Clinician Perceptions of Implementing the Cultural Formulation Interview on a Mixed Forensic Unit

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The use of the Cultural Formulation Interview (CFI), a 16-item, semistructured, patient cultural assessment, in a forensic mental health setting has not been examined. Using a mixed-methods approach, we performed a pilot test of the CFI in an inpatient service that treats both forensic and nonforensic adult patients. Clinicians' attitudes toward adoption of the CFI was assessed quantitatively with the Evidence-Based Practices Attitudes Scale, which is used to measure provider attitudes toward adopting new treatments, and qualitatively with a semistructured interview. Assessments occurred up to five times to analyze changes with increasing CFI use. In the quantitative measures we observed a general openness to implementing the CFI throughout the implementation period. Compared with clinicians on civil units, forensic clinicians indicated they were less likely to implement the CFI over time if it were required rather than voluntary. Interviews with clinicians revealed concerns about the skills, ability, and confidence needed to implement the CFI, external requirements, and the ease of integrating the CFI into their practice. Based on our findings, forensic units could encourage CFI use after the clinician has determined that the patient is clinically stable, rather than at admission. Units could also incorporate information obtained from the CFI into current documentation to reduce administrative burden.

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Forensic psychiatrists have increasingly recognized cultural factors as central to their work. Based on the lack of a consensus definition for culture in the social and behavioral sciences, the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) Cross-Cultural Issues Subgroup has defined it as:

> Systems of knowledge, concepts, rules, and practices that are learned and transmitted across generations. Culture includes language, religion and spirituality, family structures, life-cycle stages, ceremonial rituals, and customs, as well as moral and legal systems. Cultures are open, dynamic systems that undergo continuous change over time; in the contemporary world, most individuals and groups are exposed to multiple cultures, which they use to fashion their own identities and make sense of experience (Ref. 1, p 749).

Forensic psychiatrists observe professional ethics guidelines[2] and boundaries with patients or evaluees,[3] which are influenced by rules and practices in the medicolegal system that emerge from socially specific concepts, rituals, and customs.[4] Culture also influences moral decision-making, which relates to questions that forensic psychiatrists must often address, such as an individual's capacity to distinguish between right and wrong conduct, criminal intent behind any punishable behavior, and expectations of rehabilitation or punishment.[5] The practice of forensic psychiatry in multicultural societies may exhibit structural biases because historically disadvantaged

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minority populations and new immigrants experience more severe disorders, are assessed to be more dangerous, and are hospitalized involuntarily more than nonminority counterparts.[6] Forensic professionals thus have advised psychiatrists against projecting cultural biases when evaluating individuals from immigrant or minority backgrounds.[7–8]

For these reasons, forensic psychiatrists have called for comprehensive cultural assessments to improve clinical practice. The American Academy of Psychiatry and the Law's Practice Guideline for the Forensic Assessment recommends assessing cultural factors by exploring the evaluee's conceptions of identity, matching language use, exploring transference-countertransference dynamics, and avoiding biases in diagnosis, noting, "Cultural formulation skills are rapidly becoming accepted in all aspects of psychiatric practice, including forensic psychiatry" (Ref. 9, p S39). In 1994, the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), included an Outline for Cultural Formulation (OCF) with social science concepts that could be used in cultural assessments, as recommended by a National Institute of Mental Health workgroup.[10,11] The outline format did not include instructions to clinicians or direct questions to patients. This hindered systematic research (because there was no standardized assessment method) and restricted use of the OCF mostly to those with prior social science training.[12,13] To reconcile the growing interest in the OCF in academic medical centers with the lack of a single method for collecting information, cultural formulation guidelines were published in 2009, which informed an adaptation for forensic psychiatry.[14–16] Case studies have demonstrated that the OCF revealed cultural information that provided forensic psychiatrists with an evaluee's life context to understand the commission of criminal offenses and mitigate sentencing.[17,18]

