Ethnography and Measurement in Mental Health: Qualitative Validation of a Measure of Continuity of Care (CONNECT)

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Ethnography contributes to measure development by enhancing validity and providing a basis for qualitative validation. Validating research measures means making cases for their "trustworthiness." The authors argue for the trustworthiness of CONNECT, a measure of continuity of care, by presenting the interpretive logic through which they elaborated continuity for measure construction purposes. They used category construction methods to identify mechanisms of continuity in ethnographic data. Mechanisms suggested five measurement domains: (a) knowledge, (b) flexibility, (c) availability, (d) coordination, and (e) transitions. Validation rationales summarize the ethnographic evidence and explain how the domain relates to continuity. In making explicit the data and the reasoning used, the authors argue for the trustworthiness of their interpretation. The arguments for trustworthiness demonstrate a qualitative validation process.

Keywords: continuity of care; qualitative research; measurement; mental health services research

Alidation of a new measurement tool involves procedures that assess the statistical relationship between that measure and more established measures of the same construct (criterion validity), measures of related constructs (convergent validity), or measures of unrelated constructs (discriminant validity). Even a brief excursion into the literature teaches us, however, that validation is at once broader, deeper, and more open ended than the processes reflected in psychometric operations suggest. Critical analyses of scientific practice in the social sciences over the past 20 years, as well as developments in validity theory itself, have refocused attention on validity as a theoretical construct as well as a technical problem (American Educational Research Association [AERA], 1999; Anastasi, 1986; Collins, 1985; Latour & Woolgar, 1979; Wainer & Braun, 1988). Cronbach, writing in 1971, stated, "to validate is to investigate," not just to determine the worth of (p. 443). Messick

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(1989) has argued for validation as a type of scientific inquiry, a judgment based on an inductive summary of all available information.

Analysts concerned with developing approaches to validation for research conducted outside positivistic, experimental paradigms define it as part of the social construction of knowledge (Cherryholmes, 1988). Interpretive processes move to the center in these formulations, as validity is cast first and foremost as a question of meaning and validation as "the processes through which we make claims for and evaluate the 'trustworthiness' of reported observations, interpretations, and generalizations" (Mishler, 1990, p. 419).

These processes are neverending. We can think of validation as an ongoing accumulation of evidence informing the performance of a given measurement tool: which parts work well and which less well, the kinds of populations for which the tool can be appropriately used, and the substantive research ends to which it might be put. Validation defines—again and again—the shifting boundaries of a measure's meaningfulness.

Trustworthiness derives in part from "showing how the work was done" (Mishler, 1990, p. 423). Making research data, analytic processes, and interpretations "visible" provides the basis for independent judgments about the reasoning and the empirical work. In this article, we make a case for trustworthiness by laying out the procedures and the logic through which we identified the five conceptual domains of CONNECT, a new measure of continuity of care in mental health services. The domains form the backbone of the measure and organize its scales and items. By making these interpretive processes explicit, we stake a claim for the domains as appropriate indicators of continuity.

In setting out to develop CONNECT, we articulated three objectives. We aimed first to depict continuity in terms of the social processes through which it is created in the day-to-day interactions of individuals who provide and use services, that is, we sought a "close-up," rather than an "at-a-distance," representation. Our second objective was a corollary of the first. Rather than the negative indicators that had characterized some earlier conceptualization and measurement efforts (e.g., gaps, breaks, or "lags" in care) (Alegria, Pescosolido, Santos, & Vera, 1997; Brekke & Test, 1992; Tessler, 1987), we decided that the new measure would include positive indicators only. The rationale was that positive indicators would tap the construct of continuity more directly. Representation of the perspectives of service users was the final objective we set for ourselves. Starting from the premise that these individuals should have a stronger voice in defining what constitutes good mental health care, we aimed to construct a measure that would reflect their stated priorities.¹

