

# Assessing Delirium Management and Follow-Up in a Clinical Research Hospital



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## Background

- Delirium is common with an overall prevalence of 23% of hospitalized patients <sup>1</sup>
- There are no FDA approved medications for delirium leading to variation in management and use of antipsychotics off label for agitation management <sup>2</sup>
- Guidelines from several national societies provide limited recommendations for ongoing treatment with antipsychotic medication or for follow-up as an outpatient <sup>2,3-7</sup>
- Previous research suggests 20.9% of patients are continued on an antipsychotic at discharge <sup>8</sup>

## Aim

- To characterize inpatient treatment of delirium of adult patients at a clinical research hospital
- To describe subsequent post-hospitalization medication management (with a particular focus on antipsychotic use) and follow-up

## Methods

- Study:** Retrospective chart review as part of a quality improvement project for the NIH Psychiatry Consultation Liaison Service (PCLS)
- Sample:** Patients over 18 years old, hospitalized between July 1, 2021 - June 30, 2022
- Design:** The electronic medical record was queried using Biomedical Translational Research Information System for the following terms:

Delirium	Confusion
Altered mental status	Encephalopathic
Agitation	Encephalopathy

- Charts were reviewed by the PCLS team to identify demographics, delirium management, and discharge characteristics
- Data was coded with PCLS team discussion and consensus
- Data analysis:** Descriptive statistics were performed