For DSM-IV's revision to DSM-5, the Cross-Cultural Issues Subgroup, composed mostly of cultural psychiatrists and medical anthropologists working in mental health settings, developed a Cultural Formulation Interview (CFI) with implementation instructions and standardized questions by identifying common topics across OCF–based interviews and cultural assessments published since DSM-IV.[19] The Cross-Cultural Issues Subgroup tested a 14-item CFI with 318 patients and 75 clinicians in a six-country field trial with outpatient clinics.[20] Positive responses to the CFI's perceived feasibility, acceptability, and clinical utility among patients and clinicians led to a revised 16-item version that was published in DSM-5 with the goal of helping clinicians improve service engagement, diagnosis, and treatment planning.[21]

To date, the extent to which the CFI can be implemented with forensic patients remains untested. None of the original field trial sites enrolled forensic patients or patients who were admitted for hospitalization. Qualitative interviews from the New York site of the pilot trial inidcated that patients and clinicians found the CFI helpful in facilitating therapeutic rapport, which can be challenging to establish with forensic patients who frequently receive treatment through forced medications or hospitalizations.[22,23] Upon invitation from the Bureau of Cultural Competence of the New York State Office of Mental Health (OMH) and the Medical Director of the Northeastern Psychiatric Center (NPC), a pseudonym that is used throughout this manuscript to protect the identity of clinician participants, we conducted an exploratory pilot study to identify clinician-named barriers and facilitators when the CFI was implemented at NPC as a cultural assessment tool. The aims of this study were to analyze barriers to and facilitators of the CFI's implementation in an inpatient service that accepts forensic and nonforensic patients; to examine whether these perceptions change over time; and to provide empirically grounded recommendations for the CFI's implementation in forensic settings. The CFI's growing use in adult psychiatric training programs and in multidisciplinary conferences with forensic providers make our findings of timely and topical interest, especially as OMH considers statewide implementation of the CFI across inpatient and outpatient forensic facilities.[24,25]

Methods

Setting

Clinicians were recruited from the inpatient service at NPC, which is part of OMH's public mental health system. In 2015, NPC expressed interest in a pilot study on implementing the CFI. Between 2015 and 2017, the authors of this article (researchers) worked with NPC's local and OMH's statewide administration to design the study. Enrollment occurred between June 2017 and April 2018; 44 pa-

tients (32.8%) were admitted to the NPC's Regional Forensic Unit, and 90 patients (67.2%) were admitted to the nonforensic Adult Service Unit (these are also pseudonyms). The Regional Forensic Unit admits felony defendants who have been found incompetent to stand trial, defendants who have been found not responsible for criminal conduct due to a mental disease or defect, and pretrial detainees in local correction facilities who are in need of inpatient care.[26]

Participants

Eligible clinicians were those on staff in the Regional Forensic Unit and the Adult Service Unit with any terminal degree that allowed them to practice independently; this group consisted of physicians, therapists with master's degrees in social work, doctorate-level psychologists, and advanced practice registered nurses. Each clinician was asked to use the official 16-item version of the CFI in its entirety and without interruption to begin the initial evaluation of any admitted inpatient, as recommended in DSM-5.[1] Clinicians were encouraged to complete the CFI with three separate patients, based on findings from the field trial that perceptions of feasibly implementing the CFI improve after its second administration.[20] Clinicians were excluded if they could not attend a standardized two-hour training session. Because the Regional Forensic Unit admits forensic patients who would be considered vulnerable to coercion and to potential abuse from their dual status as prisoners and psychiatric patients,[27] no individual-level identifying data from or about patients were collected at any time.

Design and Measures

The study was designed with policymakers at NPC and OMH. We opted for a prospective study design that enrolled clinicians who were asked to use the CFI with at least three consecutive patients. The study consisted of data collection at five time points. T0 was defined as an introductory session, during which NPC administrators introduced the CFI and the study's aims to clinicians. Clinicians were trained in the CFI through two consecutive steps. First, clinicians completed an online training module that was available free of cost to all OMH clinicians, created in collaboration between OMH and the American Psychiatric Association. The module consisted of a video lecture outlining the evidence base justifying cultural assessments in mental health, how this evidence relates to the goal of each CFI question, examples of CFI use with people in recovery, and asking clinicians to anticipate barriers and facilitators to CFI use in practice.[28] Second, clinicians attended an in-person training session with the senior author to practice CFI questions through case-based role-play, to ask questions about CFI theory and practice, and to incorporate peer feedback from fellow trainees. Clinicians in the field trial found these techniques helpful to stimulate participation and reflection.[29] T1 occurred within three days after the training but before the first patient interview. T2 occurred after the first patient interview but before the second patient interview. T3 occurred after the third patient interview. T4 occurred 10 months after training.

