



# Empowering Psychiatric Inpatients to Vote: Perceptions of Voting and the Barriers Encountered

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Received: 25 August 2023 / Accepted: 23 January 2024 / Published online: 2 March 2024  
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## Abstract

Individuals with psychiatric illness believe that voting is important. However, these individuals have lower rates of voting when compared to the general population. A survey of psychiatrically hospitalized adult patients was conducted to assess perceptions of and barriers to voting in patients with psychiatric illness. Data from 113 surveys was analyzed. A majority of survey participants agreed that they cared about voting, that their vote made a difference, and that their vote was important. 74% of individuals reported previously experiencing at least one barrier when exercising their right to vote. The most commonly experienced barriers reported were not having enough information to make an informed choice, not knowing where to vote, not having transportation, and not being registered to vote. Individuals who encountered a higher number of barriers in the past had a higher chance of encountering barriers more often. In conclusion, a high percentage of individuals with mental illness severe enough to warrant hospitalization have experienced barriers to voting, with many experiencing multiple barriers. Reduction of these barriers is important, as voting and the resultant public policies can directly affect this population's mental health and access to both mental and physical healthcare services.

**Keywords** Civic health · Recovery movement · Disenfranchisement · Political participation · Social psychiatry · Voting

## Introduction

The right to vote is foundational for any democratic society. However, individuals with mental, cognitive, and emotional impairments, particularly psychiatric inpatients, have historically been politically disempowered (Bhugra, 2016; Okwerekwu et al., 2018; Schriener et al., 1997). One study in the United Kingdom found that psychiatric inpatients were half as likely to be registered to vote as the general population and, if registered, were half as likely to cast their vote (McIntyre et al., 2012). Similarly, individuals who have been psychiatrically hospitalized in the United States demonstrate lower rates of voting and lower rates of voter registration (Graziane, 2023a).

In the general population of the United States, disability appears to have a significant influence on voting behavior. Among registered non-voters, having a disability was the fourth most commonly cited reason for not voting in the 2020 election. Other reasons for not voting, in order of frequency, include not being interested in elections, disliking the candidates or campaign issues, being too busy or having a scheduling conflict (Fabina, 2022). In addition to

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disability-specific factors, individuals with disabilities are likely to face the same barriers to exercising their right to vote as the overall population. These include transportation issues, lack of knowledge regarding their polling place location, lack of proper personal identification, illness, unstable housing, and work constraints (Lickiss et al., 2020; Matsubayashi, 2014; McIntyre et al., 2012; Melamed et al., 2007). While federal legislation has sought to expand voting access for citizens in the United States with disabilities through the 1993 National Voter Registration Act and the 1990 Americans with Disabilities Act, individual state statutes have trended towards restricting the right to vote for individuals deemed “mentally ill” or “mentally incompetent” (Walker et al., 2016).

There is little evidence regarding the nature and frequency of barriers to voting experienced by Americans with psychiatric illness, beyond specific state legislative restrictions. Some research has found that persons with psychiatric illness may be unaware of their right to vote (Kelly, 2019; McIntyre et al., 2012; Siddique, 2014). Other studies have noted that psychiatric hospitalizations pose a structural impediment to voting (Bosquet et al., 2009; Kelly, 2019). It is important to note that there are no legislative restrictions on voting for those with mental illness for the state where our hospital is based. Notably, the Commonwealth of Pennsylvania’s Manual of Rights for Persons in Treatment explicitly states that every person has the right to handle their personal affairs, and that admission or commitment to a mental health facility does not by itself prevent an individual from voting. However the patient is not guaranteed the ability to exercise this right (Commonwealth of Pennsylvania, 2023).

The authors previously published a description of the development and feasibility of a quality improvement project with the primary aim of providing voter support activities to adult psychiatric inpatients (Graziane, 2023a). As part of that project, individuals were provided with a brief voluntary survey assessing their prior voting behaviors, attitudes on voting, and previously experienced barriers to voting. This paper reports on the secondary aim of that project, which is to describe respondents’ perceptions of voting and previous barriers to voting from a sample of patients on an acute inpatient psychiatric unit.

## Methods

This project was conducted at Pennsylvania Psychiatric Institute (PPI), a free-standing, academically-affiliated community psychiatry hospital located in Central Pennsylvania. PPI has three adult inpatient units, with a maximum capacity of 64 adult beds, admitting patients on both voluntary and involuntary commitments. At the time this project was conducted, the median length of hospitalization was 7 days,

and the primary adult discharge diagnoses included: affective disorders (60%), psychotic disorders (24%), and trauma and stress-related disorders (13%).

The voter support project ran for the six weeks prior to the 2020 general election. All patients over 18 years of age on the adult psychiatric inpatient units were invited to complete the survey. Pennsylvania residents were also offered the opportunity to engage in voter support activities, regardless of survey participation. Voter support activities were conducted in a nonpartisan manner, and included checking voter registration and polling place, assisting with voter registration, and requesting a mail-in ballot. Patients were identified on a continual basis during the six week project as discharge dates neared. However, the team was also mindful of voting related deadlines, including voter registration and mail-in-ballot request deadlines, and patients were approached prior to these for both voter support activities and survey participation even if discharge was not upcoming. Survey participants were asked to assess their overall agreement with eight statements pertaining to their feelings about voting. These questions were partially informed by a similar survey conducted in Ireland (Kelly, 2019). Participants were also asked to identify how frequently they had encountered 14 independent barriers when exercising their right to vote; these barriers were selected for inclusion in the survey by a group of the investigators (JG, KD, and EK) after a review of the literature.

