

Long-Acting Injectables in Schizophrenia:

Dispelling Myths, Unlocking Clinical Value

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Faculty Introduction



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Faculty Disclosures

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Consultant for or has received honoraria from Alkermes, Allergan, Dainippon Sumitomo, H. Lundbeck, HLS Therapeutics, Indivior, Intracellular Therapies, Janssen Pharmaceutical, Johnson & Johnson, LB Pharmaceuticals, Merck, Minerva, Neurocrine, Novartis Pharmaceuticals, Neumora Therapeutics, Otsuka, Reviva, Roche, Saladex, Sunovion, Takeda, and Teva; has received grant/research support from Otsuka, Lundbeck, and Janssen; is a member of the speakers/advisory boards for Alkermes, Click Therapeutics, Intracellular Therapies, Lundbeck, Neurocrine, Otsuka, Roche, Sunovion, Takeda, Teva, and Reviva; and is a stock shareholder of Vanguard Research Group and LB Pharma; and has received other financial support from UpToDate (royalties)

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Dr. Rubio:

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Housekeeping



Share your experiences!

Please pass your question cards to a staff member when complete



Live questions and panel discussion

The panel will address as many as possible in the dedicated Q&A session



Your feedback is valued!

Please take a moment to complete the evaluation questions at the end of the session

Objectives

- Acknowledge common myths many Physicians/Providers have regarding LAIs
- Dispel myths by exploring the clinical value of LAIs and benefit of early adoption
- Introduce an educational resource that will address common clinical dilemmas and highlight the role of LAIs

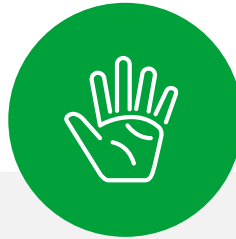
LAI, long-acting injectable.



Common Myths Identified by This Panel



**Physicians/
Providers know when
patients are nonadherent**



**Patients do not
accept/want
LAI treatment**



**LAI is only
appropriate for patients
that have demonstrated
nonadherence**

LAI, long-acting injectable.



MYTH #1

Physicians/Providers
Know When Patients
Are Nonadherent

We Do Not Have a Crystal Ball...

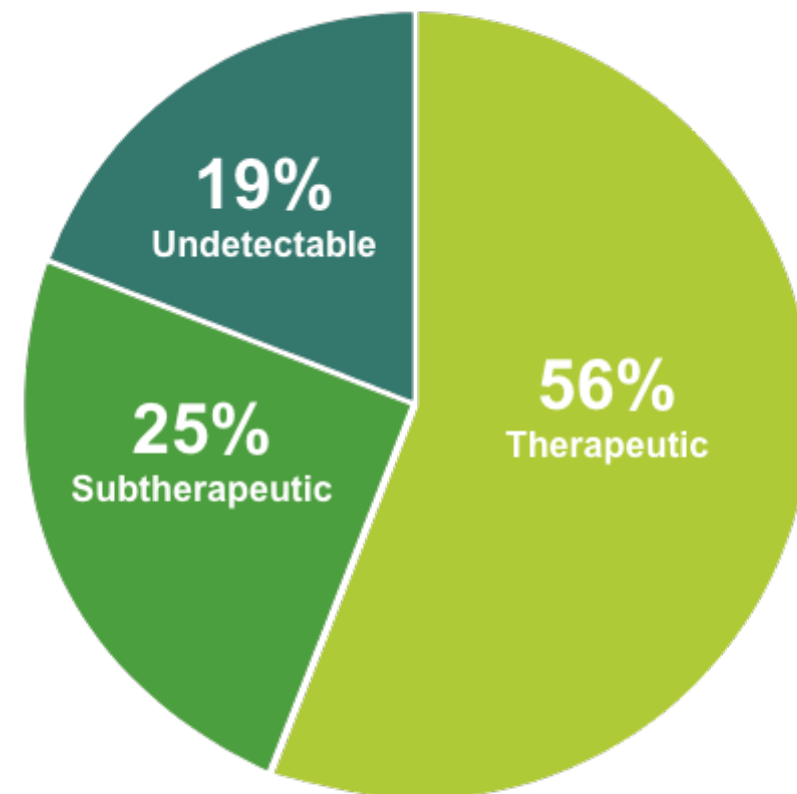


Poor Adherence May Be Mistaken as Treatment Resistance

Lack of adequate response to treatment may be seen as treatment resistance instead of poor adherence or under-treatment

- 36 patients clinically identified as having treatment-resistant schizophrenia were referred to an outpatient service for assessment
- **Over 1/3 of these patients showed evidence of poor adherence** with undetectable or subtherapeutic antipsychotic levels

Antipsychotic Plasma Levels of Patients Identified as Treatment Resistant



The original uploader was Ali at English Wikipedia. (Original text: Not attributed), Public domain, via Wikimedia Commons
McCutcheon R, et al. *J Psychopharmacol*. 2015;29(8):892-897.



Overestimation of Adherence Is Common

Adherence was evaluated in 102 outpatients diagnosed with schizophrenia and with a MEMS device for 3 months in 79 patients on OA treatments. The psychiatrist, patients, and relatives also provided compliance estimates¹

- Noncompliant behaviors were observed in 42.3% of patients
- Agreement between estimations by the psychiatrist and the MEMS findings was **fair**
- Agreements between those of both patients and relatives and the MEMS findings were **slight**

Antipsychotic nonadherence rates of 25 outpatients with schizophrenia or schizoaffective disorder was assessed by MEMS and clinician rating for 3 months²

- Nonadherence was detected in 12 of 25 patients (48%) by MEMS and **0%** by the Clinician Rating Scale

Adult outpatients with schizophrenia (N=35) or schizoaffective disorder (N=26) received adherence assessments via MEMS as well as by monthly prescriber, patient, and research assistant report for up to 6 months³

- MEMS detected greater nonadherence rates (57%) than either prescribers (**7%**) or patients (5%)

MEMS - Medication Event Monitoring System (cap); OA, oral antipsychotic.

1. Acosta FJ, et al. *Schizophr Res.* 2009;107(2-3):213-7. 2. Byerly M, et al. *Psychiatry Res.* 2005;133(2-3):129-33. 3. Byerly MJ, et al. *Psychiatr Serv.* 2007;58(6):844-7.



Clinician Assessment vs Plasma Levels

- Comparing clinician assessment of adherence and plasma levels in 97 patients presenting to ED
- Adherence typically based on patient self-report or report of individuals involved in patient's care

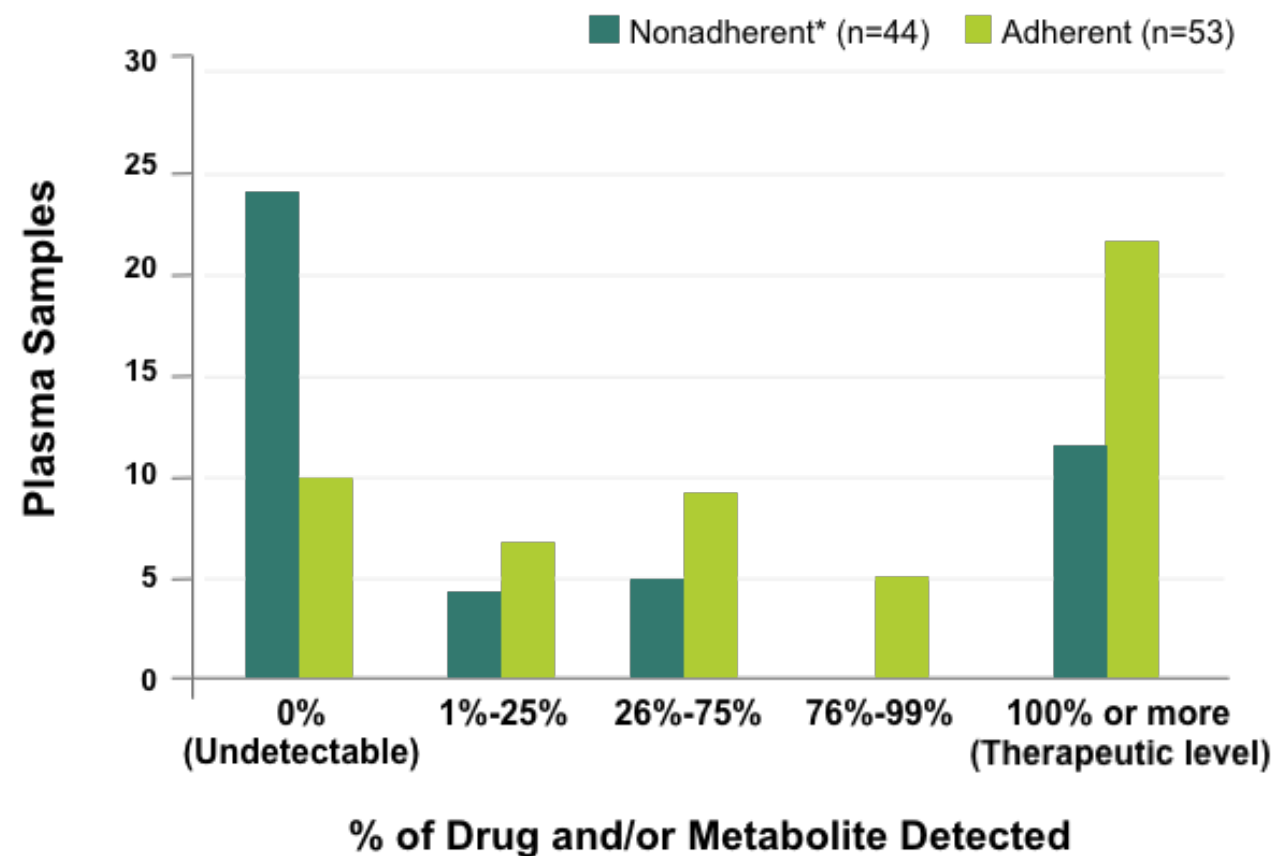
Nearly 20% of patients (10 of 53) assessed as adherent had undetectable plasma levels (0%)

25% of patients (11 of 44) assessed as nonadherent had therapeutic levels ($\geq 100\%$)

ED, emergency department.