At T0, all clinicians were asked to complete a demographic form. Variables of interest included age, gender, race and ethnicity according to U.S. Census Bureau categories, profession, number of years providing mental health care, primary work location (civil unit versus forensic unit), estimated number of hours of cross-cultural training, primary language, and nativity.

At each time point, clinicians completed the Evidence-Based Practice Attitude Scale (EBPAS), a 15-item scale whereby clinicians rate their attitudes toward adopting new treatments, interventions, and practices through a 5-point Likert scale (0 = not at all, 1 = to a slight extent, 2 = to a moderate extent, 3 = to a great extent, 4 =to a very great extent).[30] The EBPAS has been validated with providers from various disciplines who work in the public mental health system, including physicians.[31,32] It consists of four subscales: Requirements to use evidence-based practices, Appeal of evidence-based practices, Openness to innovation, and perceived Divergence of evidence-based practices with usual practice.[30] Higher scores on the first three subscales indicate the extent to which implementation is determined by requirements, appeal of the intervention, and the individual's openness to innovative practices. Higher scores on the fourth subscale rate the extent to which an intervention deviates from usual practice. We hypothesized that the Appeal subscale score would improve over time, in line with results from the field trial that clinician perceptions of implementing the CFI improve after its second administration. We also

Table 1 Open-Ended Questions for the Study

Introduction
Hi my name is XXX, and I will be going through this interview with you, where you will be asked for your opinion on the usefulness of the Cultural Formulation Interview (CFI) at your work place. I want to begin by letting you know that we are really interested in making sure that the CFI can be used at your site, and we want to ensure that it is optimally useful to you. All of the information you provide us with here will help us to do that.
Adoption
FOR ALL TIME POINTS
1. Do you plan on using the CFI questions within your practice? If so, how?
2. What would be the barriers to using the CFI questions in your practice?
3. Do you think these barriers would change depending on how frequently you used the CFI? If so, how?
4. What would help to overcome the barriers to using the CFI questions in your practice?
FOR TIME 2 ONLY (AFTER PATIENT 1)
5. After training, how did you first use the CFI with a patient?
FOR TIME 3 ONLY (AFTER PATIENT 3)
6. How did you use the CFI the second time you used it with a patient? Is this different from where you started? What about the third patient?
7. With whom are you using the CFI?
FOR TIME 4 ONLY (AFTER LAST PATIENT)
8. What has influenced your use of the CFI over time?
9. Did the way you work with patients change from before you had the CFI training? If so, what do you do differently now? If not, why not?
Sustainability
FOR ALL TIME POINTS
1. What do you feel you would need to be able to keep using the CFI?
2. What types of policies, procedures, or characteristics of your agency make it easier to use the CFI?
3. What types of policies, procedures, or characteristics of your agency make it harder to use the CFI?
4. Does management support your use of the CFI? If so, how?
5. What else could or should they do to support the use of the CFI?

hypothesized that the Divergence subscale score would decrease over time as clinicians integrated the CFI into their usual practice.

