

Code Status Assessment and Documentation in Inpatient Psychiatry: A Call for Increased Training

Wilmarie Cidre Serrano, M.D., Meenakshi S. Denduluri, M.D., and Kelli Marie Smith, M.D.

Objective: This study aimed to characterize psychiatry residents' opinions, knowledge, training needs, and practices around code status assessments (CSAs) in inpatient psychiatry at one institution.

Methods: Psychiatry residents were invited to complete a 21-item multiple-choice survey in January 2019. Data were analyzed using descriptive statistics.

Results: Twenty-three of 49 residents (47%) completed the survey. Ninety percent (N=20) reported that conducting CSAs in inpatient psychiatry was definitely or probably their responsibility, 70% (N=16) had received no formal training in conducting CSAs, and 61% (N=14) did not consistently document CSAs.

Conclusions: A discrepancy exists between the perceived importance of CSAs in inpatient psychiatry and the frequency of completion. Psychiatry residents would benefit from increased CSA education.

The Patient Self Determination Act of 1990 (PSDA) requires hospitals to inquire about advance health care directives, including code status, when a patient is admitted (1). Notably, the PSDA does not specifically distinguish between medical and psychiatric admissions. Although assessing and documenting code status has been recognized as an essential and required component of the hospital admissions process for three decades, the medical literature consis-

tently demonstrates a deficit in code status assessments (CSAs) and documentation among hospitalized patients (2). Although limited, the literature suggests an even more concerning deficit in psychiatric units, despite the disproportionately higher rates of diabetes, heart disease, pulmonary disease, and mortality among psychiatric patients, compared with the general population (3–6). A 2008 study of 593 psychiatric and medical inpatients found that rates of code status documentation among psychiatric inpatients were significantly lower, compared with rates among medical inpatients (65% vs. 96%, $p < 0.001$) (3).

CSA for psychiatric inpatients poses unique challenges to medical providers. For one, questions about capacity arise, given conditions such as acute suicidality, mania, or psychosis, which may preclude appropriate medical decision-making abilities. Additionally, when the reason for admission is not an acute medical issue, providers may have higher expectations of survival for patients admitted to psychiatric units and may deprioritize CSAs. Furthermore, our review found no published standards or clear guidelines on how to assess code status among psychiatric inpatients, and the approaches that have been studied and used to conduct CSAs in other branches of medicine have not been tested in psychiatric populations (7).

In this study, which was part of a larger quality improvement initiative, a needs assessment was performed to identify gaps in resident training and barriers to CSA and documentation in one institution. The objectives of this survey were to understand psychiatry residents' perceptions and attitudes about conducting CSAs in inpatient psychiatry, identify

perceived gaps in training and preparedness for conducting CSAs, identify barriers to completing CSAs, and quantify residents' perceived frequency of CSA and documentation practices.

METHODS

All psychiatry residents (N=49) at a single institution were invited via email to complete a 21-item, multiple-choice, anonymous, voluntary, Web-based survey in January 2019. A raffle entry for a \$10 Amazon gift card was offered as a small incentive to complete the survey. Per the institution's Human Research Protection Program, the project did not meet the definition of human subjects research, and thus no institutional review board approval was required. The survey queried residents about their demographics, training information, perceptions about the importance of CSAs in inpatient psychiatry, and barriers to completing CSAs. A 5-point Likert scale was used to assess the frequency with which they completed CSAs (always, most of the time, about half the time, sometimes, and never). A 5-point Likert scale was also used by residents to rate whether their training had prepared them to conduct CSAs in inpatient psychiatry and whether they thought this was their responsibility (definitely yes, probably yes, might or might not, probably not, and definitely not). Descriptive statistics were used to compare the responses.

RESULTS

Characteristics of the 23 residents (47%) who completed the survey are presented in Table 1. Ninety percent (N=20) felt it

TABLE 1. Demographic characteristics of 23 psychiatry resident respondents to a multiple-choice survey on code status assessments in inpatient psychiatry

Characteristic	N	%
Age (mean±SD)	30.7±2.05	
Gender		
Male	11	48
Female	11	48
Other	0	0
No response	1	4
Race-ethnicity		
Latino or Hispanic	2	9
Black	2	9
White	9	39
Asian	6	26
Other	1	4
No answer	3	13
Postgraduate year		
1	4	17
2	7	30
3	9	39
4	3	13
N of months rotating (mean±SD) ^a	5.43±2.73	

was their responsibility to assess psychiatric inpatients' code status. Over 50% (N=13) noted that they never assess a patient's code status within 24 hours of admission. Additionally, 61% (N=14) reported that they do not consistently document code status. Fifty-seven percent (N=13) felt they were probably or definitely not prepared to discuss code status with psychiatric inpatients.