METHOD

We generated the data used for deriving conceptual domains through an ethnographic study (Ware, Tugenberg, Dickey, & McHorney, 1999). Once associated exclusively with anthropological investigations of unfamiliar cultures (Evans-Pritchard, 1940; Malinowski, 1922/1961; Mead, 1928/1961), ethnography is now put to many uses, including research on mental health services (Donald, 2001; Estroff, 1981; Hopper, Jost, Hay, Welber, & Haugland, 1997; Kirschner & Lachicotte, 2001; Lovell & Cohn, 1998; Robins, 2001). Ethnographic data were collected through observation and open-ended interviewing. Observation consists of spending time and talking with people in their own settings. Open-ended interviews are often organized in terms of topics rather than questions. Both techniques are iterative, meaning that specific research questions (but not the basic purpose of the inquiry) are repeatedly reformulated and investigated as data collection proceeds and the researcher's understanding of the topic under study increases.

One form analysis of ethnographic data can take is the interpretation and articulation of meaning. Meanings can be interpreted, as they were in this study, through thematic analysis. Thematic analysis consists of identifying regularities, or "themes," in the data, and defining categories based on those themes. Meanings are articulated through description: elaborating category definitions through examples, characterizing variation, laying out logics, and incorporating multiple perspectives.

Study design. In this ethnographic study, we set out to specify the meaning of continuity of care for severely mentally ill persons using public mental health services in and around Boston, Massachusetts. We collected data over a 1-year period in 1996 to 1997 and included two participant groups and three service sites in the community in the study design. Participant groups were providers and users of mental health services. Field sites were two public community mental health centers and one psychiatric emergency evaluation unit in Boston.

Participants. Participants were 32 adults who consented to the study and completed research interviews. We defined interview groups theoretically to represent service user and practitioner perspectives. Interviewees were volunteers who responded to posted notices or announcements of the project made by ethnographers, or, in the case of service users, were referred by participating practitioners. Sixteen users and 16 practitioners took part. We conducted interviews until the point of saturation was reached.

Twelve women and 4 men were included in the user group. Four of the group members were African American, 2 were Latino, and 10 were White. Seven service users had received a diagnosis of schizophrenia. Four had been diagnosed with major depression, 4 with bipolar disorder, and 1 with schizoaffective disorder. Diagnoses were determined through self-report. These individuals were long-term users of mental health care.

The provider group also consisted of 4 men and 12 women. Four of the provider participants were African American, and 12 were White. Provider interviewees represented a range of roles and functions, including case manager, physician, therapist, housing specialist, and program administrator.

Data collection. Data collection consisted of participant observation at the three field sites and interviews with study participants. We carried out approximately 130 hours of observations. Observations at the community mental health centers took place during clinical team meetings, at which cases were systematically reviewed and acute problems addressed, and during meetings at which housing decisions were made. We observed 75 hours of clinical team meetings and 20 hours of housing meetings. We carried out 38 hours of observation of evaluations and disposition decision-making processes at the psychiatric emergency unit. We recorded

data as narrative descriptions, or field notes, immediately after each observation period.

Interviews with users elicited the details of their personal experiences with mental health services. Topics included relationships with service providers; experiences of change, such as hospitalization, discharge, departures of case managers or therapists, new medications, and new housing; perceived functions of services; prioritization of services and service needs; and the meaning of continuity of care. Provider interviews focused on professional responsibilities and functions, perceptions of client experiences, and the meaning of continuity of care.

We conducted 32 interviews ranging in length from 1 to 1½ hours. Interviews were audiotaped and transcribed. User and practitioner interviewees received U.S.\$15 in return for their time and effort. The interviews followed an iterative process and served as avenues for exploring preliminary formulations of continuity by our presenting them to interviewees and soliciting feedback.

Ethical standards. Procedures for carrying out interviews and observations were consistent with approved ethical standards for research. We scheduled interviews at the convenience of interviewees and carried them out in private locations (e.g., offices of practitioners, homes of service users, offices of researchers). For user participants, we were careful to distinguish the research interviews from activities of clinical care. We guarded against respondent burden by incorporating periodic inquiries as to the comfort of participants (e.g., "How are you doing?" "Need a break?") as a routine part of the interview process. We obtained consent using an Initial Review Group (IRG)–approved form.

