient-provider interactions</li> <li>• Discriminatory behaviors</li> <li>• Negative attitudes</li> </ul>	<ul style="list-style-type: none"> <li>• Self-stigma</li> <li>• Patient reluctance to seek care</li> <li>• Healthcare professional reluctance to disclose a mental illness and/or seek care</li> </ul>

Knaak S, et al. *Healthcare Manage Forum.* 2017;30:111-16

27

## Dispelling Myths about Violence

- **Misconception that mental illness and violence are linked**
  - Mass shootings often blamed on mental illness
- Most patients with stable mental illness are **not at an increased risk for violence**
- Small percentage of violent acts (~3-4%) that occur in society are attributed to patients with a serious mental illness
  - Patients most at risk of harming themselves
  - More likely to be victims than perpetrators

Rueve ME, *Psychiatry Edgmont.* 2008;5:34-48

28

## Violence and Racial Bias

- White and Latinx mass shooters more likely to be described as mentally ill
  - Race not discussed in most published studies about mass shootings
  - Mental health rarely mentioned in cases of Black shooters
- Research on the link between violence and mental illness largely relies on data from criminal justice system
  - Individuals labeled as violent more likely to be people of color

Metzl J, et al. *Harv Rev Psychiatry*. 2021;29:81-9

29

## Dispelling Myths about Violence

- Slightly increased possibility of violence if patient:
  - Is not receiving effective treatment
  - Has previous history of violence
  - Is currently misusing alcohol or other drugs
  - Is experiencing active psychotic symptoms
  - Is triggered by fear

Rueve ME, *Psychiatry Edgmont*. 2008;5:34-48

30

## Consequences of Stigma

Poorer quality  
mental health  
care

- Discontinuation of treatment
- Suboptimal therapeutic relationships
- Delays in seeking treatment

Poorer quality  
physical health  
care

- Symptoms not taken seriously
- Symptoms misattributed to mental illness  
--> delay in diagnosis and treatment

Knaak S, et al. *Healthcare Manage Forum.* 2017;30:111-16


31

## Stigma & LAIs

- Not directly investigated
- LAIs may help to **reduce** stigma by:
  - Allowing for less frequent dose administration
  - Improving adverse effect profile (less noticeable)
- Patients may feel **more stigma** if:
  - They feel that they do not have control over the medication administration
  - They feel that the LAI is punitive or coercive

Natale A, et al. *Curr Pharm Des.* 2023; Taylor DM, et al. *Nord J Psychiatry.* 2018;29:981-3

32



## Pharmacists & Stigma

- Stigma still exists despite increasing awareness
- Negative attitudes identified among community pharmacists toward heroin and alcohol use disorders
  - Other studies showed positive attitude toward dispensing OUD medications such as methadone, buprenorphine
- Pharmacists can play a valuable role in treatment of patient with mental illness
  - Barrier: Pharmacists may harbor negative opinions about mental illness
- Pharmacists may feel inadequately prepared which can stimulate fear, discomfort, resentment

Davis B, et al. *Front Public Health*. 2022;10:818034 Giannetti V, et al. *Int J Clin Pharm*. 2018; 40:1096-1105  
O'Reilly CL, et al. *Res Social Adm Pharm*. 2015;11:e101-9 Balayssac D, et al. *Ann Pharm Fr*, 2022;80:897-905

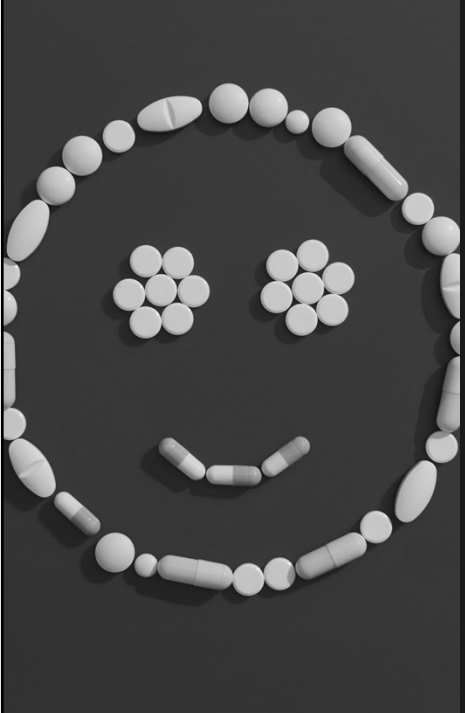
33

## Pharmacy Students & Stigma

- Study demonstrated stigma toward patients with schizophrenia, severe depression
- Recent study of pharmacy students (N=390):
  - Significantly **higher stigma toward psychotropic medications** compared to stigma toward mental health conditions
  - Most students preferred non-pharmacologic treatment (41.8%) or non-pharmacologic and pharmacologic treatment (39.7%)
    - Personal preference was associated with psychotropic stigma
  - Impact on pharmacist counseling on these medications?