At T1, T2, T3, and T4, clinicians completed a semistructured phone interview about their experiences using the CFI, which was audiotaped with consent. The first author drafted open-ended questions based on qualitative interviews from the DSM-5 CFI field trial that examined the implementation outcomes of adoption, feasibility, and sustainability, with the goal of identifying unique barriers and facilitators.[33] We used definitions for these outcomes from a systematic review of clinician-level outcomes in implementation science research:[34]

> Adoption: the intention, initial decision, or action to try or employ an innovation or evidence-based practice
>
> Feasibility: the extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting
>
> Sustainability: the extent to which a newly implemented treatment is maintained or institutionalized within a service setting's ongoing, stable operations

Table 1 presents the study questions. We asked clinicians to answer similar questions across all time points to examine whether perceptions of barriers and facilitators to implementing the CFI changed with repeated CFI administrations. Additional questions were asked at the final T4 exit interview. Because the hospital decided to implement the CFI from the outset, we examined feasibility via the types of barriers and facilitators that clinicians named. (This information is presented in Table 4.) All audiotaped interviews were sent for external transcription by a professional medical transcription agency.

Informed Consent

The OMH Institutional Review Board of record approved the study, finding it exempt from review because it did not meet the definition of human subject research. Research assistants obtained informed consent verbally from clinicians during the T0 training session. Clinicians could refuse study enrollment without affecting their employment in any way.

Table 2 Sample Characteristics

Age, years	46.31 (8.46)
Gender	
Male	3
Female	10
Race/ethnicity	
Non-Hispanic white	12
Hispanic/Latino	1
Profession	
Psychologist	4
Social worker	9
Years of providing mental health care	19.5 (7.53)
Primary work location	
Civil unit	8
Forensic unit	5
Number of hours in cross-cultural training	
< 10 hours	2
10–25 hours	5
26–50 hours	2
51–75 hours	1
> 75 hours	2

n = 13 respondents. Data are presented as *n* or mean (SD).

Data Analysis

For quantitative analysis, the PROC GLIMMIX procedure was used in SAS 9.4 (SAS Institute, Cary, NC), using a random intercept for clinicians to account for multiple assessments. We also looked at the change in EBPAS score between baseline and final assessment by unit type as well, using PROC TTEST and PROC NPAR1WAY where appropriate.

Consistent with methods in implementation science, qualitative analysis was used to elicit the perspectives of clinicians so that they could speak for themselves, especially for a topic with little extant data, such as use of the CFI in real-world settings.[35] Qualitative analyses were conducted by a three-person multidisciplinary team (two research psychiatrists and a data analyst with a master's degree in public health) using deductive content analysis. Deductive content analysis involves coding qualitative data using preestablished categories to extend known theory with new datasets.[36] Each semistructured interview was coded for barriers and facilitators based on a codebook created by the first author from a systematic literature review on staff-reported barriers and facilitators to implementing hospital-based interventions.[37] In implementation research, mixed methods can be used such that qualitative findings expand on quantitative results and inform how existing interventions can be adapted to new populations.[38] The EBPAS and systematic review address similar domains for clinicians to consider, such as the role of external requirements, individual attitudes, and the scientific evidence base in deciding whether to implement an intervention, so we wished to use quantitative and qualitative data in a complementary fashion.

Coder training consisted of two one-hour sessions in which the research psychiatrist labeled each interview phrase with a unique code for a barrier or facilitator, and codes for 10 percent of all transcripts were discussed for consensus coding with the data analyst.[20,21]

Results

Table 2 presents the demographic characteristics of enrolled clinicians. Out of a sample of 14 enrolled clinicians, 13 provided complete demographic information. The clinician who did not provide a complete demographic form dropped out after T1 and is the only clinician to drop out entirely from the study. Most of the items on this clinician's demographic form are missing, so these data are not incorporated into the table.

Table 3 presents clinician EBPAS mean scores by study period and by number of respondents. We

Table 3 Clinician EBPAS Mean Scores[a]

	T0		T1 (*n* = 14)		T2 (*n* = 12)		T3 (*n* = 10)		T4 (*n* = 13)			
EBPAS Domain	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Beta (95% CI)[b]	*P*
Requirements	2.95	1.03	2.88	1.09	2.56	.80	2.57	1.19	2.41	1.36	−.13 (−.27 to .02)	.1970
Appeal	3.11	.72	3.09	.84	2.60	.63	2.80	.98	2.85	.54	−.07 (−.18 to .04)	.0800
Openness	2.96	.92	2.98	.89	3.02	.67	2.55	.94	2.81	.76	−.06 (−.18 to .06)	.3056
Divergence	2.95	.86	3.05	.66	2.02	.67	2.83	.88	2.73	.85	−.07 (−.16 to .02)	.1122
Overall	3.00	.67	3.01	.63	2.66	.49	2.69	.75	2.72	.64	.01 (−.25 to .28)	.9089