We negotiated access to field sites for purposes of observation with senior representatives at each location. The ethnographers were introduced to staff at each of the sites and the nature of the observations explained. We solicited and addressed questions throughout the observation period. We provided feedback in the form of presentations on the research results at participating sites.

Data analysis. We began the analytical process by bringing to the data a set of general "orienting" constructs derived from the research literature on continuity of care. This placed limits on inductiveness but allowed us to benefit from the results of previous conceptual work. The constructs were

- links, which reduce interruptions or "gaps" in care;
- timing, the idea that services should take place at an appropriate pace; and
- consistency, which refers to stability or "sameness" in the ways events relate to each other over time (Bachrach, 1981, 1993; Barbato, Terzian, Saraceno, Montero Barquero, & Tognoni, 1992; Bass & Windle, 1972, 1973; Brekke & Test, 1992; Wolkon, 1970).

We coded the data, taking these three analytic constructs as a starting point. In each case, we fitted sections of text from field notes and interviews to these initial categories by asking ourselves, "Which of these categories, if any, is this section of text an example of?" Emerging substantive themes in the data assigned to each category suggested new, more descriptive labels. We assigned a different label to data that did not fit into the existing category structure but nonetheless seemed to represent continuity of care. The result was a taxonomy in which the three orienting constructs were implicitly embedded but which differed significantly from them in form and substance. In coding, we worked toward the objectives of representing continuity as a social process, from a "close-up" perspective through positive indicators, from the perspectives of service users, as indicated above.

RESULTS

Identification of mechanisms laid the foundation for formulating the measure's conceptual domains. We used the term *mechanism* to refer to concrete social processes through which providers of services worked to create continuity for users. Thus, mechanisms tapped intersections of practitioner activities and user experience.

The mechanisms of continuity identified through the ethnographic study were represented as six descriptive categories: pinch-hitting, trouble-shooting, creating flexibility, contextualizing, smoothing transitions, and speeding the system up. The mechanisms formed the basis for deriving domains of measurement and are described in detail elsewhere (Ware, Tugenberg, Dickey, et al., 1999).

The mechanisms were regrouped and renamed in the early stages of converting the ethnographic material into a conceptual framework for CONNECT. Pinch-hitting was folded into creating flexibility, whereas part of the initial content of flexibility became a separate category: provider availability. Trouble-shooting and contextualizing were reframed more broadly as providers' knowledge of their clients. Material originally assigned to several different mechanisms was brought together under the heading coordination. Smoothing transitions remained smoothing transitions. Speeding the system up was eliminated, because activities making up this mechanism took place largely out of sight of service users, rendering them inappropriate for a measure aimed at representing user perspectives. The result was the five conceptual domains that define the measure in its current form.²

In what follows, we present the rationales for these five domains. In each case, the rationale consists of a summary of the ethnographic evidence—examples of the observed and/or reported events that converged to define the domain—followed by a statement explaining how the domain relates to continuity. In laying out the data and the logic used in each case, we stake a claim for these domains as valid or "trustworthy" representations of continuity of care in mental health services.

Practitioners' Knowledge of Their Clients

We observed two ways in which practitioners' knowledge of their clients' problems and larger life circumstances worked to foster continuity of care. One was the sharing of information. A particularly telling example of information sharing emerged in a team meeting, where one practitioner reported to her colleagues that a client for whom the team shared responsibility was about to drop out of his day program for lack of bus fare to make the trip from his residence to the program. The problem was quickly resolved when someone else pointed out that this particular individual enjoyed a supportive family that could no doubt be relied on to provide bus fare if asked. The family was contacted, the money acquired, and a gap in service averted in this instance as a result of information shared among members of a treatment team.