The survey did not collect information on participants’ diagnoses, nor were there any exclusionary criteria based on psychiatric diagnoses or commitment status. As such, the term psychiatric illness is used broadly within this manuscript. For this study population, diagnoses could have included but were not necessarily exclusive to affective, psychotic, anxiety, trauma, and adjustment related disorders, with the common thread being a psychiatric crisis significant enough to warrant acute inpatient psychiatric hospitalization.

The only survey exclusion criterion was a patient’s inability to complete the survey. Per hospital policy, the project was reviewed and approved by the PPI Research Support Review Committee. The Penn State Human Subjects Protection Office reviewed the quality improvement project and determined that it did not meet the definition of human subjects’ research; the project was therefore exempt from further Institutional Review Board review and approval.

Participants’ basic demographic information was summarized using descriptive statistics, such as mean and standard deviation (SD) for quantitative variables, and count numbers and proportions for categorical variables. The 14 barrier items are each an ordinal categorical variable with five levels (never, rarely, sometimes, often, always). The distribution of the levels is typically skewed for every barrier item. For the ease of interpretation and validity of underlying statistical

tests, some levels are combined to create a 3-level categorical variable (never, rarely, and sometimes/often/always), followed by a binary variable (no barrier vs. some barriers). The binary indicators for barriers were used to create a composite score for barrier severity (the total number of having any barriers out of 14) for each participant. This composite score was further categorized with three levels: 0, 1–2, and 3 or more barriers. The associations between each individual barrier item and the overall barrier severity categories were examined using a Mantel-Haenszel Chi-square test for linear trend. The selected results were reported using two-way contingency tables and a 100% stacked bar-chart. The overall barrier severity categories were associated with an individual's perception of voting in a similar statistical fashion. And finally, the association between the barrier severity score and selected demographic variables were examined using a nonparametric Wilcoxon Rank-sum test and Kurskal-Wallis test. All analyses were done using statistical software SAS version 9.4 (SAS Institute Inc., Cary, NC, USA) and R programming language version 4.2.2 (R Foundation for Statistical Computing, Vienna, Austria). All tests were two-sided and the statistical significance level used was 0.05. Due to the exploratory nature of this study, we did not adjust the individual statistical significance level for multiple testing.

## Results

A total of 189 patients were approached regarding participation in the project and/or survey. A majority (67.1%) of individuals who declined survey and/or project participation cited being “not interested” as the reason. A sample of 119 individuals (63%) chose to complete the survey, with 60 of those individuals also engaging in a voter support activity. All survey questions were optional, however, surveys with more than 5 missing data points of the 14 barriers assessed were excluded from data analysis. A total of 113 surveys were included in the final analysis. Survey participant demographics and voting history are described in Table 1.

To better assess the level of burden on each individual, participants were split into groups based on the number of unique barriers they had previously encountered: zero barriers ( $N=29$ ), 1–2 barriers ( $N=42$ ), 3 or more barriers ( $N=42$ ). Figure 1 demonstrates the distribution of unique barriers previously encountered per person.