[a] EBPAS mean scores range from 0–4.
[b] Based on *n* = 63 EBPAS scores, mixed-effect model controlling for clinicians administering multiple CFIs.
EBPAS, Evidence-Based Practices Attitudes Scale.

Table 4 Barriers and Facilitators by Study Period

Domain	Definition	T1 (n = 14)		T2 (n = 12)		T3 (n = 10)		T4 (n = 13)	
		Bar	Fac	Bar	Fac	Bar	Fac	Bar	Fac
Systemic									
Environmental context	Physical and structural resources of the context, its processes, and resources	6	7	1	1	0	0	0	0
Culture	System culture, beliefs and behaviors in relation to change and staffing roles	1	9	0	7	0	5	0	1
Communication processes	Processes of conveying information within the system, online, and in-person	0	0	0	0	0	0	0	3
External requirements	Any external pressures or expectations that affect system deliverables	4	5	8	9	2	6	4	6
Staff									
Staff commitment and attitudes	Micro-level beliefs, attitudes, and behaviors toward change in general and toward the intervention	5	10	2	3	2	4	4	6
Understanding, awareness	Understanding of the aims and methodology of the intervention	1	6	0	4	0	5	1	9
Role identity	Beliefs and attitudes towards one's work role and responsibilities	3	6	3	2	3	1	1	3
Skills, ability, confidence	Staff's sense of their capacity to carry out the intervention while managing patients and the environment	12	11	11	11	10	7	13	11
Intervention									
Ease of integration	How well the intervention "fits" with the system, resources, and needs, and its ability to adapt as needed	7	14	1	9	0	5	0	13
Face validity, evidence base	Whether the intervention is grounded in evidence and how effective it looks to meet its aims	2	3	2	0	3	3	2	0
Safety, legal, and ethics concerns	How well an intervention addresses important concerns of safety and legality to protect staff and patients	0	0	0	0	0	0	4	0
Supportive components	Components of the intervention that work to support and facilitate necessary changes	0	5	0	9	0	3	0	3

Barriers and facilitators were not examined at T0.
Bar, barrier; Fac, facilitator.

found no difference in the usage of the CFI between forensic and non-forensic clinicians.

For the purposes of exploratory analysis, we examined EBPAS score changes by unit type (civil or forensic) over time. Analysis of the Requirements score changes over time revealed a significant decline in scores for clinicians in the forensic units only: beta −.4152 (95% CI −.6803 to −.1502), $P = .0042$. Compared with clinicians on civil units, forensic clinicians were less likely to implement the CFI over time if it were institutionally required. We also found unit differences in the Requirements score change from T0 to T4. Civil mean change was .2083 compared with forensic mean change of −1.5333, $t(11) = 2.56$, $P = .0266$. None of the other subscales were statistically different in either analysis.

Table 4 presents the types of barriers and facilitators that clinicians reported by study period with numbers of respondents. Participants only had to mention the item once to be counted as present. Barriers and facilitators are separated into systemic-, staff-, and intervention-level themes, with definitions culled from the original systematic review.[39] The number of clinicians naming a specific barrier and facilitator is reported, not the number of times each barrier or facilitator was coded in interview transcripts, to avoid assuming that the frequency of a code corresponds to its salience, which cannot be standardized in semistructured interviews.[40] Certain domains such as "skills, abilities, and confidence" appeared in all four study periods; other domains such as "communication processes" appeared in one study period. This type of data presentation depicts how barriers and facilitators changed by study period

with special attention devoted to barriers and facilitators named by at least half of the sample.