Lopez LV, et al. *J Clin Psychopharmacol.* 2017;37(3):310-314.

% of Therapeutic Drug Levels Detected in Plasma Samples

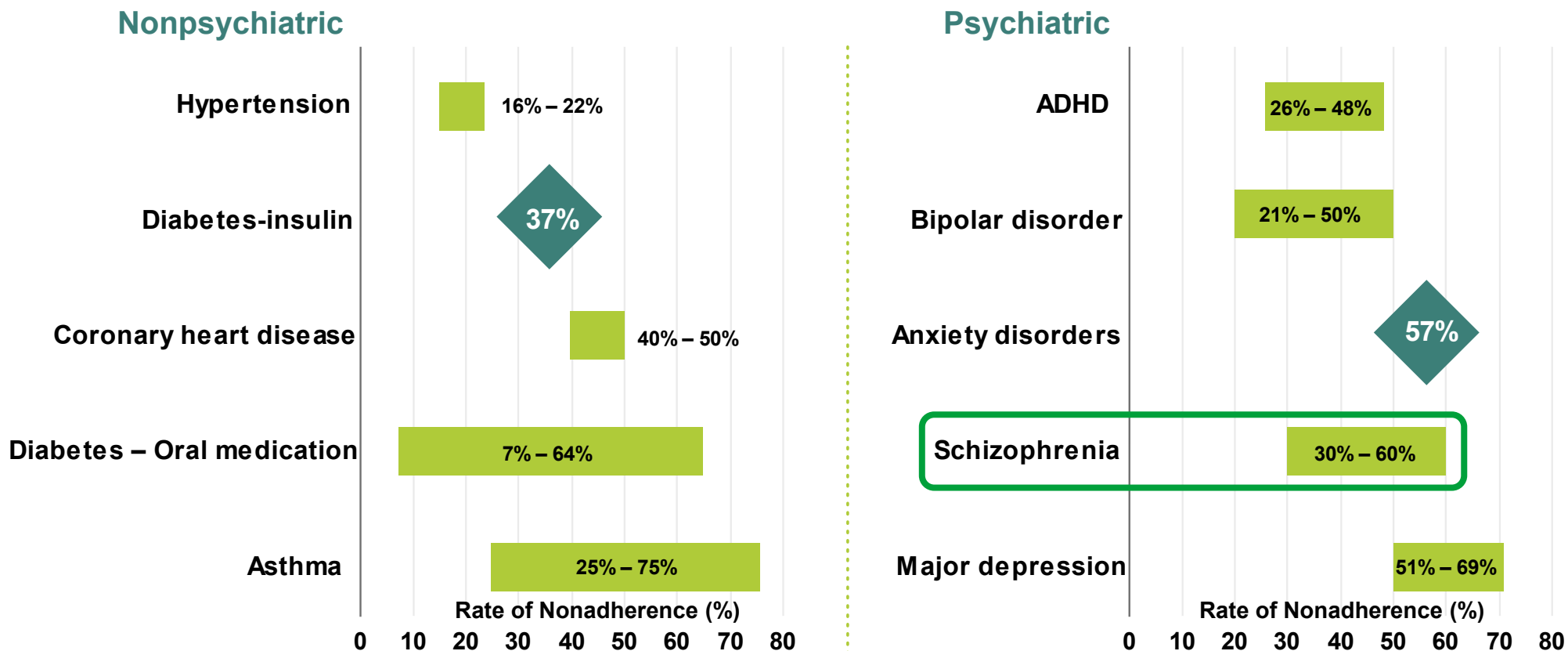


*As assessed by ED psychiatrist.



This Clinical Problem is Not Unusual:

Many Chronic Conditions Have High Rates of Medication Nonadherence



ADHD, attention-deficit/hyperactivity disorder. Parks J. Clinical Strategies to Promote Medication Adherence. Accessed February 3, 2021.
www.thenationalcouncil.org/wp-content/uploads/2020/04/Clinical-Strategies-to-Promote-Medication-Adherence-6.20.18.pdf?dof=375ateTbd56

Risk Factors for Non-adherence Can Differ for Each Patient, and Can Change Over Time



Patient-related¹

- Poor insight (anosognosia)
- Negative attitude toward medication
- Prior nonadherence
- Substance use disorder
- Cognitive impairment

Environment/Relationship-related¹

- Lack of family/social support
- Problems with therapeutic alliance
- Practical problems with getting/taking medications (financial, transportation, etc.)

Treatment-related¹

- Side effects
- Lack of efficacy/continued symptoms

Societal-related²

- Stigma attached to illness
- Stigma caused by medication side effects

1. Velligan DI, et al. *J Clin Psychiatry*. 2009;70(suppl 4):1-46. 2. Lee S, et al. *Soc Sci Med*. 2006;62:1685-1696.

Methods for Monitoring Adherence Have Various Drawbacks



Indirect Methods

Simple, but perhaps less reliable

- Patient report, diary, or self-assessment
- Informant report/questionnaire
- Clinical response/AEs

- Pill count
- Blister pack
- MEMS cap
- Electronic pill trays
- Pharmacy/prescription refill record

Direct Methods

Cumbersome/more difficult to assess but potential to provide more reliable information

- Observed ingestion
- Measurement of drug in bodily fluid or blood
- Measurement of biomarker
- Hair analysis
- Ingestible marker/digital health feedback system

In general, the simplest strategies for measuring adherence have varying levels of reliability, and the most potentially informative strategies may be more invasive and/or expensive

AE, adverse event; MEMS, medication event monitoring system.
Kane JM, et al. *World Psychiatry*. 2013;12(3):216-226.

Treatment With LAIs Can Help Rule Out Pseudo-Resistance



TRIPP Guidelines

Consensus Criteria for Assessment and Definition of Treatment-Resistant Schizophrenia

- To rule out pseudo-resistance due to inadequate treatment adherence, the optimal definition of treatment resistance would include at least one failed trial with an LAI antipsychotic, given for at least 6 weeks after it has achieved steady-state (generally at least 4 months from commencing treatment)

LAI, long-acting injectable; TRIPP, Treatment Response and Resistance in Psychosis.
Howes OD, et al. *Am J Psychiatry*. 2017;174(3):216-229.



Adherence is a challenge for clinicians, especially when managing patients with chronic disorders¹

The most common methods to monitor adherence in day-to-day practice are often inaccurate and quantitative assays are not commonly used²

Thus, should treatment with an LAI antipsychotic be considered as generally preferred?

LAI, long-acting injectable.

1. Parks J. Clinical Strategies to Promote Medication Adherence. Accessed February 3, 2021. www.thenationalcouncil.org/wp-content/uploads/2020/04/Clinical-Strategies-to-Promote-Medication-Adherence-6.20.18.pdf?daf=375ateTbd56. 2. Kane JM, et al. *World Psychiatry*. 2013;12(3):216-226.



MYTH #2

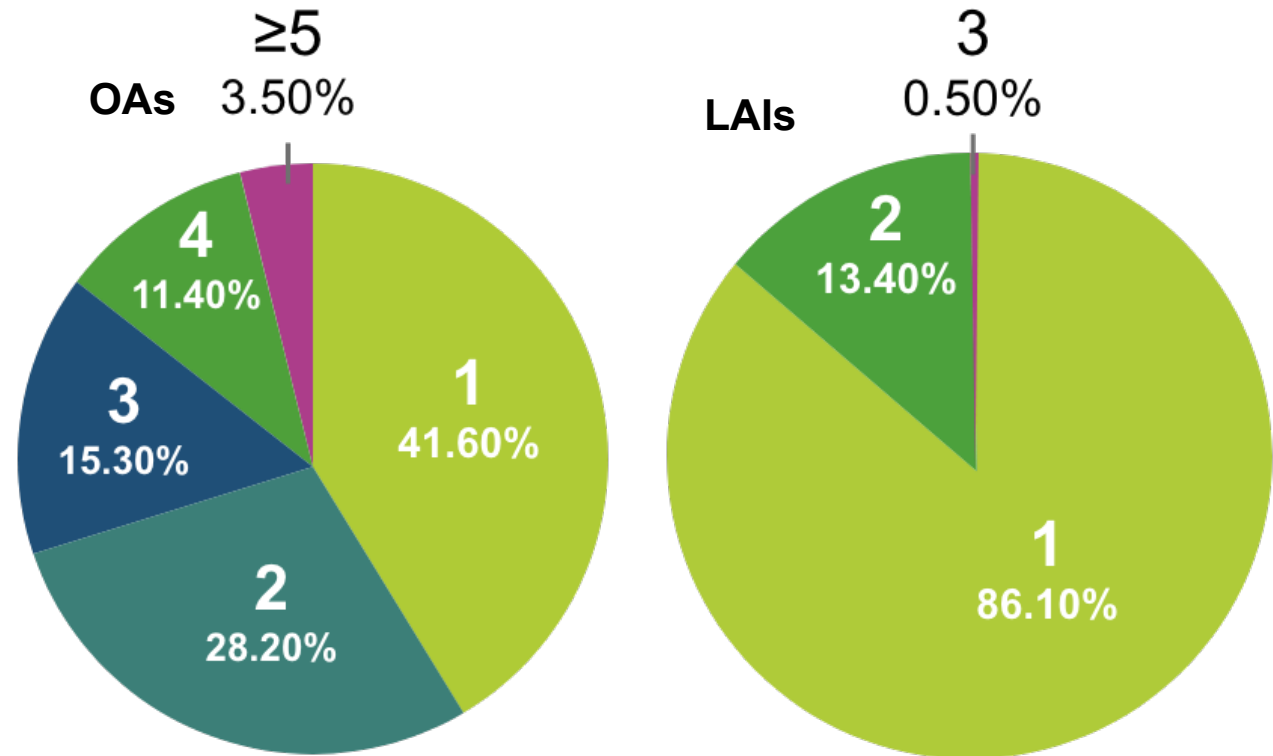
Patients Do Not
Accept/Want LAI
Treatment