Respondents noted barriers encountered when assessing and documenting code status (Table 2 and Box 1). When respondents were asked whether they knew the differences between do not resuscitate, do not intubate, and do not escalate (DNR/DNI/DNE), 17% (N=4) stated that they did not. Only one respondent (4%) felt that they definitely would know what to do if their patient lacked capacity to make code status decisions. Eighty-three percent of respondents (N=19) thought that it was extremely or very important for psychiatry residents to be competent in having discussions about code status. Seventy percent (N=16) reported receiving no formal training in how to address code status of psychiatric inpatients, and all 23 respon-

TABLE 2. Barriers to assessing and documenting code status of psychiatric inpatients cited in a survey of 23 psychiatry residents

Barrier	N	%
Comfort level in assessing a patient's capacity to decide code status	16	70
Time limitations	16	70
It's not part of my workflow	14	61
Lack of training in assessing code status	13	57
I forget	13	57
Comfort level in assessing code status	10	44
It's not my responsibility	1	4
Personal beliefs about this discussion	1	4

dents indicated that they would benefit from more formal training.

DISCUSSION

Despite legal and ethical obligations to conduct CSAs for all hospitalized patients, the findings of this study support the existing literature suggesting that CSAs are underutilized among psychiatric inpatients (1–3). Nearly all psychiatry residents surveyed in this study (N=20) felt that it was definitely or probably their responsibility as psychiatry residents to assess psychiatric inpatients' code status, yet most (N=14) did not consistently assess and document their patients' code status.

Our survey suggests that this discrepancy can be partly explained by lack of training. The Accreditation Council for Graduate Medical Education currently requires that all residents—including psychiatry residents—learn to “communicate with patients and families . . . to

assess their care goals, including, when appropriate, end-of-life goals” (8). Yet only a small minority of respondents in this study felt that their training definitely or probably prepared them to complete CSAs for psychiatric inpatients, and most reported receiving no formal training. Perhaps the most informative piece of data was that all 23 residents surveyed believed that they would benefit from more formal education on how to conduct CSAs for psychiatric inpatients. These data underscore the deficits in end-of-life training that have been consistently reported across other specialties (9), although such training has been understudied in psychiatry despite its relevance. In the only other known published study surveying psychiatrists on their CSA practices, 53% (N=8/15) of trainees did not feel well trained in this aspect of clinical care (7).

There are unique challenges in conducting CSAs for psychiatric inpatients. For one, concerns about decisional incapacity and loss of autonomy often arise and must be balanced with the ethical principles of beneficence, nonmaleficence, and justice. In particular, psychiatric conditions, such as severe depression and suicidality, mania, psychosis, catatonia, and delirium, may affect patients' capacity to make clinical decisions in general and end-of-life care decisions in particular (10, 11). Clarifying these various factors can be a daunting task even in the best of circumstances and may be particularly trying in the acute setting of inpatient psychiatry. In our study, comfort level in assessing psychiatric inpatients' capacity to decide code status was cited by 70% of residents as a barrier to conducting CSAs. There have been numerous published studies

BOX 1. Open-ended comments about barriers to assessing and documenting code status of psychiatric inpatients

Respondent 1: “It often only comes into play when it ‘feels’ more relevant, like a palliative care discussion with a cancer patient or admitting a really medically complex patient.”

Respondent 2: “I worry that the patient's stated code status may fluctuate depending on psychiatric state (when severely depressed, maybe someone chooses DNR/DNI, but when healthy would be full code), and assuming full code status sometimes feels easier.”

Respondent 3: “Uncertainty, especially with regards to suicidal patients.”

Respondent 4: “Honestly, it is very rarely relevant. It is also a jarring change of gears, e.g., how do you ask code status of someone who was just admitted for wanting to end their own life?”

KEY POINTS/CLINICAL PEARLS

- As psychiatrists, we have a legal, ethical, and clinical responsibility to conduct code status assessments (CSAs) for hospitalized psychiatric patients.
- The survey found a great deficit in the assessment and documentation of code status for psychiatric inpatients.
- Residents would likely benefit from increased training on how to conduct CSAs in inpatient psychiatry.
- There is need for consensus guidelines on how to assess and document code status for psychiatric inpatients.

testing the efficacy of CSA skills training in various medical populations (12, 13), yet there are no such studies among psychiatric inpatients.