Noteworthy also is the continuity inherent in the team meetings. The teams at this site met weekly. The meetings were well attended, and the schedule included regular, periodic review of each service user's situation. In general, the teams adhered to specified review schedules. All of this provided a formal mechanism for, and thus greatly facilitated, the sharing of information.

Knowing someone well also seemed related to continuity of care. For example, one therapist intervened to avoid what he was convinced would be a premature discharge for a hospitalized client, resulting in a "revolving-door" readmission. He knew this individual well enough, he argued, to know that she needed more time than many to recover from a relapse. In this instance, a therapist's knowledge of his client, accumulated over the many years of their association, enabled him to predict and to try to forestall an event he believed would result in discontinuity and disruption. Knowledge was seen as promoting continuity by promoting consistency and preventing gaps in care.

Creating Flexibility

Creating flexibility has two meanings:

- accommodation, a willingness on the parts of practitioners to adapt to the needs, and even the idiosyncrasies, of individual service users; and
- pinch-hitting, the systematic practice by practitioners of stepping in to fulfill functions normally performed by someone else.

In conducting ethnographic fieldwork, we observed many instances in which practitioners (in this case, psychiatrists and therapists) sought to ensure that appointments were kept by arranging and rearranging their schedules to maximize convenience for service users. One therapist would find an open hour adjacent to a time his client would be in the building for another purpose (e.g., to pick up a check, receive an injection) to eliminate the necessity of two trips. Another met a client in the client's home. A psychiatrist gave a particularly anxious and fearful individual an appointment time in the early morning so that he could ride the buses before they filled up with rush-hour crowds. These kinds of efforts represented, we reasoned, an imaginative use of timing that promoted continuity by avoiding breaks in service.

Providers regularly pinch-hit for both their colleagues and their clients. When a psychiatrist took a throat culture for a service user with a sore throat but no immediate access to medical care, we interpreted this as pinch-hitting for colleagues—other health and human service professionals. Other instances were also observed, for example, a psychiatric nurse taking it on herself to provide postsurgical in-home follow-up for someone who would otherwise have gone without this needed service or an outpatient therapist filling out housing applications or referral forms because case management was not available.

Providers pinch-hit for clients by seeing that essential responsibilities were fulfilled when the individuals were incapacitated. Observed examples included seeing that rent was paid for someone who was hospitalized and keeping an appointment with housing authorities on a client's behalf. Again, by closing and avoiding gaps, pinch-hitting promotes continuity in the lives of users outside as well as inside the realm of services.

Practitioner Availability

Accessibility

Like creating flexibility, practitioner availability also has two meanings. First is accessibility, confidence on the parts of service users that they are free to contact their practitioners whenever they need them. Statements such as "He told me I could call him anytime," "I can get hold of him whenever I want," and "Anytime I needed him, he was there" made to us by user interviewees illustrate the accessibility dimension of availability.

Responsiveness

Timely responsiveness to expressed needs is the second part of this concept. Availability means acting promptly on user requests—to acknowledge if not always fulfill them. Returning phone calls the day they are received, rearranging appointments to fit someone in, accepting "drop-ins," and moving quickly to take necessary clinical action are examples of timely responsiveness. The notion of responsiveness also emerged largely from interviews with users, who testified to its importance through statements such as "He acts on what I need *immediately*" and "She takes care of me *right away*" (speakers' emphases).

Like accommodation in creating flexibility, availability addresses timing. When problems arise for clients, the pace of services must accelerate to contain and resolve them. Availability increases the pace of services by allowing for more frequent user-practitioner contacts, thereby contributing to continuity of care.

Coordination

Coordination refers here to those instances in which practitioners of mental health services were observed to be working in ways that complemented or were consistent with one another. One class of such instances involved the responses of various caregivers to worsening symptoms. When someone appeared to be relapsing, practitioners responsible for the care of that person acted in concert to intensify support. The psychiatrist checked on medications, the therapist scheduled extra appointments, the case manager confirmed that residential staff were aware of the situation, and residential staff devised a plan for paying extra attention to the individual involved.