Davis B, et al. *Front Public Health*. 2022;10:818034  
Bell JS, et al. *Am J Pharm Educ*. 2006;70:77

34




## Pharmacist Role & Positive Impact

- Pharmacists have demonstrated ability to improve mental health outcomes
  - Improved prescribing practices
  - Increased adherence rates
  - Increased patient satisfaction
  - Identification of people experiencing mental health crisis
  - Mental health screening
  - Identification and management of adverse effects
  - Improvement in symptom management:
    - Ex: Depression, PTSD

Bell JS, et al. *Am J Pharm Educ.* 2006;70:77  
El-Den S, et al. *Pharm Pract (Granada).* 2021;19:2545


35

## Combating Stigma



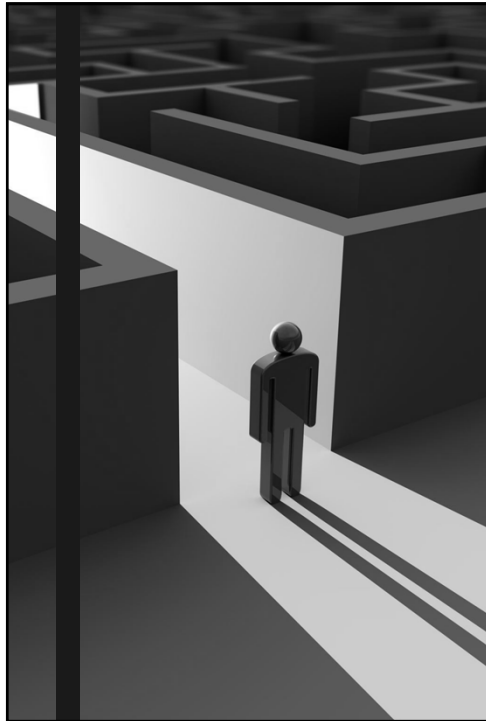
- 1. Educate yourself and others:**
  - Use facts to battle stereotypes
  - Dispel false ideas
  - Mental health issues are not a result of personal weakness, lack of character, or poor upbringing
- 2. See the person, not the condition:**
  - Get to know the person
  - Treat everyone with kindness and empathy
  - Everyone with a mental health condition has their own story, path, and journey
- 3. Take action:**
  - Push for better legislation and policies to improve lives
  - Support the cause

Take the stigma quiz: [nami.org/stigmafree](https://nami.org/stigmafree)



National Alliance on Mental Illness. StigmaFree Me. Available from: [nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me](https://nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me)

36





## Stigmatizing Language

- Language is powerful
  - Can break down stereotypes or feed into them
- **Person-first language** puts the focus on the person, not their disorder or diagnosis
  - People not defined by their illness

37



## Person-First Language: Mental Illness

 Instead of...	Try... 
Schizophrenic	Person with schizophrenia
He is bipolar	He has bipolar disorder/he is living with bipolar disorder
Manic depressive	Person living with bipolar disorder
The mentally ill	People with a mental illness/mental health condition

Mental Health First Aid, Use person-first language to reduce stigma, 2022. Available from: [mentalhealthfirstaid.org/2022/04/use-person-first-language-to-reduce-stigma/](https://mentalhealthfirstaid.org/2022/04/use-person-first-language-to-reduce-stigma/)  
 National Alliance on Mental Illness. StigmaFree Me. Available from: [nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me](https://nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me)

38



## Person-First Language: SUDs

 Instead of...	Try... 
Alcoholic	Person with alcohol use disorder
Addict, junkie, druggie	Person with a substance use disorder
Ex-addict, clean	Person in recovery

Mental Health First Aid, Use person-first language to reduce stigma, 2022. Available from: [mentalhealthfirstaid.org/2022/04/use-person-first-language-to-reduce-stigma/](https://mentalhealthfirstaid.org/2022/04/use-person-first-language-to-reduce-stigma/)  
National Alliance on Mental Illness. StigmaFree Me. Available from: [nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me](https://nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me)

39

## Stereotyping Language

 Instead of...	Try... 
Drug/alcohol abuse	Substance use disorder
Committed suicide	Died by suicide
Failed suicide	Attempted suicide
Crazy, insane, nuts	Person living with a mental illness/person experiencing a mental health crisis

Mental Health First Aid, Use person-first language to reduce stigma, 2022. Available from: [mentalhealthfirstaid.org/2022/04/use-person-first-language-to-reduce-stigma/](https://mentalhealthfirstaid.org/2022/04/use-person-first-language-to-reduce-stigma/)  
National Alliance on Mental Illness. StigmaFree Me. Available from: [nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me](https://nami.org/Get-Involved/Pledge-to-Be-StigmaFree/StigmaFree-Me)

40

## Audience Question 2

Which of the following would be the best way to describe a patient who will be receiving an LAI at your pharmacy today?