Barriers to CSAs related to knowledge deficits have been reported in other specialties (14), but no such studies have been conducted in psychiatry. The results of this study suggest that, in addition to training deficits, gaps in knowledge related to code status preference and cardiopulmonary resuscitation also interfere with respondents' ability to conduct CSAs. For example, 17% of surveyed residents in this study were unaware of the difference between DNR/DNI/DNE, which is basic terminology used in CSAs. Additionally, a majority of respondents were unaware of next steps to take if a patient lacked capacity to make code status decisions. Finally, some respondents noted that CSAs for psychiatric inpatients felt irrelevant unless their patients were medically ill. A similar observation was made in the only other published study on this topic (7).

There are limitations to this study. First, generalizability was limited, given that the survey was part of a larger quality improvement project and was not designed to evaluate a research hypothesis. Additionally, this study was conducted in a small single-site sample. Our response rate of 47% is slightly higher than what is expected from the literature (15). This might suggest that our respondents had a special interest in this topic, which could have introduced selection bias. Finally, the open-ended responses (Box 1) suggest that some residents viewed conducting CSAs as irrelevant, and the absence of this as a response option in our survey was a limitation.

As psychiatrists, we have a legal, ethical, and clinical responsibility to conduct CSAs for psychiatric inpatients. This work adds to the small number of studies that show a deficit in CSAs in inpatient psychiatry, as well as a lack of training on this topic (3, 4, 7). We hope this study serves as a call to action for other institutions to develop quality improvement initiatives to examine and improve the frequency of CSA and documentation practices in their units and track quality of resident training on this important topic. In addition, greater attention is needed from the research community to study the evaluation of end-of-life wishes among psychiatric patients, as well as to research and develop specialized training for psychiatrists to conduct effective CSAs in this vulnerable population. The psychiatric and medical communities need to engage in conversation about this clinical issue and develop consensus guidelines on how to assess and document code status for psychiatric patients.

At the time this article was submitted for publication, Drs. Cidre Serrano, Denduluri, and Smith were fourth-year residents in the Department of Psychiatry, Stanford University, Stanford, Calif.

The authors thank Dr. Daniel Kim for his guidance and mentorship.

REFERENCES

1. HR4449 101st Congress (1989–1990): Patient Self-Determination Act of 1990. <https://www.congress.gov/bill/101st-congress/house-bill/4449>
2. Hakim RB, Teno JM, Harrell Jr FE, et al: Factors associated with do-not-resuscitate

orders: patients' preferences, prognoses, and physicians' judgments. *Ann Intern Med* 1996; 125:284–293

3. Warren MB, Lapid MI, McKean AJ, et al: Code status discussions in psychiatric and medical inpatients. *J Clin Psychiatry* 2015; 76:49–53
4. Ahmed K, Daniels N, Aswad A, et al: An audit of resuscitation status decisions in an older adult psychiatric unit. *Int J Geriatr Psychiatry* 2011; 26:214–216
5. Olsson M, Gerhard T, Huang C, et al: Premature mortality among adults with schizophrenia in the United States. *JAMA Psychiatry* 2015; 72:1172–1181
6. Felker B, Yazel JJ, Short D: Mortality and medical comorbidity among psychiatric patients: a review. *Psychiatr Serv* 1996; 47:1356–1363
7. McKean AJ, Lapid MI, Geske JR, et al: The importance of code status discussions in the psychiatric hospital: results of a single site survey of psychiatrists. *Acad Psychiatry* 2015; 39:200–203
8. ACGME Program Requirements for Graduate Medical Education in Psychiatry. Chicago, Accreditation Council for Graduate Medical Education, 2019. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/400_Psychiatry_2020.pdf?ver=2020-06-19-123110-817
9. Buss MK, Alexander GC, Switzer GE, et al: Assessing competence of residents to discuss end-of-life issues. *J Palliat Med* 2005; 8:363–371
10. Owen GS, Richardson G, David AS, et al: Mental capacity to make decisions on treatment in people admitted to psychiatric hospitals: cross sectional study. *BMJ* 2008; 337:a448–a448
11. Ganzini L, Lee MA, Heintz RT, et al: Do-not-resuscitate orders for depressed psychiatric inpatients. *Psychiatr Serv* 1992; 43:915–919
12. Szmuliowicz E, Neely KJ, Sharma RK, et al: Improving residents' code status discussion skills: a randomized trial. *J Palliat Med* 2012; 15:768–774
13. Margolis B, Blinderman C, de Meritens AB, et al: Educational intervention to improve code status discussion proficiency among obstetrics and gynecology residents. *Am J Hosp Palliat Med* 2018; 35:724–730
14. Binder AF, Huang GC, Buss MK: Uninformed consent: do medicine residents lack the proper framework for code status discussions? Code status discussions. *J Hosp Med* 2016; 11:111–116
15. Cunningham CT, Quan H, Hemmelgarn B, et al: Exploring physician specialist response rates to web-based surveys. *BMC Med Res Methodol* 2015; 15:32