LAIs Have Been Underutilized in the US



- Analysis of US-based commercial claims databases* showed out of 41,391 patients with newly diagnosed schizophrenia, ~5% (1836 patients) received treatment with an LAI
- Before initiating an LAI, more than half (58% of 202) of patients received ≥ 2 different OAs
- Once initiated on LAI, 86% of patients stayed on that LAI until successful implementation†

Number of OAs Received Prior to Successful LAI Implementation (n=202)



LAI, long-acting injectable; OA, oral antipsychotic; US, United States. *Data from the IBM® MarketScan® Commercial and Medicare Supplemental databases. †Treatment ≥ 90 consecutive days with ≤ 7 -day gaps. Kane JM, et al. Treatment Patterns Among Patients in the United States Utilizing Long-Acting Injectable Antipsychotic Agents: An Analysis of a Commercial Claims Database. Presented at: Psych Congress 2021; October 29-November 1, 2021; San Antonio, Texas.

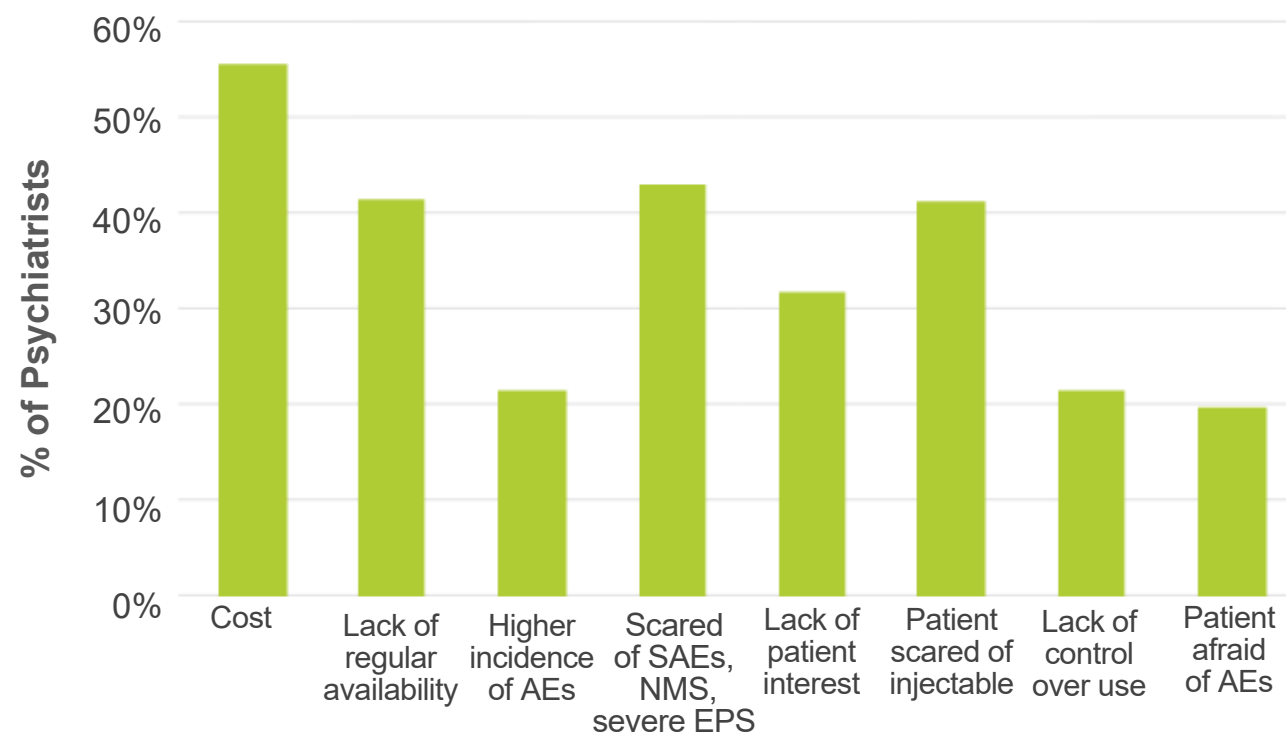
Many Factors May Prevent Physicians From Prescribing LAIs



In an online survey of 622 psychiatrists*:

- 59% believed they underuse LAIs “to a certain extent”
- 19.8% reported that they “definitely” or “to a large extent” underuse LAIs

Top Factors Identified by Psychiatrists that Keep Them From Prescribing LAIs

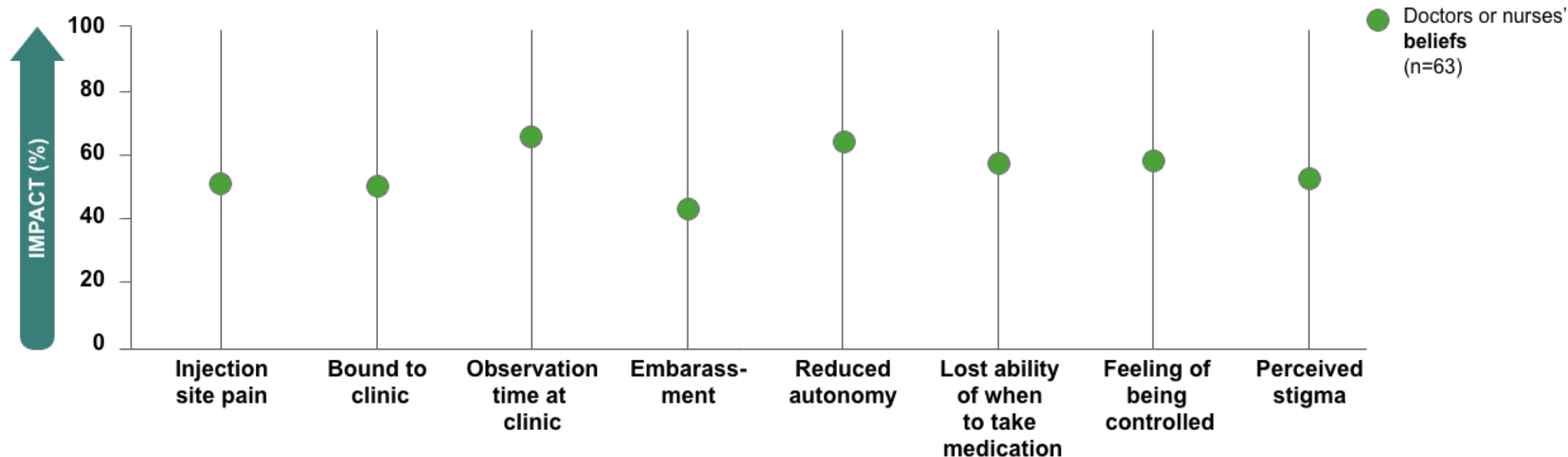


AE, adverse event; EPS, extrapyramidal symptoms; LAI, long-acting injectable; NMS, neuroleptic malignant syndrome.

*cross-sectional study design was followed in which an online questionnaire-based survey was carried out among practicing psychiatrists and trainee residents in India.

Grover S, et al. *J Clin Psychopharm*. 2019;39(6):611-619.

Physicians Believe Patients Have High Levels of Concern Regarding LAIs

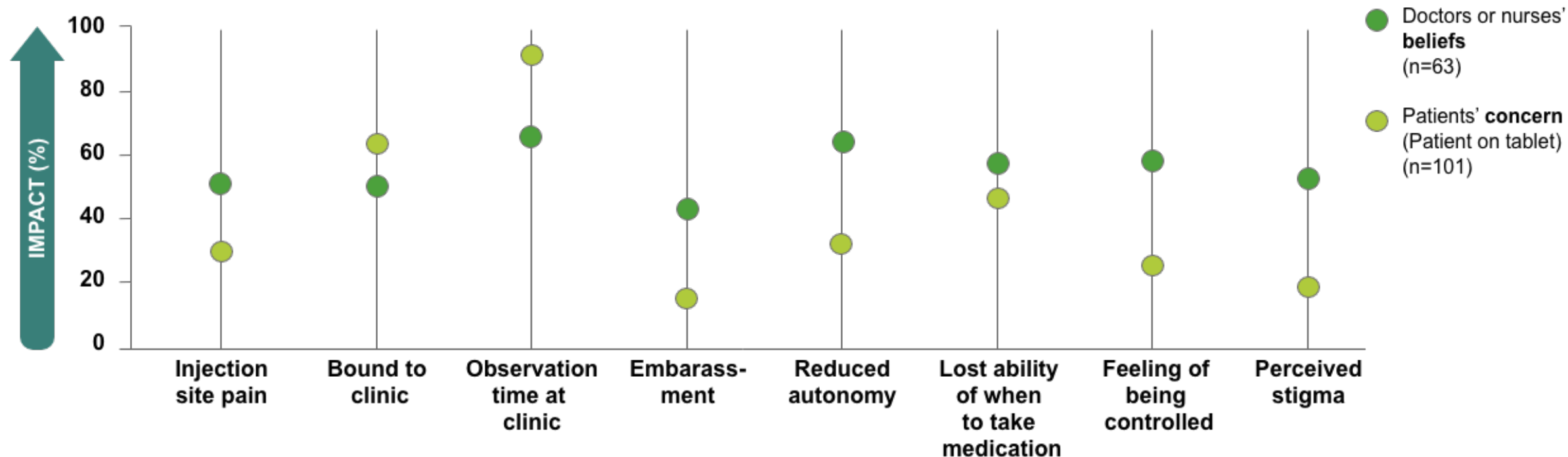


LAI, long-acting injectable.