## Perceptions of Voting

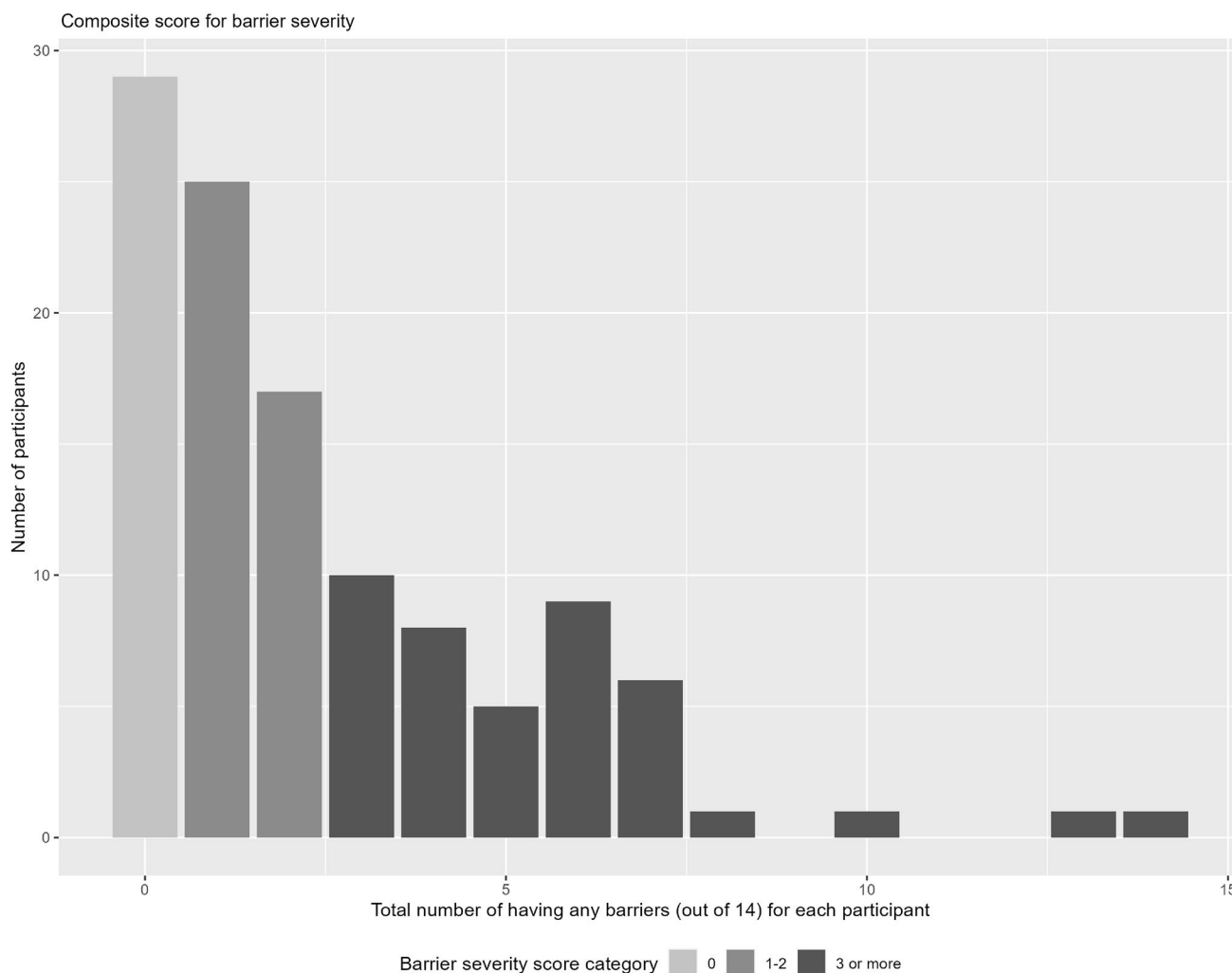
Participants were asked to use a Likert scale to assess eight different statements about voting, evaluating how strongly they agreed or disagreed with each statement. Table 2 outlines the eight statements and the number of participants who strongly disagreed or disagreed versus those who were

**Table 1** Participant demographics

	Total ( $N=113$ )
Age	
N	110
Mean (SD)	47.1 (16.66)
Median (IQR)	45.5 (32.0, 62.0)
Sex, n (%)	
Male	56 (51.9%)
Female	52 (48.1%)
Gender, n (%)	
Female	50 (47.2%)
Male	50 (47.2%)
No Answer	3 (2.8%)
Non-Binary	3 (2.8%)
Race, n (%)	
African American	14 (12.8%)
Asian	3 (2.8%)
Multiple Races	4 (3.7%)
Not Applicable	1 (0.9%)
Prefer Not to Answer	4 (3.7%)
Something Else*	3 (2.8%)
White	80 (73.4%)
Ethnicity, n (%)	
Hispanic	9 (10.1%)
Non-Hispanic	80 (89.9%)
Education, n (%)	
College degree or Higher	60 (56.1%)
High School or less	47 (43.9%)
Are you registered to vote in PA?, n (%)	
Yes	75 (66.4%)
No	29 (25.7%)
Unsure	9 (8.0%)
Have you ever voted in the past, n (%)	
Not voted	30 (26.5%)
Voted	83 (73.5%)
Last time voted, n (%)	
2016 and before	34 (39.5%)
2017-2019	28 (32.6%)
2020	24 (27.9%)

\*Racial identities reported as Something Else include 1 written response indicating “Brown” and another written response indicating “Spanish”

neutral versus those who agreed or strongly agreed with each statement. The table reports on the entire sample, and also categorizes participants into groups based on the number of unique barriers they had previously encountered (0 barriers, 1–2 barriers, 3 or more barriers). 81.4% of individuals agreed or strongly agreed with the statement “voting is important.” 66.4% agreed or strongly agreed with the statement “voting helps me feel connected to the community.” 55.8% agreed or strongly agreed with the statement “voting



**Fig. 1** Histogram of barrier severity

is helpful to my mental health recovery.” There are no statistically significant differences in the relationship of opinions when broken down by the number of unique barriers previously encountered.

### Barriers to Voting

The most common barrier to voting identified by survey participants (43.6%) was not having enough information to make an informed choice. Other previous barriers commonly reported included: 38.0% of individuals did not know where to vote; 27.4% did not have transportation; 27.2% had not previously applied to vote; and 25.5% were hospitalized. Those survey participants who participated in a voter support activity ( $N=54$ ) identified a median of 2 previous barriers to voting compared to those who had not participated in a voter support activity ( $N=59$ , median of 1 barrier,  $p=0.0331$ ). Table 3 describes the frequency that

each unique barrier was encountered by the entire cohort. Participants are also broken out into groups based on the number of unique barriers they previously encountered (0 barriers, 1–2 barriers, 3 or more barriers).