- A. A schizophrenic patient is coming in at noon for his Invega Sustenna dose.
- B. A patient with bipolar disorder is scheduled to receive Abilify Maintena.
- C. This patient is receiving Vivitrol every month because he is an alcoholic.
- D. A patient with manic depression needs her Risperdal Consta dose today.

41

## Audience Question 2

Which of the following would be the best way to describe a patient who will be receiving an LAI at your pharmacy today?

- A. A schizophrenic patient is coming in at noon for his Invega Sustenna dose.
- B. A patient with bipolar disorder is scheduled to receive Abilify Maintena.**
- C. This patient is receiving Vivitrol every month because he is an alcoholic.
- D. A patient with manic depression needs her Risperdal Consta dose today.

42

# Other Barriers To LAI Treatment



43

## Cost

- Patients and providers may have to balance cost vs. benefits
- LAI formulations generally more expensive than oral
  - May have increase in quality-adjusted life-years (QALYs)
- Older formulations of LAIs often less expensive
  - Older agents may be more cost-effective even if associated with less QALYs
- **However** also need to weigh cost-savings of avoiding hospitalization, other healthcare costs

Wang GH, et al. *J Manag Care Spec Pharm.* 2023;29:884-95  
 Rosenheck RA, et al. *Psychiatr Serv.* 2016;67:1124-30 Augusto M, et al. *J Comp Eff Res.* 2018;7:627-36

44

## Other Cost Considerations



Almost all LAI antipsychotics included on CT Medicaid Preferred Drug List



Many agents have associated savings programs

45

## Logistics

- May need to travel to clinic to receive injection
  - Time, cost, work schedules
- May feel "tied" to their home if need to wait for administrator (i.e. nurse) to arrive
- LAIs may pose problems during periods when patient is traveling away from home

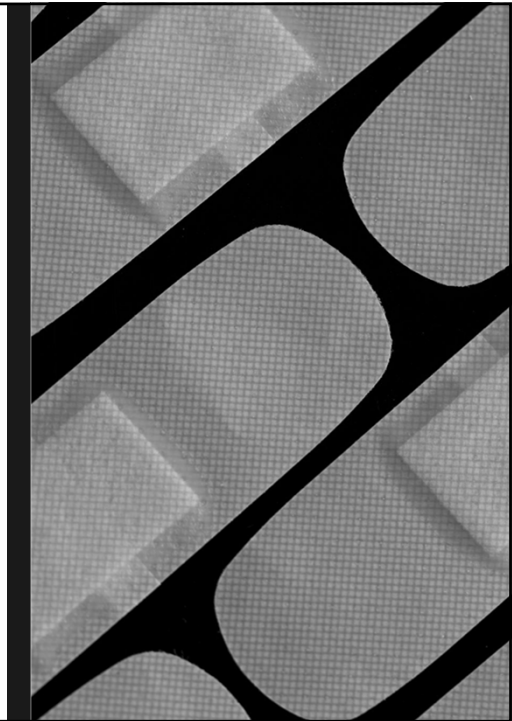
Fiore G, et al. *J Bras Psiquiatr.* 2021;70:68-77

46

## Fear of Needles & Injection Site Pain

- Studies included patients treated with and not treated with LAIs
- Some patients did report first injection being painful
  - Nodules
  - Indurations
  - Muscle granulomas
  - Fibrosis
  - Abscesses

Fiore G, et al. *J Bras Psiquiatr.* 2021;70:68-77



47

## Impaired Insight

- **Insight:**
  - Ability to recognize that one has a psychiatric illness
  - Ability to label unusual psychological experiences as pathological
- **Patients may not believe they need treatment**
  - Diminished insight associated with poor treatment adherence
    - Impaired insight very common in schizophrenia
      - Can occur with other mental disorders
    - In one study, 8.3% of patients who refused an LAI antipsychotic did so due to poor insight

Joseph B, et al. *Indian J Psychol Med.* 2015;37:5-11  
Zhu L, et al. *Front Public Health.* 2021;9:770276

48

## Prescriber Concerns

- Fear of damaging therapeutic relationship
  - Coercion
- Lack of knowledge of long-acting formulations

Potkin S, et al. *BMC Psychiatry*. 2013;13:261

49

## Positive Aspects of LAIs: Patient Perspective

- Do not have to remember to take medication every day
- Sense of control/safety
- LAIs seen as a way to prevent relapses and hospitalizations
- Fewer side effects (drowsiness, weight gain)
- Increased sense of wellbeing due to reduction in psychiatric symptoms

Fiore G, et al. *J Bras Psiquiatr*. 2021;70:68-77

50

## Summary

- Patients living with mental illness and/or substance use disorders experience many barriers to optimal treatment
- Stigma can reduce the likelihood that a patient seeks and receives care
- Long-acting injectable medications may improve patient outcomes including hospitalization rates and relapse rates

51

# Stigma, Barriers, and Outcomes for Patients Treated with LAIs

**Kristin Waters, PharmD, BCPS, BCPP**  
University of Connecticut  
Associate Clinical Professor

52