At all time points, clinicians named concerns about their skills, ability, and confidence to implement the CFI as a barrier to its implementation. At all time points, facilitators to implementing the CFI included ease of the CFI's integration within the system and skills, ability, and confidence to implement the CFI. In addition, clinicians named a receptive organizational culture as a facilitator in T1, T2, and T3, but not in T4. In T3 and T4, clinicians named understanding the CFI's aims as a facilitator.

Conflicting Data

To understand how three domains (i.e., skills, ability, and confidence; ease of integration; and external requirements) could be named by most clinicians as both barriers and facilitators to implementing the CFI, we will share representative quotes from debriefing interviews.

Skills, Ability, and Confidence

One respondent in T3 exemplified how concerns about the skills, ability, and confidence needed to implement the CFI varied by patient population. One social worker discussed her sense of implementing the CFI while managing patient flow and workplace expectations. She expressed confidence in implementing the CFI with defendants who have been found not responsible for criminal conduct due to a mental disease or defect. She referred to them as "stable" in that they could "answer these questions." She contrasted them with the patients admitted as felony defendants found incompetent to stand trial. She referred to this group as "psychotic." She explained how the CFI could elicit inaccurate information when used with psychotic patients:

> Let me give an example of somebody. He was very psychotic, making allegations that in Peru he was being persecuted. Those people then came to the United States. They were persecuting him here. He was talking about being persecuted, mistreated here. I have to take into account how accurate this information is if they're not stable and they've also been found not competent.

Of the 13 other clinicians, 12 agreed that the CFI could not be used with patients experiencing psychosis. Only one clinician believed that the CFI could be used with patients in acute psychosis. No clinician refused to implement the CFI, but all qualified its use depending on the clinical status of each patient. Hence, the domain known as "skills, ability, and confidence" could be a barrier or facilitator to CFI implementation based on a clinician's perceptions of a patient's ability to engage in reality testing.

Ease of Integration

One respondent in T3 described how integrating the CFI within workplace demands could be a barrier and facilitator. She wanted to implement the CFI at her discretion rather than on admission: "If it was something that was used later in a person's hospitalization, it might be more effective. There's always things that have to be done within certain time limits. It's kind of hard to go back and then have to redo more paperwork. I think that's part of the problem."

She explained that paperwork burdens could interfere with implementing the CFI: "Time is really the biggest thing. Not enough time for any additional paperwork that you might have to do. If I'm not able to use it right away, it's going to be kind of hard to use it a month later. It just ends up being more paperwork." She suggested that if integration were flexible as opposed to mandated at admission, then CFI use could be facilitated: "If there was maybe a little more flexibility it might be easier to use it. I don't really think it has anything to do with the CFI itself. It's probably more the rules that we have to follow here at this hospital. There's not a lot of flexibility." Notably, she offered a solution that others echoed for where information from the CFI could be incorporated: "We already do the core history. I mean, there's already questions in there that kind of deal with cultural type questions—people's ethnicity, race, that kind of thing. That makes it easy since there's already kind of an area in the core history that kind of addresses that." For such clinicians, perceptions about the ease of integrating the CFI into extant workflow processes would determine whether it was a barrier or facilitator.

External Requirements

Many clinicians agreed that treating the CFI as a bureaucratic exercise required by state agencies would be a barrier to its implementation. One clinician believed that mandating its use across disciplines could actually facilitate implementation, especially among physicians who might not otherwise do a cultural assessment. Clinicians did not want the CFI to be yet another task undertaken for compliance, but as a way for mental health professionals across disciplines to understand a patient's culture.

Discussion

Since the CFI's publication in 2013, forensic mental health professionals have recommended its use to assess cultural and linguistic differences between evaluators and evaluees for those undergoing legal proceedings,[40] to promote cultural competence in prisons,[41] and to determine cultural factors affecting forced medication use.[42] These recommendations suggest that forensic professionals recognize the validity of the cultural formulation approach to cross-cultural assessment. Yet little empirical work has been published. We could find only one case study on the CFI's contribution to elucidating the role of cultural factors in the assessment of homicide for a defendant in the United Kingdom.[43] This study adds to the growing research on cultural formulations by examining how clinicians perceived CFI implementation in a real-world setting.