Cross-sectional study using semi-structured interviews to assess patient and HCP perceptions of LAIs (164 patients, 63 physicians/nurses) in a psychiatry catchment area in Stockholm, Sweden.

Cahling L, et al. *BJPsych Bull.* 2017;41(5):254-259.

Physicians Overestimate Patient Concerns in Most Cases

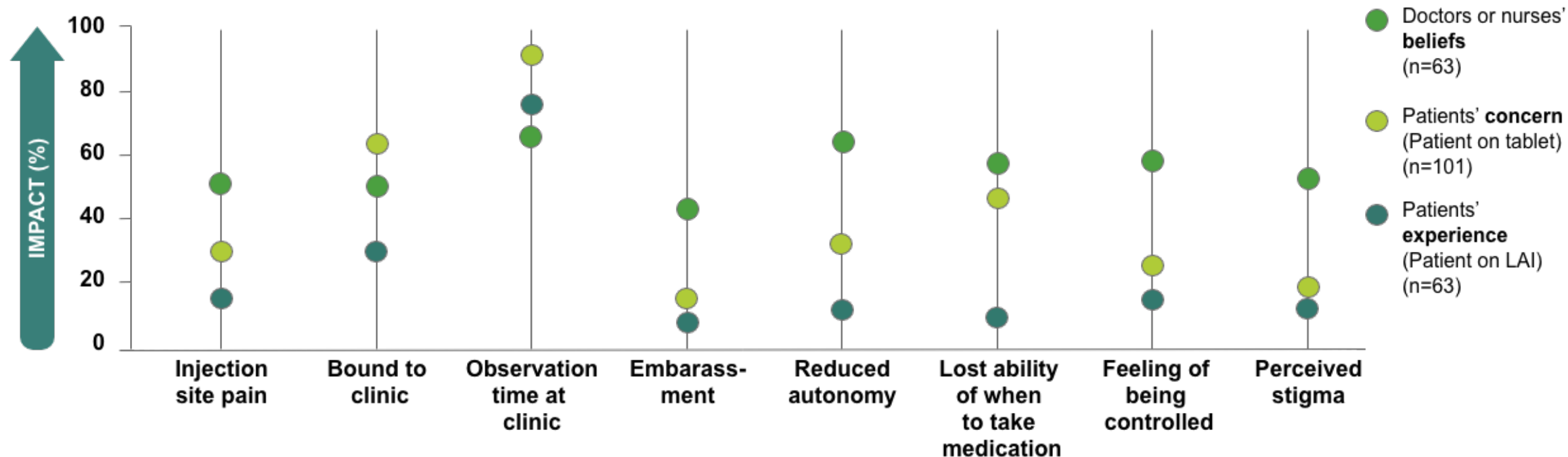


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Cahling L, et al. *BJPsych Bull.* 2017;41(5):254-259.

Physician Beliefs and Patient Concerns Exceed Actual Patient Experiences on LAIs



LAI, long-acting injectable.

Cross-sectional study using semi-structured interviews to assess patient and HCP perceptions of LAIs (164 patients, 63 physicians/nurses) in a psychiatry catchment area in Stockholm, Sweden.

Cahling L, et al. *BJPsych Bull.* 2017;41(5):254-259.

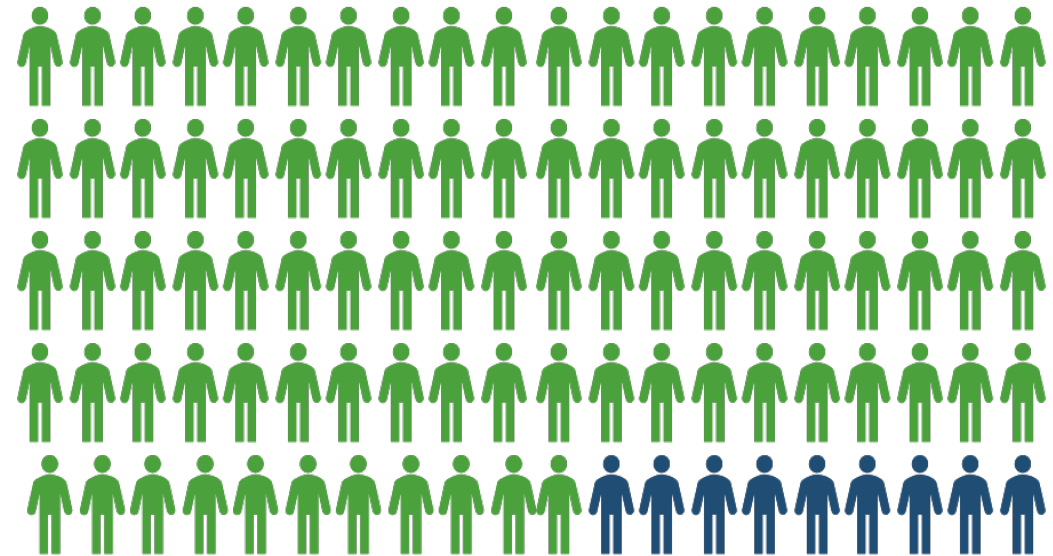
Patients with Early-Phase Schizophrenia Were Open to LAI Treatment



- For the recruitment phase of a clinical trial, site staff were educated on the benefits of LAI antipsychotic medications, trained in communication strategies and how to overcome logistical barriers
- 91.0% (213 of 234) of patients accepted at least one LAI antipsychotic injection during their first 3 months of study participation

Staff training has the potential to substantially enhance the use of LAI antipsychotics

Most Early-phase Patients Were Willing to Participate in an LAI Antipsychotic Trial



LAI, long-acting injectable.

At 19 outpatient clinics randomized to provide LAI antipsychotic treatment, 234 participants were identified.

Kane JM, et al. *J Clin Psychiatry*. 2019;80(3):18m12546.



Physicians may overestimate patients' fears of LAIs and therefore refrain from presenting LAIs as a treatment option^{1,2}

Data have shown that most patients were open to LAI treatment³

LAI, long-acting injectable. 1. Cahling L, et al. *BJPsych Bull.* 2017;41(5):254-259. 2. Grover S, et al. *J Clin Psychopharm.* 2019;39(6):611-619.
3. Kane JM, et al. *J Clin Psychiatry.* 2019;80(3):18m12546.

MYTH #3



LAI Are Only Appropriate
for Patients That Have
Demonstrated Nonadherence

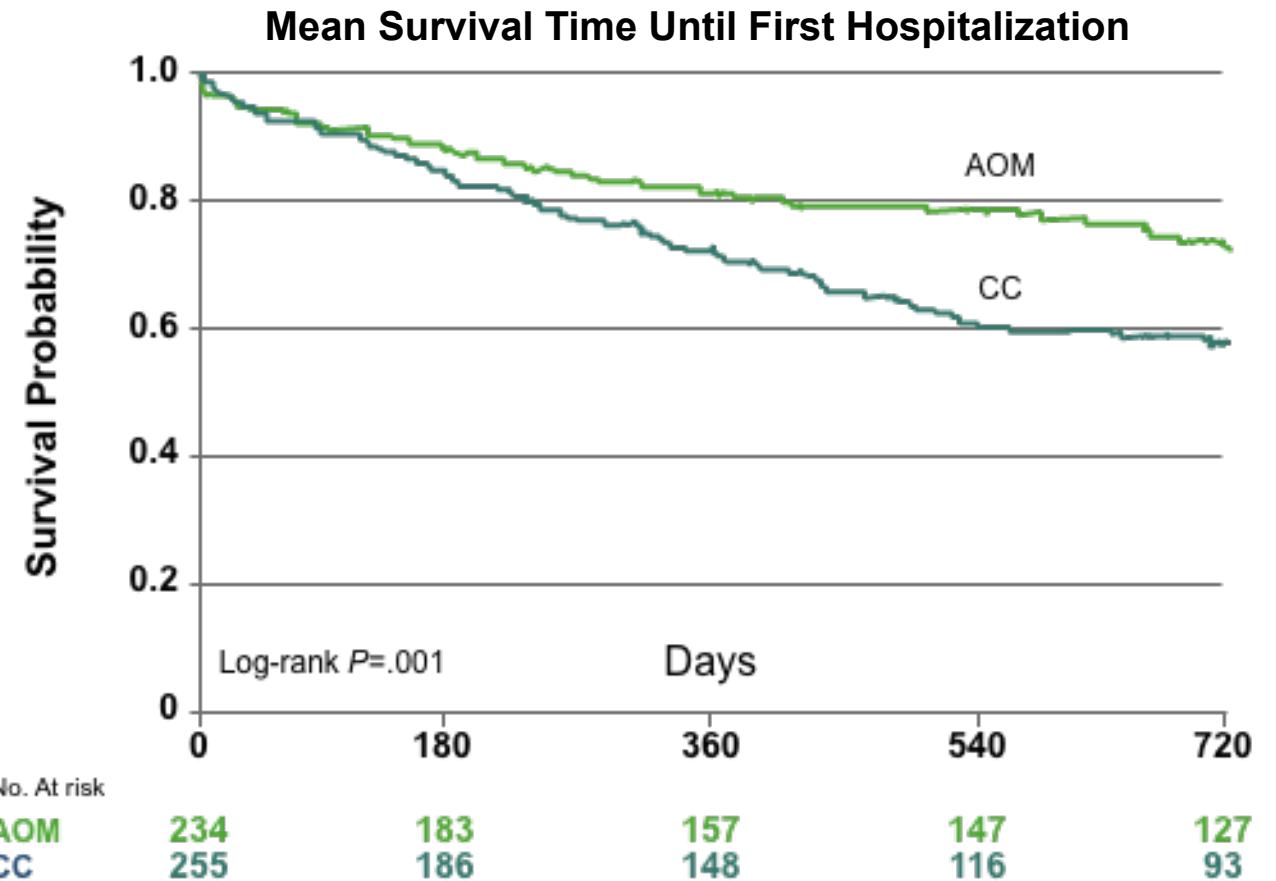
LAI, long-acting injectable.