Individuals who previously encountered a higher number of unique barriers (3 or more) had a higher likelihood of encountering barriers more often. For example, 29 individuals never experienced the barrier “I did not have transportation,” nor any other barrier. Among individuals who previously experienced 1–2 barriers, 4.8% ( $N=2$ ) identified lack of transportation as “rare” and 4.8% ( $N=2$ ) reported it happening “sometimes, often or always.” For those individuals who previously encountered 3 or more barriers, 11.9% ( $N=5$ ) identified lack of transportation as “rare,” while 52.4% ( $N=22$ ) identified this barrier as occurring “sometimes, often or always.” Those individuals who had previously encountered 3 or more unique barriers therefore had a higher likelihood of experiencing a lack of transportation

**Table 2** Perceptions of voting

	Total (N= 113)	Number of barriers per person			P-value
		0 (N=29)	1–2 (N=42)	> = 3 (N=42)	
I care about voting, n (%)					.8583 <sup>1</sup>
Strongly disagree/disagree	12 (10.6%)	3 (10.3%)	5 (12.2%)	4 (10.0%)	
Neutral	10 (8.8%)	1 (3.4%)	5 (12.2%)	4 (10.0%)	
Agree/strongly agree	88 (77.9%)	25 (86.2%)	31 (75.6%)	32 (80.0%)	
Voting is important, n (%)					.6292 <sup>1</sup>
Strongly disagree/disagree	7 (6.2%)	3 (10.7%)	3 (7.5%)	1 (2.4%)	
Neutral	11 (9.7%)	1 (3.6%)	2 (5.0%)	8 (19.0%)	
Agree/strongly agree	92 (81.4%)	24 (85.7%)	35 (87.5%)	33 (78.6%)	
People with mental illness should be allowed to vote, n (%)					.8019 <sup>1</sup>
Strongly disagree/disagree	19 (16.8%)	4 (14.3%)	8 (20.0%)	7 (16.7%)	
Neutral	19 (16.8%)	3 (10.7%)	10 (25.0%)	6 (14.3%)	
Agree/strongly agree	72 (63.7%)	21 (75.0%)	22 (55.0%)	29 (69.0%)	
Voting helps me feel connected to the community, n (%)					.1530 <sup>1</sup>
Strongly disagree/disagree	15 (13.3%)	3 (10.3%)	4 (10.0%)	8 (19.0%)	
Neutral	21 (18.6%)	3 (10.3%)	10 (25.0%)	8 (19.0%)	
Agree/strongly agree	75 (66.4%)	23 (79.3%)	26 (65.0%)	26 (61.9%)	
Voting gives me pride in my community, n (%)					.0660 <sup>1</sup>
Strongly disagree/disagree	19 (16.8%)	3 (10.7%)	7 (16.7%)	9 (22.0%)	
Neutral	21 (18.6%)	2 (7.1%)	9 (21.4%)	10 (24.4%)	
Agree/strongly agree	71 (62.8%)	23 (82.1%)	26 (61.9%)	22 (53.7%)	
Voting is helpful to my mental health recovery, n (%)					.5835 <sup>1</sup>
Strongly disagree/disagree	22 (19.5%)	4 (14.3%)	10 (25.0%)	8 (19.5%)	
Neutral	24 (21.2%)	6 (21.4%)	8 (20.0%)	10 (24.4%)	
Agree/strongly agree	63 (55.8%)	18 (64.3%)	22 (55.0%)	23 (56.1%)	
My vote is important, n (%)					.7589 <sup>1</sup>
Strongly disagree/disagree	13 (11.5%)	4 (13.8%)	5 (12.2%)	4 (9.5%)	
Neutral	17 (15%)	4 (13.8%)	5 (12.2%)	8 (19.0%)	
Agree/strongly agree	82 (72.6%)	21 (72.4%)	31 (75.6%)	30 (71.4%)	
My vote makes a difference, n (%)					.3498 <sup>1</sup>
Strongly disagree/disagree	13 (11.5%)	3 (10.3%)	5 (12.2%)	5 (11.9%)	
Neutral	16 (14.2%)	3 (10.3%)	2 (4.9%)	11 (26.2%)	
Agree/strongly agree	83 (73.5%)	23 (79.3%)	34 (82.9%)	26 (61.9%)	

<sup>1</sup>Mantel–Haenszel test of linear trend exact p-value

more frequently than those reporting fewer barriers. This statistically significant relationship is seen with each unique barrier examined, as depicted in Fig. 2, including: “I did not have transportation;” “I did not know where to vote;” “I was in the hospital;” “I did not have enough information to make an informed choice;” “I did not apply to vote;” “I did not have the necessary ID to vote;” “I thought I was not allowed to vote due to a previous criminal conviction;” “I cannot read;” “I was afraid to vote.”

Table 4 examines participants’ previous voting behaviors, demographics of age, gender, racial identity and education, and the number of barriers identified per person in each group. There were no significant differences noted in the number of barriers previously encountered when

participants were separated by age cohorts or by gender. Individuals with an associate’s degree or less identified a median of 2.0 previous barriers compared to a median of 1.0 barrier for individuals with a bachelor’s degree or higher, which was significant ( $p = .0320$ ). Individuals who identified as African American ( $N = 14$ ) experienced a median of 5.5 barriers, and individuals who identified as Asian, Multiple Races, or Something Else ( $N = 10$ ) experienced 3.5 barriers compared to a median of 1.0 barrier among those who identified as white ( $N = 80$ ) ( $p < .0001$ ). 71.4% of African Americans in our sample had previously encountered 3 or more barriers and 14.3% had previously encountered 1–2 barriers. 45.0% of white participants had previously experienced 1–2 barriers and 22.5% had