We used mixed-methods research to examine clinician-named barriers and facilitators. We found a general openness to implementing the CFI, which was found on the quantitative measures throughout the implementation period. Comparing clinicians in forensic to nonforensic settings, we found that forensic clinicians were significantly less likely to implement the CFI over time if it were required by an agency, supervisor, or state. This may have to do with the greater requirements and legal protections they must already observe with a vulnerable population of mentally ill defendants. Qualitative analysis of our debriefing interviews with clinicians showed that themes pertaining to staff-level skills, ability, and confidence to use the CFI with patients, ease of integrating the CFI within the Regional Forensic Unit's system, and external requirements to implement the CFI elicited the greatest numbers of barriers and facilitators across time points. Clinicians wanted the flexibility to determine CFI use based on the clinical status of the patient and at a point in care when they felt that the patient was clinically stable rather than only on admission. They also wanted to know that CFI use would not be a bureaucratic requirement disconnected from patient treatment plans.

In particular, clinicians worried that patients with psychosis may not be able to answer questions accurately even though administrators might mandate CFI use. Indeed, earlier researchers have noted difficulties with conducting cultural formulations in patients with acute hallucinations,[44] although this could reflect symptom severity because others have conducted cultural formulations in patients referred for evaluation of first-episode psychosis[45] and those with chronic psychosis presenting to outpatient Veterans Affairs clinics.[46] Instead, clinicians wanted to exercise discretion over when to use the CFI during a patient's trajectory in care while making sure that the CFI did not become a bureaucratic exercise that would burden them with paperwork. Clinicians even named solutions for integrating the CFI into their workplace processes, indicating that they understood the CFI's value.

The study also revealed concerns that attempting the CFI with certain types of forensic patients may create barriers. One clinician questioned the accuracy of information obtained from a patient who was found not competent to stand trial. As OMH considers state-wide implementation of the CFI for cultural competence across civil and forensic units, administrators and policy makers should consider the forensic status of the patient before using the CFI. For example, postponing the CFI until a patient is restored to competency may facilitate implementation because clinicians would feel more confident that the information they obtain is helpful.

Our methodology offers a way of discovering how to implement the CFI as its developers intended, while also attending to the concerns of clinicians. Based on the clinicians' experiences, we recommend that forensic units admitting patients with acute psychosis encourage clinicians to use the CFI when clinicians believe that patients are clinically stable to inform ongoing treatment planning, rather than only upon admission. We also recommend that administrators work with clinicians to find ways of integrating information elicited through the CFI within extant documentation requirements as much as possible to avoid negative staff attitudes and waning commitments toward implementation.

This study has several limitations. First, the study sample is admittedly small, so our findings may not be generalizable to other settings. Nonetheless, we enlisted NPC and OMH stakeholders over a multiyear process to ensure that our study design fit regulatory requirements. We enrolled real-world clinicians who were free to continue or end their involvement in the study as they wished. We suggest that our method of stakeholder involvement could be generalizable to other settings. Studies with larger

sample sizes could clarify whether our findings are unique to NPC's population and setting or are common elsewhere. Second, our study enrolled only clinicians to protect patients who could be vulnerable due to mental illness or precarious legal status. Future studies could examine the CFI's use with patients who are more clinically stable and in other types of forensic settings, such as outpatient clinics. Third, our study enrolled social workers and psychologists. This population may have been more receptive to CFI implementation from the outset, unlike psychiatrists who are also trained in the use of medications and may have a more biological orientation to mental illness. Nonetheless, this may reflect the demands of a real-world system where psychiatrists are expected to focus on medication management and risk assessment, with cultural competence falling to other mental health professionals. Fourth, there was limited racial and ethnic diversity in the backgrounds of the participating clinicians. This could have implications in terms of how receptive the clinicians were to completing cultural assessments. Despite these limitations, we believe that our study offers the first exploration of how the CFI is implemented in a real-world forensic unit.

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