LAI Improved Survival Time Until First Hospitalization in Early-phase Treatment



- In this randomized trial of 489 participants, use of long-acting injectable was associated with a significant delay in time to first hospitalization
- Mean survival time until first hospitalization was 613.7 days for LAI participants and 530.6 days for participants who received clinician's choice of medication

Data suggest clinicians should more broadly consider LAI treatment for patients with early-phase illness



AOM, aripiprazole once monthly; CC, clinician's choice; LAI, long-acting injectable.
Kane JM, et al. *JAMA Psychiatry*. 2020;77(12):1217-1224.

Hazard ratio 0.56 (95% CI, 0.34-0.92; $P=0.02$)

LAI Reduced the Rate of Relapse in First-episode Patients

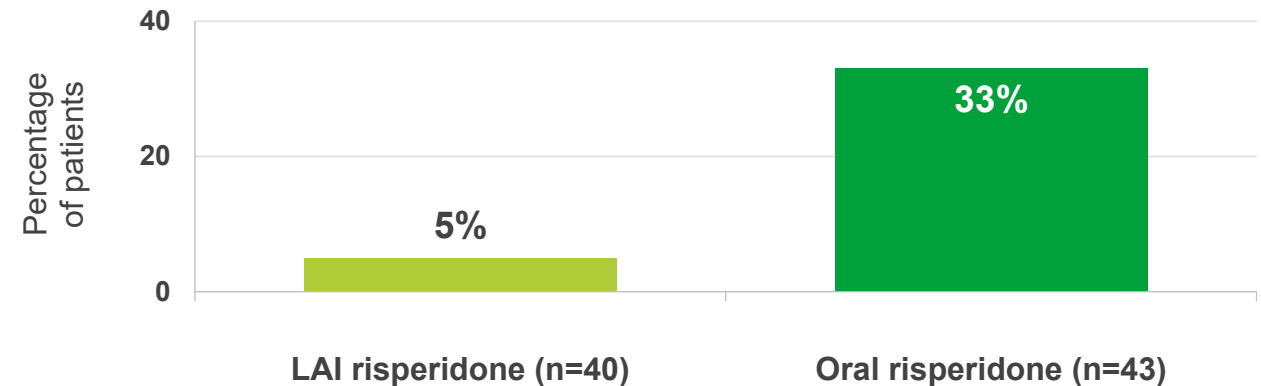


- A prospective study compared 83 patients with early schizophrenia randomly assigned to LAI or oral antipsychotics after a 3-week oral stabilization phase

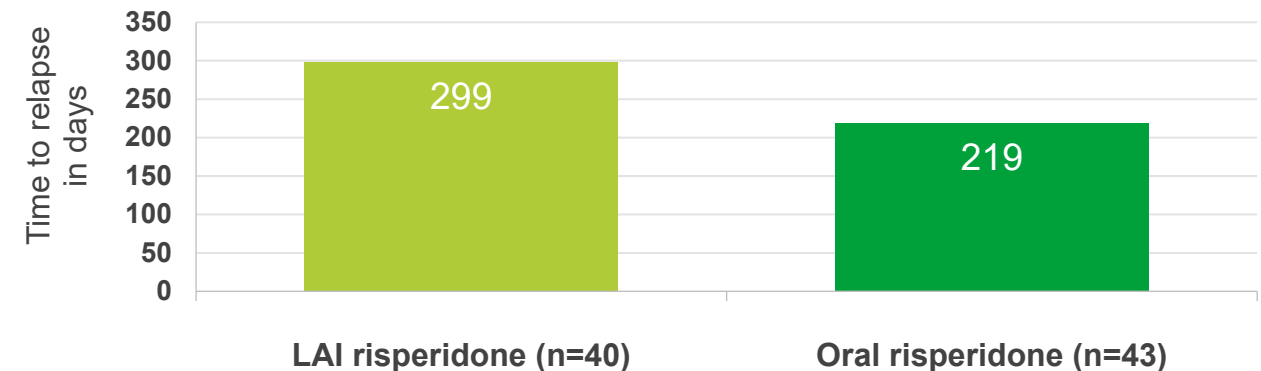
Fewer patients in the LAI group experienced a psychotic exacerbation and/or relapse vs the oral group

Mean time to relapse was higher with LAI vs oral

Exacerbation and/or Relapse



Mean Time to Relapse



LAI, long-acting injectable.
Subotnik KL, et al. *JAMA Psychiatry*. 2015;72(8):822-829.

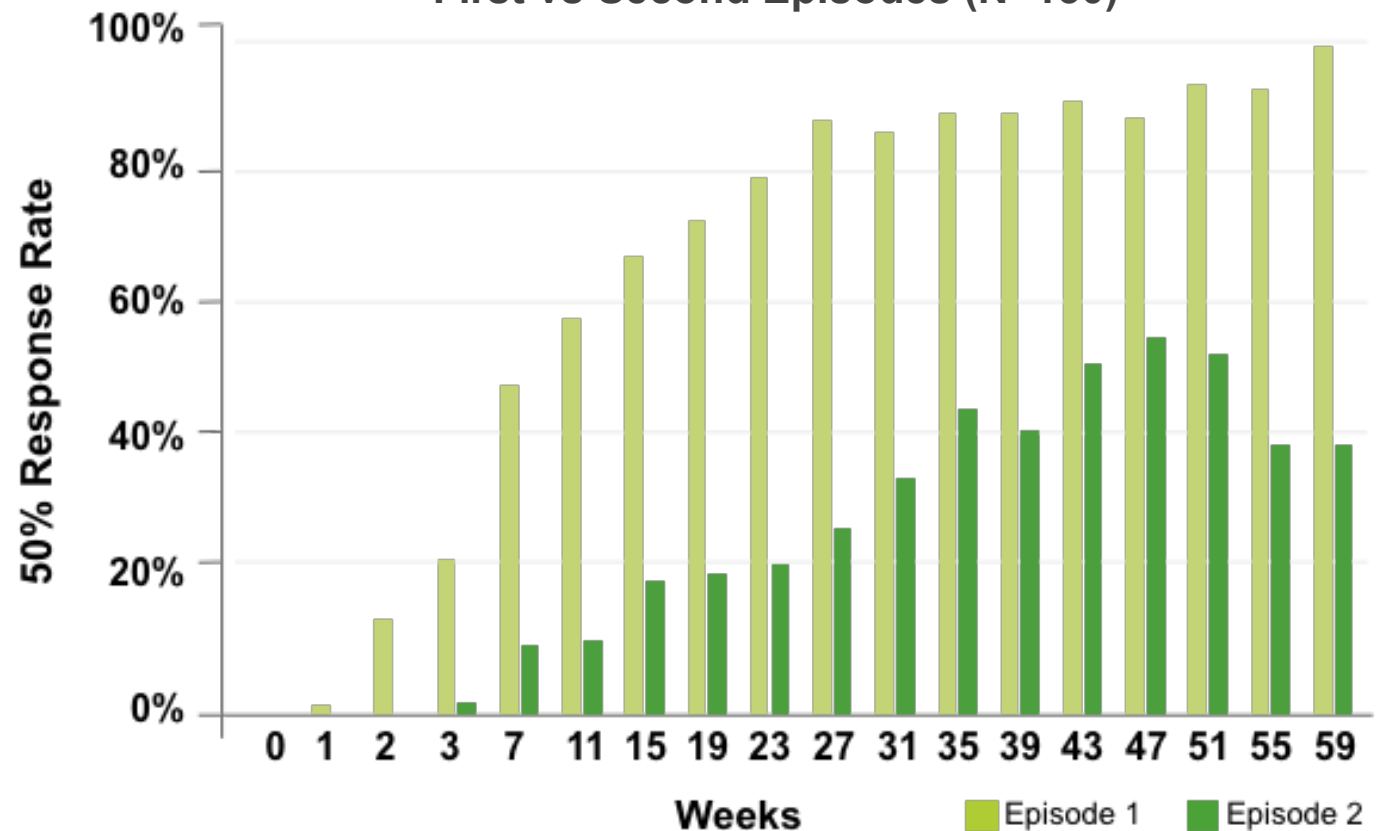
Relapse Reduced or Delayed Antipsychotic Treatment Response



- Prospective study of response rates in patients who experienced a first episode of psychosis, remitted, chose to discontinue pharmacotherapy and relapsed, leading to reinstatement of the same antipsychotic
- For most patients it was possible to re-establish a response, but that response may be attenuated and/or delayed

Good response cannot be guaranteed in the treatment of relapse following a first episode, even if the same treatment is reinitiated

**Changes in 50% Response Rates Over Time*:
First vs Second Episodes (N=130)**



*Proportion of patients achieving a $\geq 50\%$ reduction in the BPRS total score.
Takeuchi H, et al. *Neuropsychopharmacology*. 2019;44(6):1036-1042.