## Results

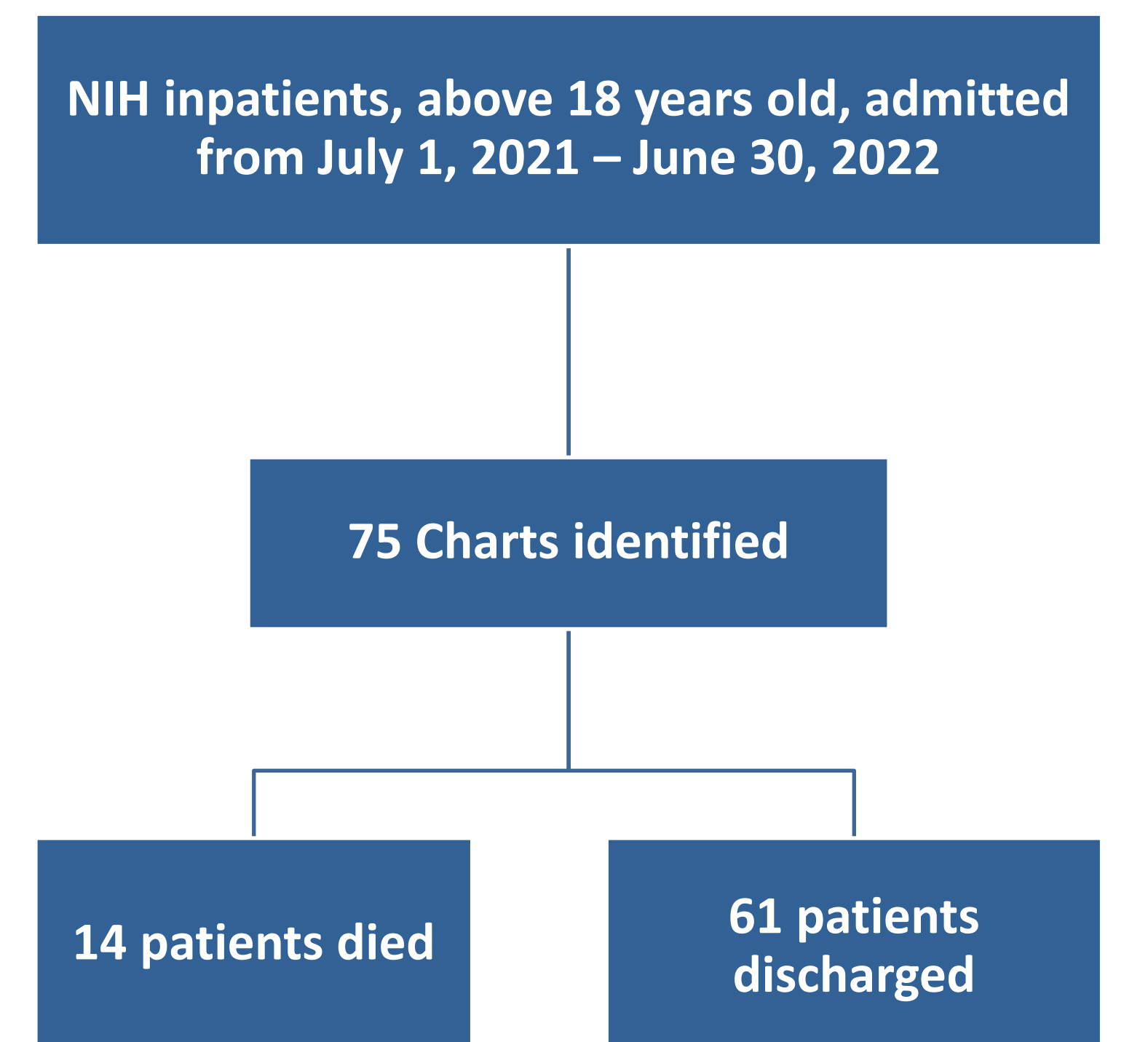
