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Evaluating prescribing patterns of long-acting injectable antipsychotics at a community health system

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OBJECTIVE

- Describe prescribing patterns for long-acting injectable antipsychotics and identify knowledge gaps in prescribing within our health system

BACKGROUND

- Patients with schizophrenia and related psychiatric disorders may exhibit poor adherence.¹⁻⁴
- Development of long-acting injectable (LAI) antipsychotics address concerns of poor compliance.¹⁻⁴
- Previous studies demonstrated patients with concurrent documented substance abuse and cognitive impairment may be ideal candidates for long-acting injections.¹
- Additionally, previous studies demonstrate benefits in lowering relapse rates and number of hospitalizations.¹⁻³
- Differences in indications for use, recommendations for oral antipsychotic overlap, titration instructions, and dosing intervals provide challenges for prescribing clinicians.¹⁻⁴
- Improving understanding of appropriate prescribing of LAI antipsychotics may improve patient outcomes, minimize side effects, and decrease unnecessary healthcare costs.⁴

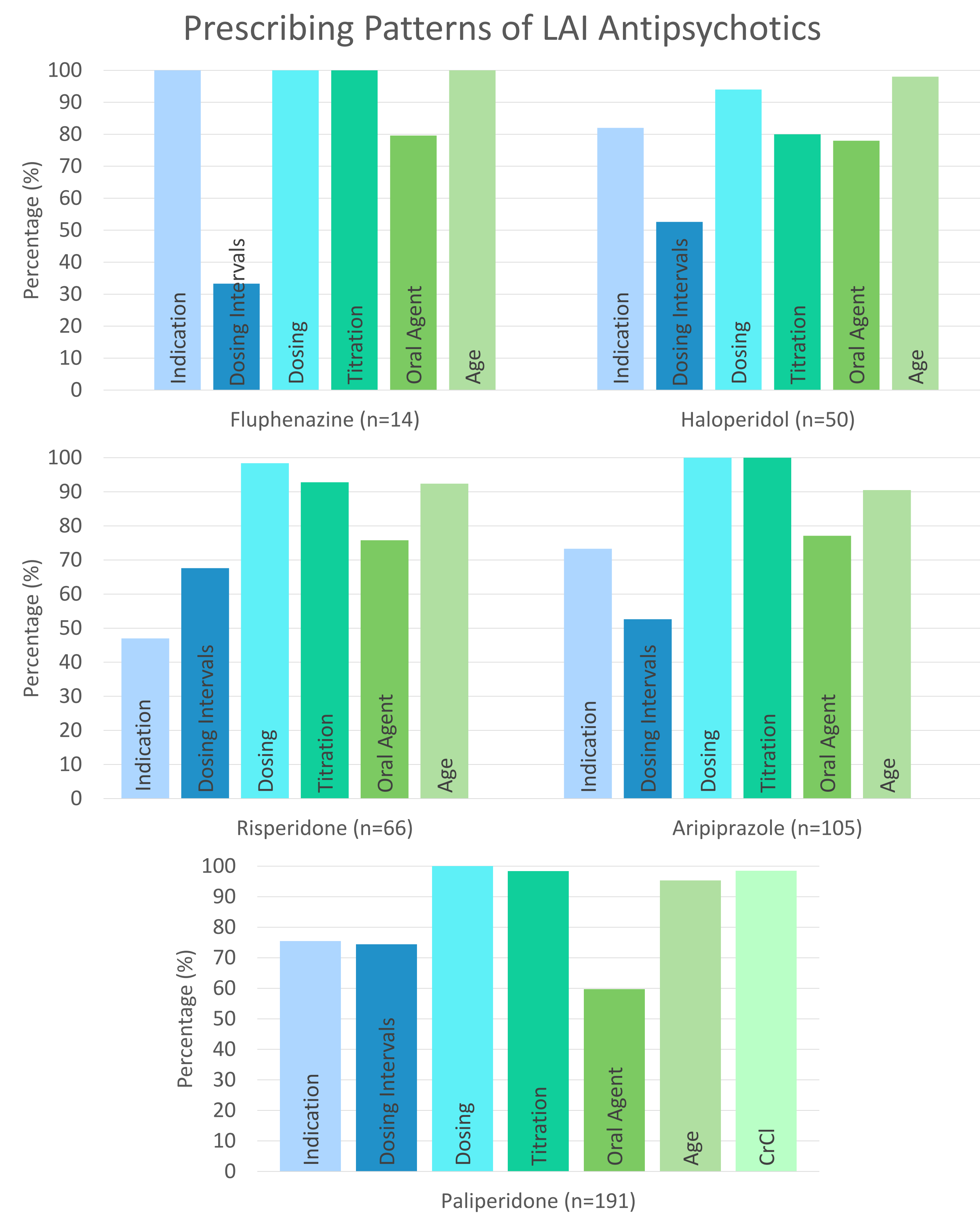
METHODS

- Retrospective chart review of subjects who received fluphenazine decanoate, haloperidol decanoate, risperidone microspheres, aripiprazole extended release, or paliperidone palmitate
- Data was collected from patients between January 2015 – June 2017
- Primary outcome:**
 - Percentage of patients appropriately prescribed long-acting injectable antipsychotics according to specified criteria from each agent's package insert:
 - Approved indication for therapy
 - Approved dosing intervals
 - Approved dosing
 - Approved dosing titrations in applicable patients
 - Previous trial with oral antipsychotic(s)
 - Age \geq 18 years
 - Renal impairment dose adjustments (if applicable)
- Secondary outcomes:**
 - Occurrence of behavioral health unit admissions
 - Duration of therapy within Parkview EMR