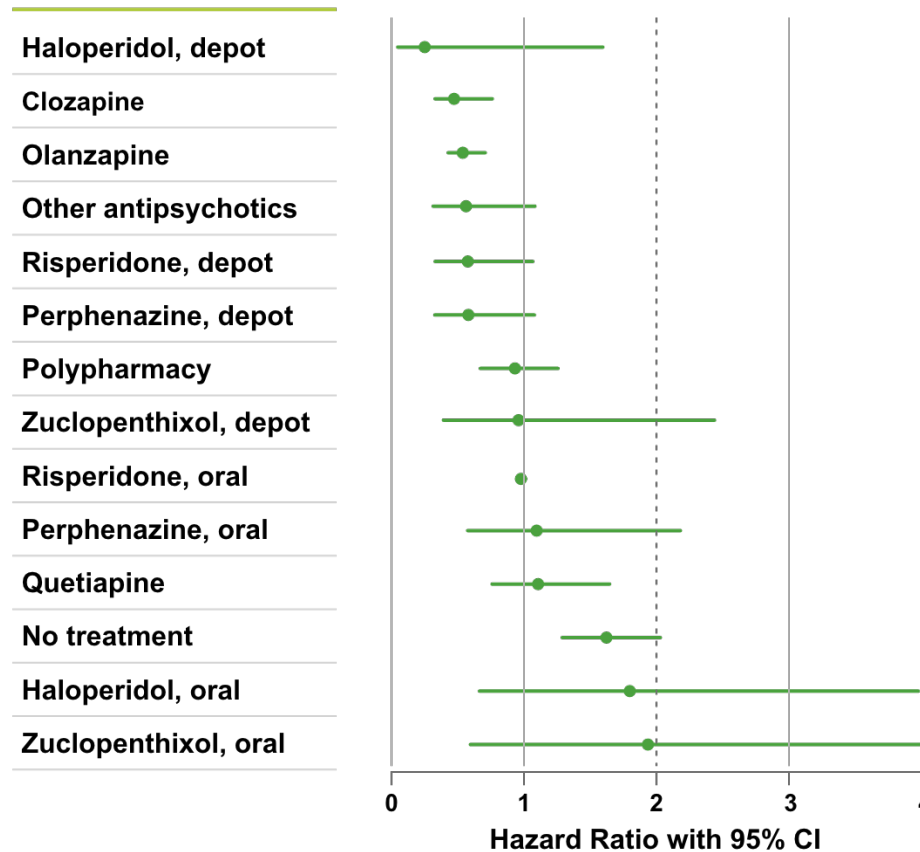
LAIs Reduced the Risk of Rehospitalization in Early-phase Treatment



- Nationwide cohort of 2,588 consecutive patients hospitalized for the first time with a diagnosis of schizophrenia
- 1,496 patients (57.8%) were rehospitalized due to relapse during the 2-year follow up

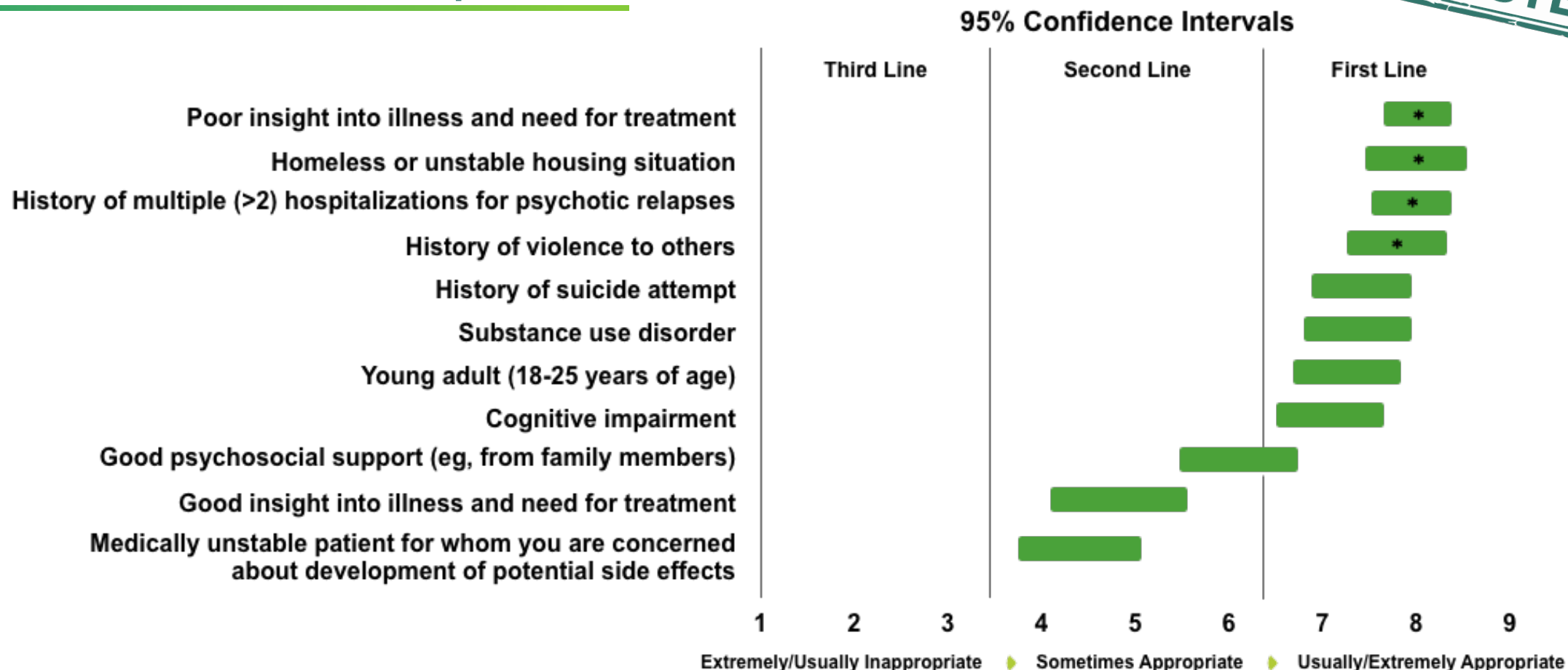
In the pooled analysis, LAIs were associated with a significantly lower risk of rehospitalization when compared with equivalent oral formulations (aHR=0.36, 95% CI=0.17–0.75, $P=0.007$)

Risk of Rehospitalization After a First Hospitalization (N=2,588)



aHR, adjusted hazard ratio; CI, confidence interval; LAI, long-acting injectable.
Tiihonen J, et al. *Am J Psychiatry*. 2011;168(6):603-609.

Expert Consensus Supports a Wider Use of LAIs in Schizophrenia



LAI, long-acting injectable. A 50-question survey comprising 916 response options was distributed to research experts and high prescribers with extensive LAI experience. Responses to 29 questions (577 options) relating to appropriate patients and clinical scenarios for LAI use were reported. Rating scale: 1 = extremely inappropriate, 2–3 = usually inappropriate, 4–6 = sometimes appropriate, 7–8 = usually appropriate, 9 = extremely appropriate. *Options that received highest ranking by ≥50% of respondents. Horizontal bars represent CIs. Sajatovic M, et al. *Neuropsychiatr Dis Treat*. 2018;14:1463-1474.

Guidelines Recommend/Suggest LAIs Beyond Nonadherence



APA Practice Guideline for the Treatment of Patients With Schizophrenia¹

- APA suggests that patients receive treatment with an LAI if they **prefer** such treatment **or** if they have a history of poor or uncertain **adherence**

Florida Best Practice Psychotherapeutic Medication Guidelines²

- **Initial treatment:** monotherapy with an SGA other than clozapine—either *oral*, or **oral antipsychotic followed by the same SGA-LAI**

APA, American Psychiatric Association; SGA-LAI, second-generation antipsychotic long-acting injectable.

1. American Psychiatric Association Practice Guideline for the Treatment of Patients with Schizophrenia, Third Edition. 2020. Accessed August 2021.

<https://psychiatryonline.org/doi/book/10.1176/appi.books.9780890424841> 2. 2019–2020 Florida Best Practice Psychotherapeutic Medication Guidelines for Adults. 2020. floridamedicaidmentalhealth.org.



LAIs have improved survival time to 1st hospitalization and reduced the rate of relapse in patients with early Schizophrenia^{1,2}

Expert consensus and recent guidelines support wider use of LAIs³⁻⁵

LAI, long-acting injectable. 1. Kane JM, et al. *JAMA Psychiatry*. 2020;77(12):1217-1224. 2. Subotnik KL, et al. *JAMA Psychiatry*. 2015;72(8):822-829. 3. Sajatovic M, et al. *Neuropsychiatr Dis Treat*. 2018;14:1463-1474. 4. American Psychiatric Association Practice Guideline for the Treatment of Patients with Schizophrenia, Third Edition. 2020. Accessed August 2021. <https://psychiatryonline.org/doi/book/10.1176/appi.books.9780890424841> 5. 2019–2020 Florida Best Practice Psychotherapeutic Medication Guidelines for Adults. 2020. floridamedicaidmentalhealth.org.

Evidence Changes Beliefs

Physicians/Providers Know
When Patients Are Nonadherent

BUSTED

- Adherence is a challenge for clinicians, especially when managing patients with chronic disorders¹
- The most common methods to monitor adherence in day-to-day practice are often inaccurate and quantitative assays are not commonly used²
- Thus, should treatment with an LAI antipsychotic be considered as generally preferred?