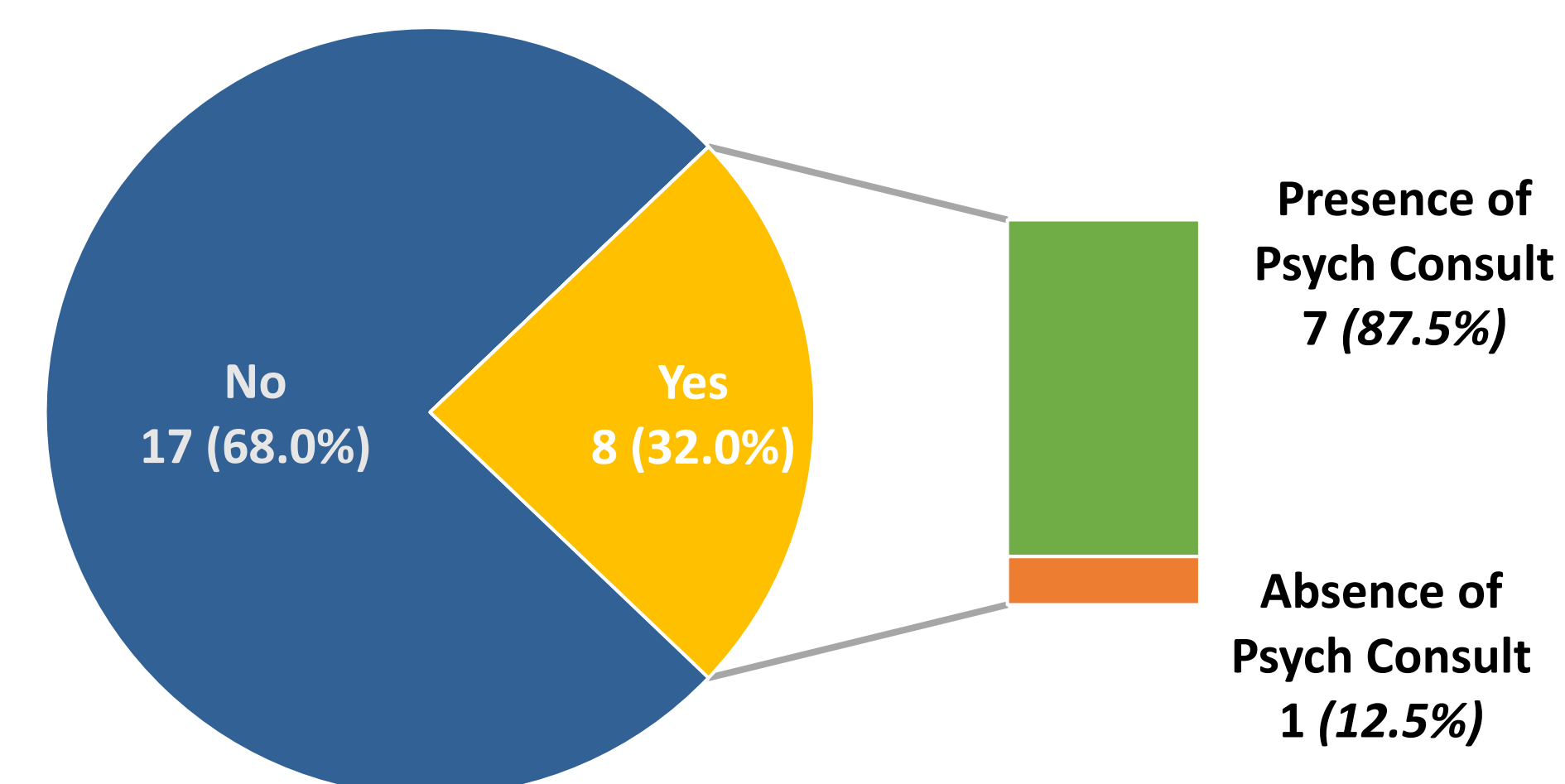