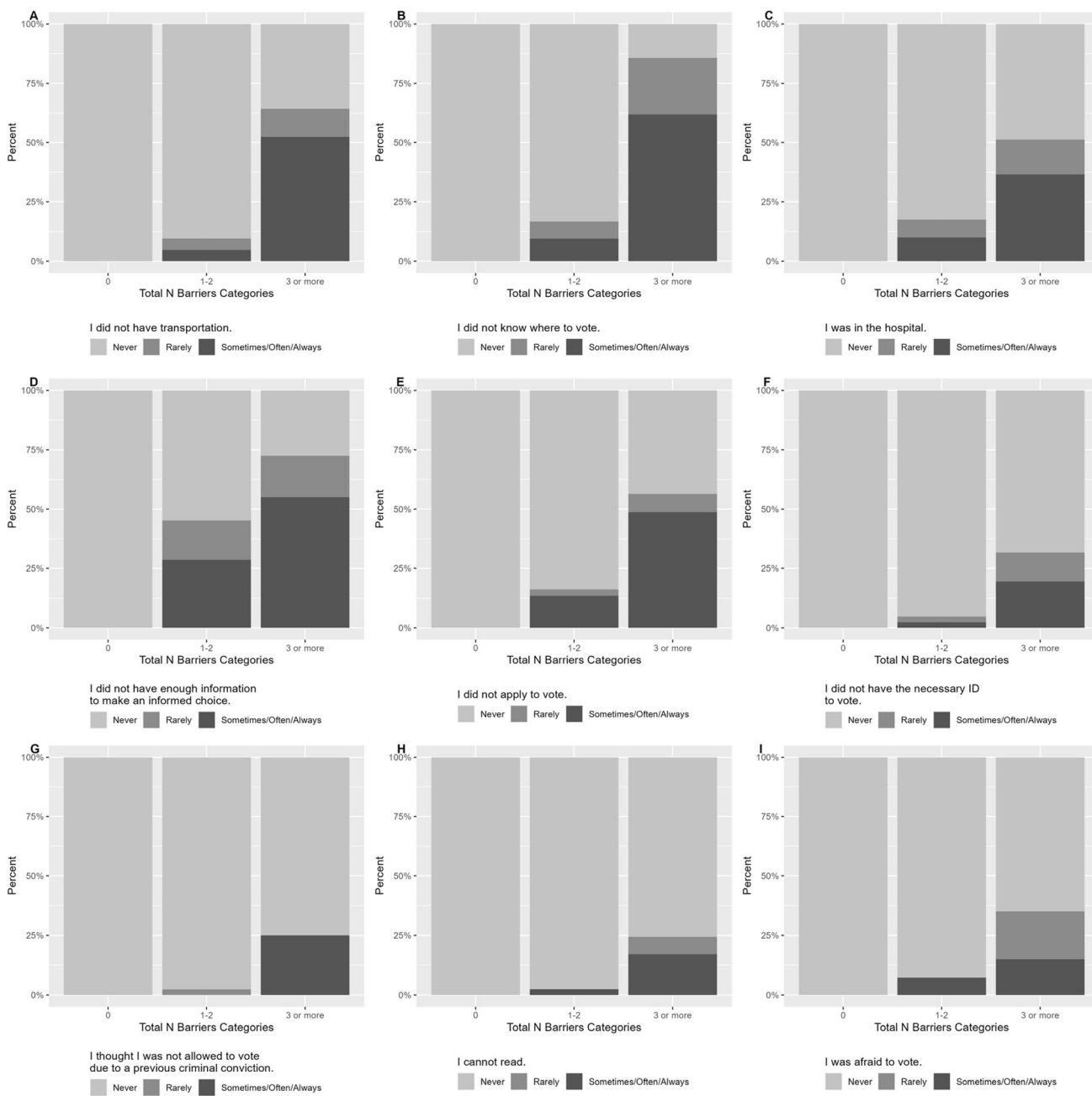
**Table 3** Previous barriers to voting

	Total (N = 113)	Number of barriers per person			P-value
		0 (N = 29)	1–2 (N = 42)	>=3 (N = 42)	
I did not have transportation, n (%)					
Never	82 (72.6%)	29 (100.0%)	38 (90.5%)	15 (35.7%)	<.0001 <sup>1</sup>
Rarely	7 (6.2%)	0 (0.0%)	2 (4.8%)	5 (11.9%)	
Sometimes/Often/Always	24 (21.2%)	0 (0.0%)	2 (4.8%)	22 (52.4%)	
I did not know where to vote, n (%)					
Never	70 (61.9%)	29 (100.0%)	35 (83.3%)	6 (14.3%)	<.0001 <sup>1</sup>
Rarely	13 (11.5%)	0 (0.0%)	3 (7.1%)	10 (23.8%)	
Sometimes/Often/Always	30 (26.5%)	0 (0.0%)	4 (9.5%)	26 (61.9%)	
I was afraid to vote, n (%)					
Never	92 (84.4%)	28 (100.0%)	38 (92.7%)	26 (65.0%)	.0004 <sup>1</sup>
Rarely	8 (7.3%)	0 (0.0%)	0 (0.0%)	8 (20.0%)	
Sometimes/Often/Always	9 (8.3%)	0 (0.0%)	3 (7.3%)	6 (15.0%)	
Others tried to frighten me not to vote, n (%)					
Never	100 (89.3%)	29 (100.0%)	38 (92.7%)	33 (78.6%)	.0048 <sup>1</sup>
Rarely	7 (6.3%)	0 (0.0%)	2 (4.9%)	5 (11.9%)	
Sometimes/Often/Always	5 (4.5%)	0 (0.0%)	1 (2.4%)	4 (9.5%)	
I was in the hospital, n (%)					
Never	82 (74.5%)	29 (100.0%)	33 (82.5%)	20 (48.8%)	<.0001 <sup>1</sup>
Rarely	9 (8.2%)	0 (0.0%)	3 (7.5%)	6 (14.6%)	
Sometimes/Often/Always	19 (17.3%)	0 (0.0%)	4 (10.0%)	15 (36.6%)	
I did not have enough information, n (%)					
Never	62 (56.4%)	28 (100.0%)	23 (54.8%)	11 (27.5%)	<.0001 <sup>1</sup>
Rarely	14 (12.7%)	0 (0.0%)	7 (16.7%)	7 (17.5%)	
Sometimes/Often/Always	34 (30.9%)	0 (0.0%)	12 (28.6%)	22 (55.0%)	
I did not apply to vote, n (%)					
Never	75 (72.8%)	27 (100.0%)	31 (83.8%)	17 (43.6%)	<.0001 <sup>1</sup>
Rarely	4 (3.9%)	0 (0.0%)	1 (2.7%)	3 (7.7%)	
Sometimes/Often/Always	24 (23.3%)	0 (0.0%)	5 (13.5%)	19 (48.7%)	
I did not have the correct ID to apply to vote, n (%)					
Never	93 (85.3%)	28 (100.0%)	38 (92.7%)	27 (67.5%)	.0002 <sup>1</sup>
Rarely	5 (4.6%)	0 (0.0%)	1 (2.4%)	4 (10.0%)	
Sometimes/Often/Always	11 (10.1%)	0 (0.0%)	2 (4.9%)	9 (22.5%)	
I did not have the necessary ID to vote, n (%)					
Never	96 (86.5%)	28 (100.0%)	40 (95.2%)	28 (68.3%)	.0001 <sup>1</sup>