Patients Do Not Accept/Want
LAI Treatment

BUSTED

- Physicians may overestimate patients' fears of LAIs and therefore refrain from presenting LAIs as a treatment option^{3,4}
- Data have shown that most patients were open to LAI treatment⁵

LAI Are Only Appropriate for
Patients That Have
Demonstrated Nonadherence

BUSTED

- LAIs have improved survival time to 1st hospitalization and reduced the rate of relapse in early Schizophrenia^{6,7}
- Expert consensus and recent guidelines support wider use of LAIs⁸⁻¹⁰

LAI, long-acting injectable. 1. Parks J. Clinical Strategies to Promote Medication Adherence. Accessed February 3, 2021. www.thenationalcouncil.org/wp-content/uploads/2020/04/Clinical-Strategies-to-Promote-Medication-Adherence-6.20.18.pdf?dof=375ateTbd56. 2. Kane JM, et al. *World Psychiatry*. 2013;12(3):216-226. 3. Cahling L, et al. *BJPsych Bull*. 2017;41(5):254-259. 4. Grover S, et al. *J Clin Psychopharm*. 2019;39(6):611-619. 5. Kane JM, et al. *J Clin Psychiatry*. 2019;80(3):18m12546. 6. Kane JM, et al. *JAMA Psychiatry*. 2020;77(12):1217-1224. 7. Subotnik KL, et al. *JAMA Psychiatry*. 2015;72(8):822-829. 8. Sajatovic M, et al. *Neuropsychiatr Dis Treat*. 2018;14:1463-1474. 9. American Psychiatric Association Practice Guideline for the Treatment of Patients with Schizophrenia, Third Edition. 2020. Accessed August 2021. <https://psychiatryonline.org/doi/book/10.1176/appi.books.9780890424841> 10. 2019–2020 Florida Best Practice Psychotherapeutic Medication Guidelines for Adults. 2020. floridamedicaidmentalhealth.org

Clinical Dilemmas and the Potential Role of LAIs

LAI, long-acting injectable.

Clinical Decisions in Schizophrenia Are Made at Various Points Throughout the Patient Journey

Emergency Department



Inpatient Setting



Outpatient Setting



It is important to assess the unique clinical situations and engage with patients appropriately based on various scenarios

Healthcare Providers May Face Various Clinical Dilemmas

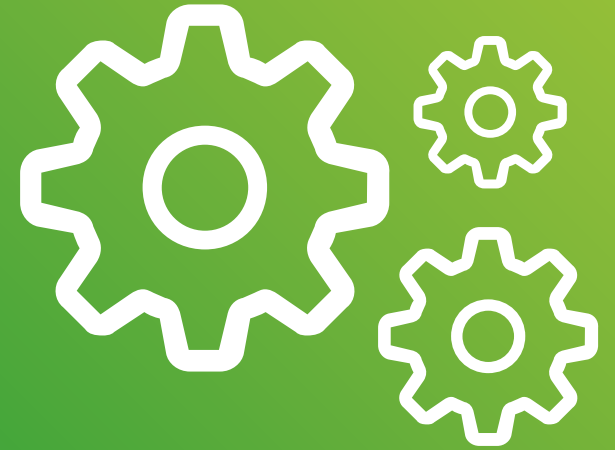
- **Providers face unique challenges during patient care and broader education around these dilemmas is needed^{1,2}**
- **Educational initiatives targeting the most common dilemmas or issues faced by providers would potentially alleviate knowledge gaps and add more clarity to the role LAIs may play²**

LAI, long-acting injectable.

1. Goldstone LW, et al. *Am J Manag Care*. 2020;26(3 Suppl):S48-S54. 2. Correll CU, et al. *J Clin Psychiatry*. 2016;77(suppl 3):1-24.

SCOPE: Schizophrenia Clinical Outcome Scenarios & Patient-Provider Engagement

SCOPE is a resource aimed at providing educational materials for several stakeholders in the continuum of care



Educational Support

In context of the various sites of care where patients present and engage with the healthcare system, this module provides:

1 A set of queries/questions to consider when patients present to ED

2 A framework to inform clinical dilemmas and scenarios observed in inpatient care and outpatient clinics

**Although there are several clinical dilemmas to consider,
the following slides will focus on 2 scenarios**

ED, emergency department.

Inpatient

Upon ED evaluation of the patient utilizing standard hospital protocol and the SCOPE educational framework, a variety of clinical scenarios can be considered

Scenario #1

Patient: Leslie, age 35

- Existing schizophrenia diagnosis*
- On oral antipsychotic*
- Relapsed*



ED, emergency department.

Inpatient Scenario #1

- Many factors may lead to an exacerbation of psychotic illness including dosing, adherence, drug-drug interactions, etc
- Upon patient admission, accurate and reliable assessments are needed to help support clinical decisions



RCT, randomized clinical trials.
Lopez LV, et al. *J Clin Psychopharmacol*. 2017;37(3):310-314.

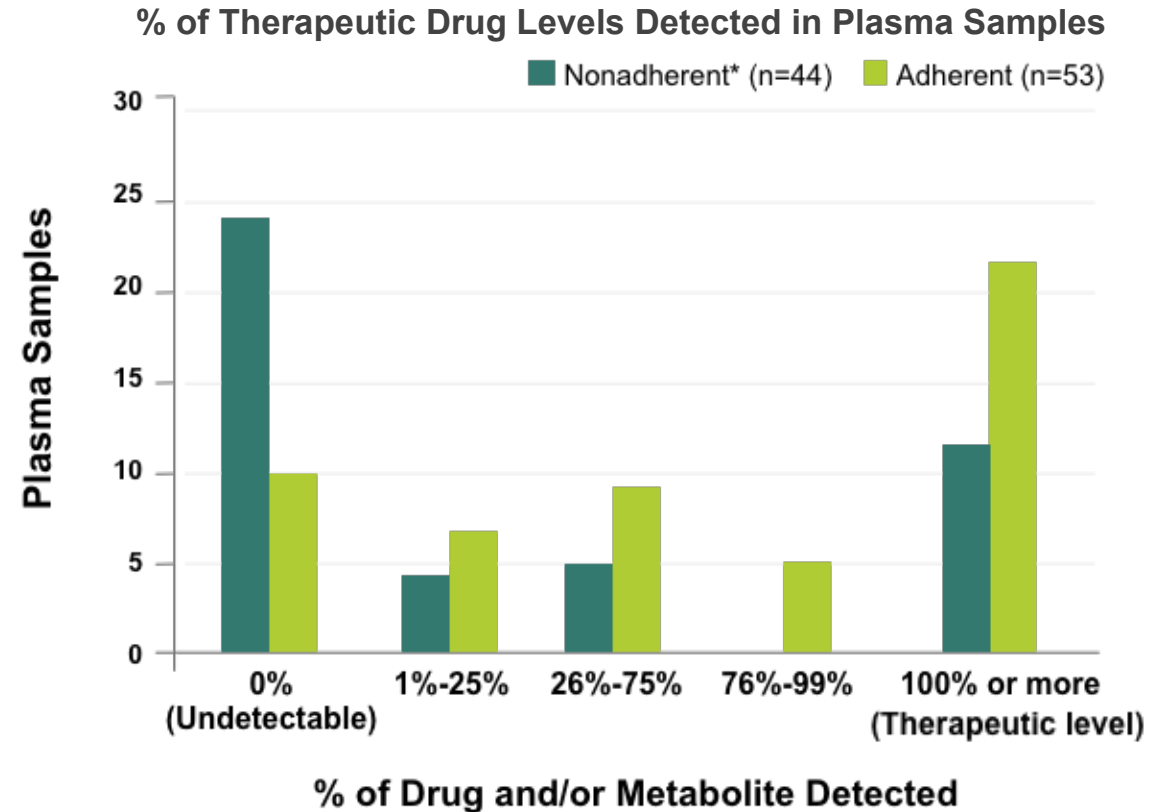
Accurately Measuring Adherence Remains a Significant Challenge in Schizophrenia

- Comparing clinician assessment of adherence and plasma levels in 97 patients presenting to ED¹
- Adherence typically based on patient self-report or report of individuals involved in patient's care¹

Nearly 20% of patients (10 of 53) assessed as adherent had undetectable plasma levels (0%)¹

25% of patients (11 of 44) assessed as nonadherent had therapeutic levels (≥100%)¹

LAI use would help clinicians assess whether a relapse occurred because of non-adherence or despite adequate medication²



ED, emergency department; LAI, long-acting injectable.

1. Lopez LV, et al. *J Clin Psychopharmacol*. 2017;37(3):310-314. 2. Kane JM, Garcia-Ribera C. *Br J Psychiatry*. 2009;52:S63-S67.

LAIs Are Associated With Lower Risks of Hospitalization or Relapse Than Orals

- Comprehensive systematic review and meta-analysis compared LAIs versus oral antipsychotics for schizophrenia
- 137 studies (397,319 patients) analyzed
- Out of 328 outcomes, LAIs were more beneficial than orals in ~1 of 5 (18.3%) and not different in 76.8%

Relative Risk of Hospitalization or Relapse: LAIs vs Orals

Study Type	Studies	Patients	Relative Risk [95% CI]	P Value
RCT	29	7,833	0.88 [0.79–0.99]	P=0.033
Cohort	44	106,136	0.92 [0.88–0.98]	P=0.0044
Pre–post	28	17,876	0.44 [0.39–0.51]	P<0.0001

LAIs consistently demonstrated a significant benefit vs orals in preventing hospitalization or relapse, in studies ranging from restricted research to real-world application

LAI, long-acting injectable; RCT, randomized controlled trial.
Kishimoto T, et al. *Lancet Psychiatry*. 2021;8(5):387-404.