Figure 1: Flow Diagram of Enrollment

Table 2: Hospital Management

	Participants (N=75)
Primary Team at Diagnosis % (n)	
NCI	54.7 (41)
Critical Care	25.4 (19)
NINDS	6.7 (5)
NHLBI	5.3 (4)
NIAID	2.7 (2)
NIDDK	2.7 (2)
NICHD	1.3 (1)
Palliative Care	1.3 (1)
Consults % (n)*	
Psychiatry	38.7 (29)
Neurology	33.3 (25)
Palliative Care	18.7 (14)
Primary Team Solely Managed Delirium % (n)	36.0 (27)
ICU Care Required during Admission % (n)	61.3 (46)
Length of Stay (Days) Median (IQR)	27 (45)

\*Could be seen by more than 1 service

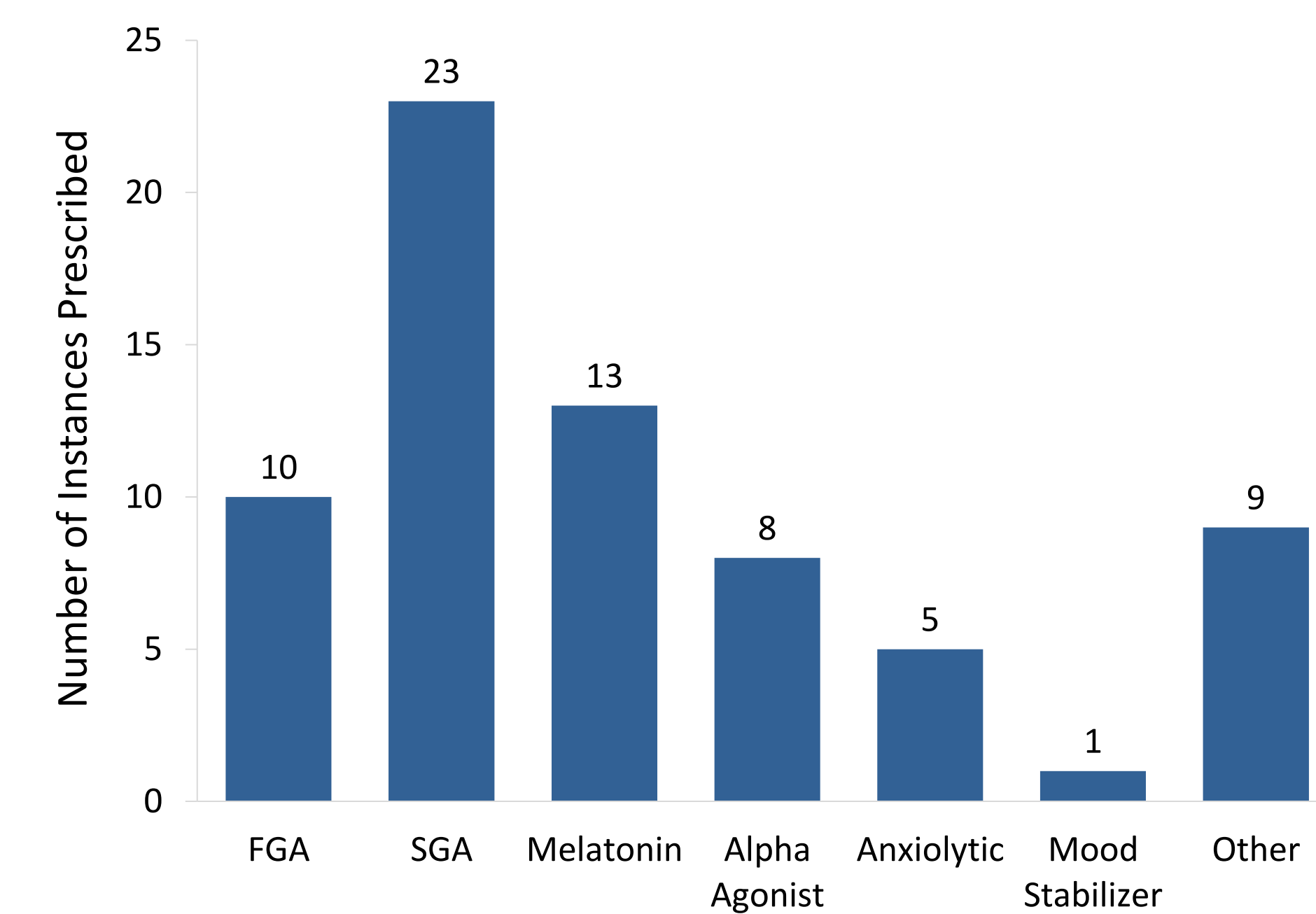


25 patients were prescribed ≥1 antipsychotic medication during hospitalization.

Figure 3: Discharged on Antipsychotics

Table 1: Participant Characteristics

	Participants (N=75)
Median age years (IQR)	57 (20)
Range	20-89
Male % (n)	64.0 (48)
Female % (n)	36.0 (27)
Race % (n)	
White	58.7 (44)
Black/AA	22.7 (17)
Asian	5.3 (4)
Multiple	2.7 (2)
Unknown	10.6 (8)
Not Hispanic or Latino % (n)	89.3 (67)
Marital Status % (n)	
Married	64.0 (48)
Single	30.6 (23)
Divorce	2.7 (2)
Other	2.7 (2)



Patient could be on ≥ 1 medications  
25 patients were prescribed antipsychotics  
Other includes: levetiracetam, lactulose, SSRIs, thiamine

Figure 2: Types of Medications Prescribed

Table 3: Discharge Characteristics

	Participants
Documented Resolution of Delirium % (n)	N=75 64.0 (48)
Disposition % (n)	N=75
Home	66.7 (50)
Death	18.7 (14)
Acute Rehab	8.0 (6)
Other	5.3 (4)
Skilled Nursing Facility	1.3 (1)
Time to Medical Follow-Up % (n)	N=61
< 1 week	49.2 (30)
< 2 weeks	16.4 (10)
< 3 weeks	11.5 (7)
< 4 weeks	6.6 (4)
> 1 month	8.2 (5)
Unknown	8.2 (5)
Was delirium followed up after discharge? % (n)	N=61 37.7 (23)

## Discussion

- Delirium was managed by a variety of different providers, with primary teams utilizing consultants for 64% of patients
- C-L psychiatry was consulted most often and managed care for 39% of patients
- A variety of medications were used with antipsychotics as the most prescribed drugs
- While antipsychotics were discontinued before discharge in a majority of patient, about 30% remained on the medication
- Although most patients had follow-up, only 38% of them received additional evaluation for post-delirium effects, including cognitive issues and functional decline

## Limitations

- Each chart was reviewed by a single rater
- Data limited to what was documented in EMR
- Risk of bias due to convenience sampling
- Data range limited to 1 year

## Conclusions

- Although antipsychotics are commonly used to treat delirium during hospitalization, they are less likely to be continued upon discharge
- C-L Psychiatrists are uniquely positioned to model antipsychotic stewardship for delirium
- These results suggest potential improvements to workflow: in-service trainings for primary teams, standardized ICU screening, closed-loop discharge recommendations with antipsychotic medication taper guidance

## References

- Gibb et al, 2020
- Burry et al, 2018
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Please use QR Code for full list of references



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