Table 3 (continued)

	Total (N= 113)	Number of barriers per person			P-value
		0 (N= 29)	1–2 (N= 42)	>=3 (N= 42)	
Rarely	6 (5.4%)	0 (0.0%)	1 (2.4%)	5 (12.2%)	.0260 <sup>1</sup>
Sometimes/Often/Always	9 (8.1%)	0 (0.0%)	1 (2.4%)	8 (19.5%)	
I was not allowed to vote due to citizenship, n (%)					
Never	107 (96.4%)	28 (100.0%)	42 (100.0%)	37 (90.2%)	.0002 <sup>1</sup>
Rarely	1 (0.9%)	0 (0.0%)	0 (0.0%)	1 (2.4%)	
Sometimes/Often/Always	3 (2.7%)	0 (0.0%)	0 (0.0%)	3 (7.3%)	
I was not allowed to vote due to a previous criminal conviction, n (%)					
Never	98 (89.9%)	27 (100.0%)	41 (97.6%)	30 (75.0%)	.0003 <sup>1</sup>
Rarely	1 (0.9%)	0 (0.0%)	1 (2.4%)	0 (0.0%)	
Sometimes/Often/Always	10 (9.2%)	0 (0.0%)	0 (0.0%)	10 (25.0%)	
I was in prison for a felony conviction, n (%)					
Never	101 (90.2%)	29 (100.0%)	41 (97.6%)	31 (75.6%)	.0009 <sup>1</sup>
Rarely	2 (1.8%)	0 (0.0%)	1 (2.4%)	1 (2.4%)	
Sometimes/Often/Always	9 (8.0%)	0 (0.0%)	0 (0.0%)	9 (22.0%)	
I cannot read, n (%)					
Never	99 (90.0%)	28 (100.0%)	40 (97.6%)	31 (75.6%)	.0015 <sup>1</sup>
Rarely	3 (2.7%)	0 (0.0%)	0 (0.0%)	3 (7.3%)	
Sometimes/Often/Always	8 (7.3%)	0 (0.0%)	1 (2.4%)	7 (17.1%)	
I cannot write, n (%)					
Never	97 (89.0%)	27 (100.0%)	39 (95.1%)	31 (75.6%)	.0015 <sup>1</sup>
Rarely	5 (4.6%)	0 (0.0%)	1 (2.4%)	4 (9.8%)	
Sometimes/Often/Always	7 (6.4%)	0 (0.0%)	1 (2.4%)	6 (14.6%)	

<sup>1</sup>Mantel–Haenszel test of linear trend exact p-value



**Fig. 2** Barrier frequency by category and number of unique barriers

previously experienced 3 or more barriers. Among individuals not identifying as white or African American, 10% had previously encountered 1–2 barriers, and 90% had encountered 3 or more. There is a significant difference when the number of previously encountered barriers is compared amongst these racial identity groups ( $p < .0001$ ). Individuals who reported never having voted in the past had a higher number of previously identified barriers (a median of 3) compared to those who had previously voted in PA (a median of 1 barrier).