Queries/Questions to Consider in ED

1. Does the patient have an existing record at the ED/Hospital?

a) If yes, retrieve record and review the following [as available]

b) If no, assess the following:

Items to Review

1. Patient history
2. Diagnosis on file
3. List of meds
4. Comorbidities
5. Assessment of danger to self or others
6. Ability to care for oneself

Questions for Patient/Family

1. Patient history
2. Diagnosis change or what is diagnosis?
3. Comorbidities?
4. What lead up to ED visit? (Assess environmental stressors as well)
5. What antipsychotics was the patient taking and how frequently? Any comorbid medications?
6. Using drugs of abuse?
7. What is the patient's social structure? (i.e. family, employment)
8. If not admitted to inpatient, where will the patient go? Do they have somewhere to go?

ED, emergency department.

Inpatient Scenario #1

Patient has been previously diagnosed with schizophrenia, already been on an oral and relapsed

Consider the following:

- In addition to routine blood tests and toxicology screen, consider AP plasma level
- Rule out other underlying causes of psychosis
- Acknowledge the possibility of nonadherence
- Assess additional sources for collateral information



Discuss LAI considerations

AP, antipsychotic; LAI, long-acting injectable.

Outpatient

Here we review a commonly occurring clinical dilemma or scenario in Outpatient:

Scenario #2

Patient: Jim, age 25

- Existing schizophrenia diagnosis
- On oral antipsychotic
- Substance use disorder



Outpatient Scenario #2

- Co-occurring substance use disorders in patients with schizophrenia are associated with:
 - Increased symptom severity
 - Worsened illness trajectory
 - High rates of treatment nonadherence
- Data from case studies and clinical trials in this patient population have shown that treatment with LAIs may increase adherence and improved substance use-related and psychopathology-related outcomes



LAI, long-acting injectable.
Coles AS, et al. *Front Psychiatry*. 2021;12:808002.

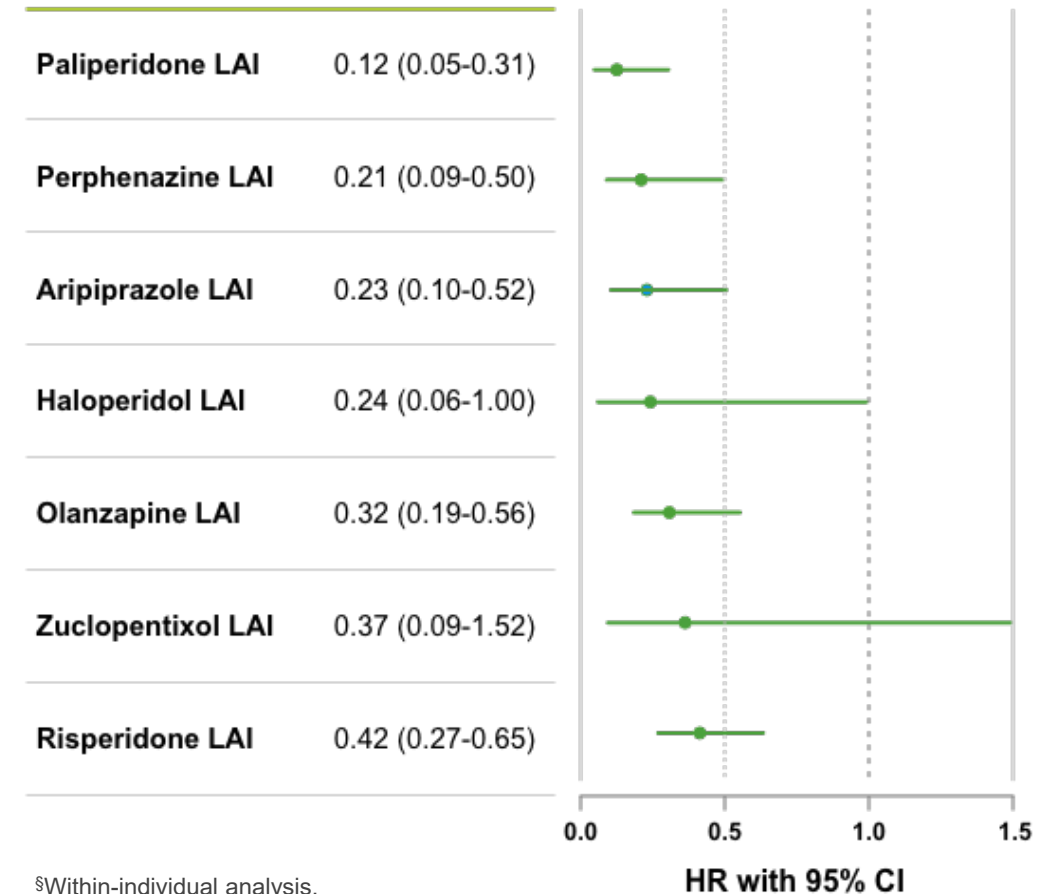
Time to Discontinuation Was Longer With LAIs vs Orals

- National cohort of 3,343 first-episode psychosis patients followed up to 18 years (mean of 8 years; SD=4.93)¹
- Among patients that used both LAIs and orals, patients were 67% less likely to discontinue LAIs (aHR=0.33; 95% CI=0.27-0.41)¹
- Younger patients* and those with comorbid substance use disorders[†] were more likely to discontinue treatment¹

LAIs should be considered in patients with the greatest risk for discontinuation¹

Patient adherence to antipsychotics has been shown to be a good indicator of adherence to other medications in 2 of every 3 patients^{2‡}

Risk of Treatment Discontinuation in Head-to-Head Comparison of LAIs vs Oral Counterpart^{1§}



aHR, adjusted hazard ratio; CI, confidence interval; LAI, long-acting injectable; SD, standard deviation. *Patients <25 years of age (aHR = 1.24; 95% CI = 1.13–1.37) and 25–34 years (aHR = 1.14; 95% CI = 1.04–1.25) vs those >35 years of age. [†]Comorbid substance abuse disorder vs those without (aHR = 1.30; 95% CI = 1.18–1.42). [‡]Retrospective claims database analysis of 129,614 patients.

1. Rubio JM, et al. *Schizophrenia bulletin*. 2021;47(6):1611-1620. 2. Shafrin J, et al. *P T*. 2019;44(6):350-357.

Outpatient Scenario #2

Patient is on an oral AP and presents with substance use disorder (cannabis or cocaine) that can interfere with treatment success

Consider the following:

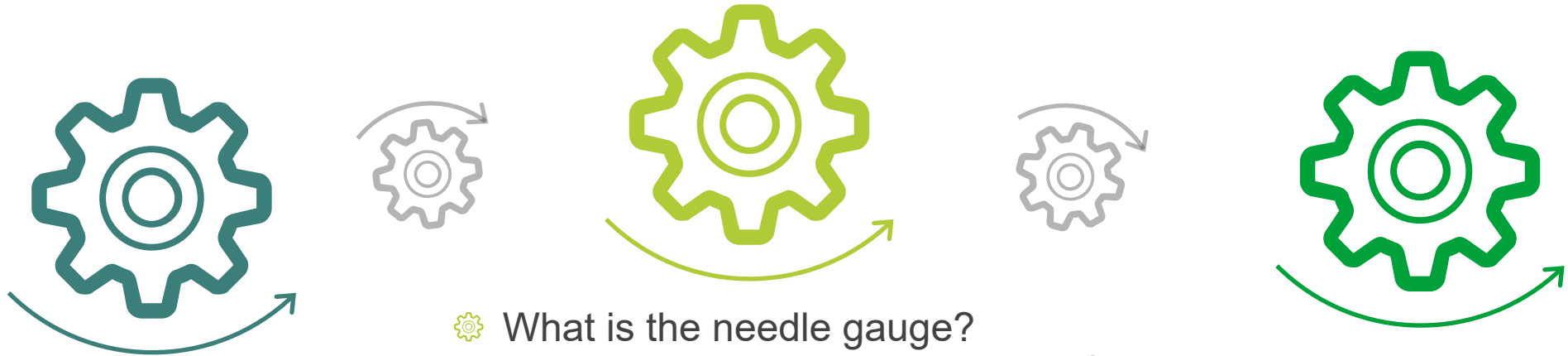
- Current mental status
- Acknowledge the possibility of current or future nonadherence
- Self-medication to address adverse events
- Self-medication to address mental state
- Any change in social support network/environment
- Sources of stress

Discuss LAI considerations

- To help ensure continuity of foundational medication treatment
- To help mitigate psychotogenic effects of substances of use

AP, antipsychotic; LAI, long-acting injectable.

Considerations for Choosing Among LAIs



- ⚙️ How often are the injections administered?
- ⚙️ Are there different dosing strengths available?

- ⚙️ What is the needle gauge?
- ⚙️ What is the injection volume?
- ⚙️ Is there a choice of injection site?
- ⚙️ Does this product require reconstitution?
- ⚙️ Does storage of this product require refrigeration?

- ⚙️ Is oral supplementation required?
- ⚙️ Are there any special requirements for post-injection observation?
- ⚙️ Are there any important drug–drug interactions, and can they be remedied?
- ⚙️ Missed doses: What is the grace period?

LAI, long-acting injectable.
Citrome L. *CNS Spectr.* 2021;26(2):118-129.

Key Take-Aways

- Despite data supporting the increased utilization of LAIs, myths, attitudes, and preconceived perceptions have limited their adoption in clinical care
-
- **SCOPE** (**S**chizophrenia **C**linical **O**utcome Scenarios & **P**atient-Provider **E**ngagement) is a resource that will provide educational support on the appropriateness and clinical value of LAIs

We look forward to sharing more about this tool at upcoming events and learning activities



QUESTIONS & DISCUSSION

Thank you

For additional resources on
schizophrenia and to download
the presentation slides
scan the QR code or visit the
website URL to the right



[https://www.cnsbytes.us/schizophrenia/
scope-engage/resources/conference](https://www.cnsbytes.us/schizophrenia/scope-engage/resources/conference)