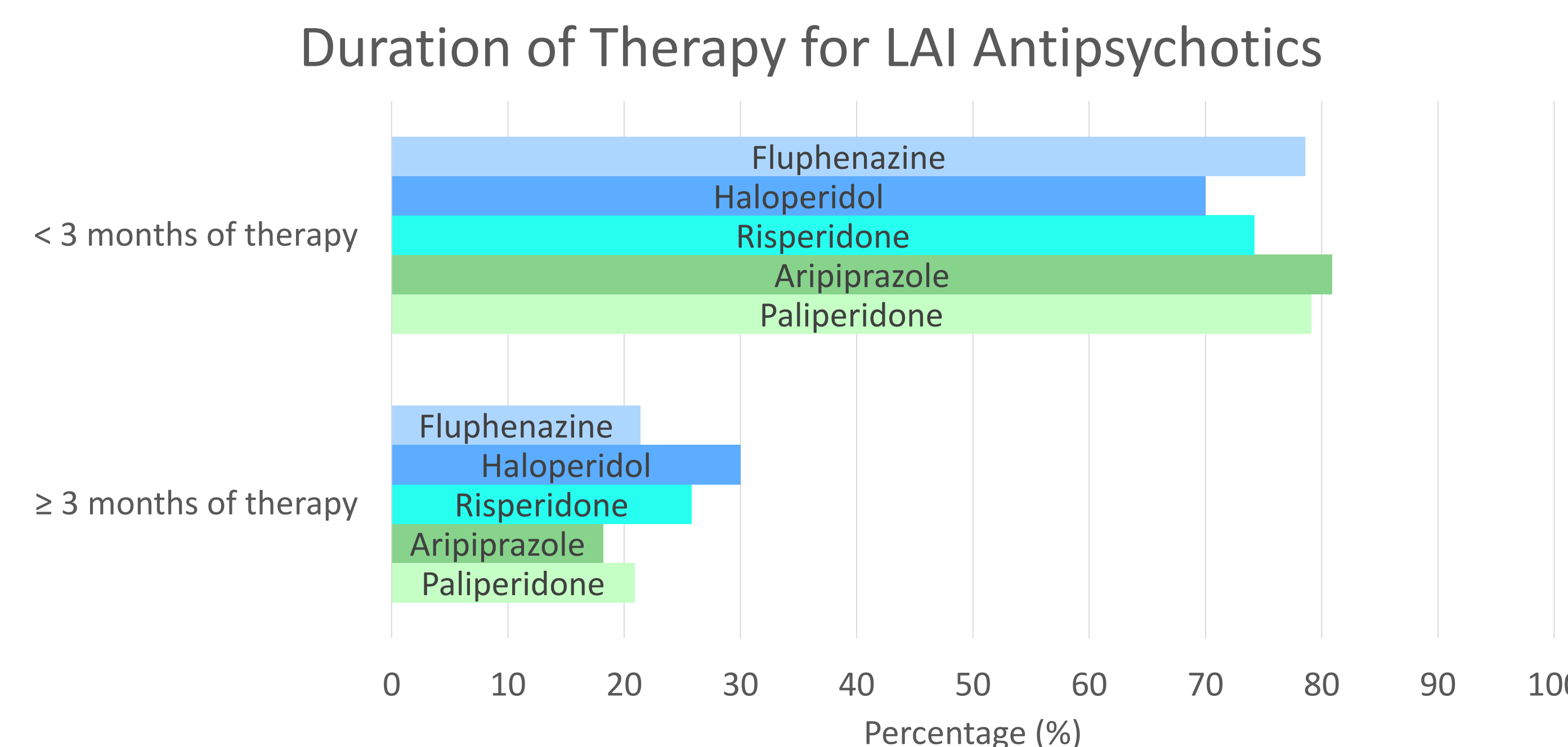
RESULTS

Baseline Characteristics	n=405
Mean age (yrs \pm SD)	42 \pm 18
Male (% , n)	54.3% (220)
Prescribing physician, Psychiatry (% , n)	88.6% (359)
Patients with \geq 1 LAI antipsychotic trial (% , n)	1.9% (8)
Concurrent documented substance abuse (% , n)	28.9% (117)
Concurrent cognitive impairment (% , n)	15.6% (63)

RESULTS



Occurrence of Behavioral Health Unit Admissions after LAI Antipsychotic Initiation	n=405
0 admissions (% , n)	79.8% (323)
1 admission (% , n)	11.9% (48)
2 admissions (% , n)	5.9% (24)
3 admissions (% , n)	1.9% (8)
4 admissions (% , n)	0.5% (2)



DISCUSSION & CONCLUSIONS

- Many behavioral health facilities in the area focus on injectable agents in which we do not have access to the EMR. Short durations of therapy in this study population could be secondary to this lack of access.
- Paliperidone was the most commonly prescribed LAI antipsychotic in this subset. This may be due to a prescription assistance program that qualifies many patients at our institution for cost savings. In addition, the advantages of this product include longer dosing intervals and no oral overlap needed compared to the other agents.
- There is an increased risk of experiencing side effects in patients that receive these agents in shorter dosing intervals than recommended. Many patients received injections at shorter dosing intervals, which could be due to patient compliance concerns.
- Patients that did not receive previous trial with an oral antipsychotic were identified as being prescribed by family medicine practitioners as opposed to psychiatrists.
- According to the FDA approved package insert, paliperidone requires previous therapy with oral risperidone or paliperidone only, which led to low percentage of patients with inadequate oral agent trials for this medication.
- FDA approved indications for these agents are limited to schizophrenia and bipolar disorder. Off-label psychiatric conditions (anxiety and depression) were common other indications for therapy. Literature supports the use of LAI antipsychotics in treatment-resistant depression, anxiety, and other mental health disorders. This was not assessed here and further research is warranted.
- Patients with one or more behavioral health unit hospitalizations was 20.2%. This finding is low compared to previous studies demonstrating rates of re-hospitalizations > 50%.⁵
- Limitations
 - Retrospective chart data
 - Inability to follow majority of patients receiving medications at other locations
- Impact on Practice
 - This study provides evidence to target this high risk population for care coordination to ensure improved disease outcomes.
 - Further emphasis should be placed on pharmacist provided education to patients regarding the importance of compliance.
 - Additionally, a focus on monitoring for side effects in patients that receive LAI antipsychotics at shorter dosing intervals is recommended.

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Disclosure
The authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Chelsea Ferguson: Nothing to disclose Jamie Gaul: Nothing to disclose Jared Netley: Nothing to disclose