### Discussion

This study is unique in that it evaluates barriers to and perceptions of voting among a sample of American psychiatric inpatients. We are not aware of any other similar U.S.-based studies of voting among patients hospitalized with psychiatric illness. Crucially, this study confirms that psychiatric inpatients value voting but experience significant challenges in exercising their right to vote.



**Table 4** Association of the number of barriers with selected demographic variables

	Number of barriers per person			P-value
	N	Mean (SD)	Median (IQR)	
Age				
18–29 years	21	3.1 (2.74)	2.0 (5.0)	.6347 <sup>2</sup>
30–44 years	31	2.7 (3.13)	2.0 (4.0)	
45–64 years	38	2.6 (2.85)	2.0 (2.0)	
65+ years	20	2.0 (2.09)	1.0 (3.5)	
Gender				
Female	50	2.3 (2.91)	1.0 (3.0)	.0894 <sup>2</sup>
Male	50	2.7 (2.71)	2.0 (4.0)	
No Answer	3	2.0 (2.00)	2.0 (4.0)	
Non-Binary	3	6.0 (1.00)	6.0 (2.0)	<.0001 <sup>2</sup>
Race				
White	80	1.8 (2.30)	1.0 (2.0)	
African American	14	4.4 (2.68)	5.5 (4.0)	
Others*	10	5.1 (3.96)	3.5 (3.0)	
Education				
Associate degree/some college or less	80	2.8 (2.66)	2.0 (3.0)	.0320 <sup>1</sup>
Bachelor's degree or higher	24	1.9 (3.19)	1.0 (2.5)	
Have you ever voted in the past?				
PA	61	2.1 (2.77)	1.0 (3.0)	.0392 <sup>2</sup>
Other State	6	2.0 (1.79)	1.5 (2.0)	
PA + Other State	14	2.4 (2.02)	2.0 (3.0)	
No/Unsure	27	3.4 (2.39)	3.0 (4.0)	

\*Other racial identities reported include 3 Asian, 4 Multiple Races, and 3 Something Else with 1 response indicating “Brown” and another response indicating “Spanish”

<sup>1</sup>Wilcoxon rank sum test p-value

<sup>2</sup>Kruskal-Wallis test p-value

The act of voting has been shown to have key beneficial effects for people with mental illness, including impacts on social connectedness and empowerment, particularly for those who use mental health services (Bergstresser et al., 2013; Kelly, 2019). In addition, voting may help promote social integration for those living with serious mental illness (Nash, 2002). Civic engagement, of which voting is one form, has also been shown to reduce community rates of suicide in a study of white individuals living in rural areas (Cutlip et al., 2010). Our study confirmed patients' awareness of the relationship between voting, social engagement, and perceived mental health recovery. More than half of respondents saw a positive association between the act of voting and their mental health, agreeing or strongly agreeing with the statement that "voting is helpful to my mental health recovery." A majority of respondents also agreed or strongly agreed that they cared about voting, that their vote makes a difference, and that their vote is important. Similarly, a majority agreed or strongly agreed that voting helps them feel connected to and proud of their community. Most respondents agreed or strongly agreed that people with mental illness should be allowed to vote.

Consistent with previous study findings of those receiving mental health treatment, the majority of respondents encountered barriers in exercising their right to vote: 74% of individuals reported encountering voting barriers in their lifetime. The most common barriers included not having enough information to make an informed choice, not knowing where to vote, not having transportation, and not being registered to vote. Lack of registration was also the most common barrier in international samples of populations receiving treatment (Kelly, 2019; McIntyre et al., 2012). Unsurprisingly, people who had not voted in the past reported a higher burden of barriers to voting than those who had voted previously. In this same patient population those who did not vote in 2016 identified 3.4 previous barriers, as compared to 1.72 barriers in those who did vote ( $p < .01$ ) (Graziane, 2023a).

A significant portion of eligible U.S. citizens do not vote: in a survey conducted by the U.S. Census Bureau for the November 2020 U.S. election, 33.2% of citizens eligible to vote reported they did not vote in the 2020 election (Fabina, 2022). The most common reasons cited for registered voters not casting a ballot were not being interested in the election, dislike of candidates or campaign issues, conflict with their schedule, and illness or disability. Other identified barriers to voting in the general population include lack of required identification documents, frequent change of address or housing instability, insufficient information on elections, limited English proficiency, poor health and problems accessing polling sites (such as closure of sites, long wait times) (Executive Order 14019, 2021; APHA Policy, 2022). In the U.S. voting turnout rates vary by racial identity,

age, educational level and income levels. It has been demonstrated that voter turnout is lower among Black, Latino and American Indian people; younger citizens; citizens with lower educational levels; and those with lower income levels (APHA Policy, 2022). This is consistent with data from our results showing that participants with lower educational level and those identifying as African American had a significantly greater number of barriers.

Lack of transportation, lack of knowledge regarding one's polling place, and lack of voter registration were all notable barriers in this study. More than a third of patients surveyed indicated that they did not know where to vote, and more than a quarter identified a lack of transportation and lack of voter registration as barriers they had experienced at some point in their lives. Many of the barriers endorsed by psychiatric inpatients in our study are similar to those encountered in the general U.S. population, but those with serious mental illness are less likely to vote than the general population (Kamens et al., 2019). Individuals with serious mental illness often encounter structural barriers to registering to vote and to casting ballots (Kamens et al., 2019). Many of the same factors that are associated with lower voting turnout are established social determinants of mental health, including marginalized racial status, poverty and low education level (Brown et al., 2020; Compton & Shim, 2015). Importantly, these barriers to voting may compound the health-related factors to which they are associated. Communities with policies that enhance voter engagement have better health outcomes, including lower rates of infant mortality, fewer self-reported poor mental health days, and lower rates of premature death (Health & Democracy Index, 2022).

In addition to structural barriers to voting, individuals with mental illness may also have illness-specific factors that make voting more challenging. Symptoms of anergia and amotivation associated with depression and other mental illnesses may create obstacles to patients physically going to polling locations (Landwehr, 2021). Serious mental illness is often associated with cognitive impairments, particularly problems with executive functioning, which may make the complex multi-step process of registering to vote, creating a plan to vote, executing the plan, and overcoming unexpected obstacles more difficult. Furthermore, going to the polls has been found to be associated with increased cortisol levels, suggesting a stressful experience, when compared to both a control group and a mail-in-ballot voting group (Nieman et al., 2015). Additionally, when life stressors occur, individuals who have never voted in the past are less likely to vote compared to routine voters (Hassell, 2017).

While the obstacles to civic engagement appear nuanced, they lend themselves to a variety of multi-level interventions. Individual psychiatric practitioners may learn about existing voting barriers for patients, and work on problem-solving strategies with them to target these

issues (Graziane, 2023b). Notably in our project cohort, individuals who engaged in a voter support activity also had a higher number of previously encountered barriers. On an institutional level, voter registration drives within health care settings have become more commonplace as a means of mitigating the disparity in patient voter registration rates compared to the general population (Brown et al., 2020; Grade et al., 2023; Liggett et al., 2014; Ruxin et al., 2022). The National Voter Registration Act of 1993 allows for public assistance offices to offer voter registration services, with public assistance offices being defined as those who provide services under federal or state funded programs, including Medicaid (The National Voter Registration Act of 1993). Statewide efforts to increase voter engagement may include advocacy for policies like automatic voter registration, same day voter registration, no-excuse mail in ballots, and voting rights restoration, all of which address barriers that individuals with mental illness face when trying to exercise their right to vote. Finally, Executive Order 14019 on Promoting Access to Voting not only identifies specific obstacles to voting many Americans face, but also identifies a responsibility of the Federal Government and its agencies in providing access to and education about voter registration and election activities (Executive Order 14019., 2021).

Strengths of this study include sampling a unique population of persons hospitalized with acute psychiatric illness. This sampling method has been used in studies in other democratic countries, which allows for international comparison. The sample was large enough to examine relationships between past voting, barriers burden, and some demographics. The coupling of the survey with interventions to support voting helped ensure that data was not collected in isolation and may have contributed to the high survey participation rate. Furthermore, the project's proximity to the 2020 election may have also affected participation rates in both the survey as well as the previously described voter support activities.

Limitations of this study include a small sample size and limited racial diversity, both of which restricted our ability to draw significant conclusions about barriers and perceptions among communities with people of color. The lack of racial diversity and the specific population of patients on an inpatient psychiatric unit may limit generalizability. Additionally, while this study identifies previous barriers to voting it does not assess the degree to which these barriers prevented these individuals from voting. Finally, the study did not collect qualitative data regarding perceptions and barriers to voting, which may have enriched our conclusions.

Future work in this domain could include oversampling of racial and ethnic minority individuals, qualitative assessment of individuals' views and experiences with voting, and further exploration of these issues in other levels of

psychiatric care, ranging from general outpatient services to assertive community treatment and residential treatment.

This study population of patients hospitalized with psychiatric illness overwhelmingly agreed that voting is important. However, only 55.8% of patients surveyed agreed or strongly agreed that voting is helpful to their mental health recovery, which means that more than 40% did not recognize a relationship between voting and the structural and systemic barriers to recovery. On an immediate, individual level, the importance of securing basic needs like food and housing may trump patients' sense of priority or urgency towards voting participation. Yet voting participation determines the election of public officials who make critical decisions impacting resource availability for this population, such as affordability of healthcare and medication, access to housing services, and accessibility of public transportation. As an example, an analysis by Pabayo and colleagues found that greater restrictions on voting access, as measured by the Cost of Voting Index, were associated with higher odds of being uninsured (2021). Although there is only a small percentage of individuals with psychiatric illness who require inpatient psychiatric hospitalization, social determinants have been found to influence the need for hospitalization in a range of mental illnesses (Amiel-Lebigre, 2003; Roick et al., 2004). Practitioners are becoming more cognizant of the connection between social determinants and mental health (Compton & Shim, 2015), however, patients may not yet see the connection as clearly. Individuals within the psychiatric patient population are significantly affected by social and political determinants of health while also facing an escalating number of barriers to voting, which places them at risk of further marginalization and disenfranchisement if elected officials do not represent their interests. Though our patients' belief in the importance of voting is reassuring, multi-level efforts must be prioritized to reduce their barriers to civic engagement and to empower them to exercise their right to vote.

**Data Availability** A portion of this data was presented at the Mental Health Services Conference in October 2023.

## Declarations

**Conflict of interest** All authors have no disclosures or acknowledgements.

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