Sometimes, practitioners reached outside the mental health system for extra support for service users. One clinician increased the number of service contacts an individual would have each week by arranging visits from both Meals on Wheels and homemakers employed by the state rehabilitation agency while also seeing the person more frequently herself.

The wheels of coordinated services are greased by good communication among practitioners: the practice of "sharing information," cited above. When a therapist informs a psychiatrist colleague that an individual they both work with is feeling worse, the psychiatrist can then act to follow up. When a psychiatrist calls a client's residence to let the staff know he has not been coming to appointments, the staff is then in a position to investigate. When there is a change of clinician, and the outgoing individual takes the time to brief his or her replacement directly on the client and the treatment process, the likelihood of consistency—of continuity of care is enhanced greatly. Team meetings and "hallway chats" are two effective venues for sharing of information among practitioners. Like accommodation (flexibility) and availability, coordination addresses the timing of services, allowing for increasing frequency of contact, when necessary, to promote continuity of care.

Smoothing Transitions

Much concern about continuity of care has centered on transitions: transitions from inpatient to outpatient settings, across outpatient facilities, from one individual practitioner (therapist, case manager) to another. We, too, identified transitions as critical to continuity for service users. Consistent with our emphasis on positive indicators, we distinguished successful from unsuccessful transitions and focused deliberately on the former. Successful transitions were defined as "smooth." The ethnographic research revealed several ways in which transitions could be made "smoother."

Working actively to minimize additional disruption for users of services was one way of smoothing transitions. Practitioners worked to minimize change by, for example, postponing modifications to medication regimens for an individual getting used to a new case manager, ensuring that replacement of an outpatient practitioner would not coincide with a move to new housing, scheduling a change in housing to take place only after treatment for a medical problem is complete, and arranging for service users returning to a clinical site to be assigned to practitioners they knew or had worked with previously.

The importance of smoothing transitions by reducing the degree and abruptness of change was brought home to us by clients, one of whom explained that what helped her most in returning to her apartment following a hospital discharge was finding her cat waiting for her when she arrived. Why? Because, this individual revealed, "it's quite a contrast from being with lots of people at the hospital to being with no one at home." Being greeted by her cat meant she was not alone. The cat had been able to remain in the apartment while its owner was away because an outreach worker from the local mental health center made regular visits to feed it.³

Practitioners also worked to smooth transitions for service users by building overlap into the change process. New aspects of care were presented in the context of some form of consistency, following a deliberate plan. Thus, clients were introduced to incoming clinicians in meetings attended by those who were leaving, or in a familiar, stable environment, such as a day program or social club. New information—a curriculum on prevention of HIV infection, for example—was presented at gatherings of established groups. Outpatient providers newly assigned to hospitalized patients made a point of visiting these individuals before discharge to ensure a strong link to aftercare.

In interviews, service users made it clear that from their perspective, exemption from having to repeat their clinical and life histories every time they were assigned a new practitioner would help greatly in easing these transitions. "Why couldn't clinicians spare them the discomfort of revisiting the past by reading this information in the records instead?" they wondered. Smoothing transitions promotes continuity by forging and strengthening links among both individual practitioners and larger components of systems of care. Modulating timing in change and using consistency to balance disruption ("building in overlap") are also part of smoothing transitions.

DISCUSSION

Few extended conceptual treatments of continuity of care in mental health services exist. However, most of the domains we cite have been noted by other observers. Flexibility and accessibility of services, for example, both appear on Bachrach's (1981, 1993) list of principles and dimensions of continuity. Accessibility is also designated as part of continuity in the recent Maudsley Continuing Care Study, which has both conceptual and empirical components (Bindman et al., 2000; Johnson, Prosser, Bindman, & Szmukler, 1997). The importance of coordination between mental health service practitioners and caregivers working outside this system is also invoked in the Maudsley study (Johnson et al., 1997). Test (1979) cited lack of coordination as a source of discontinuity—"gaps" and "cracks"—in the system of mental health care. Bachrach (1981) also pointed to communication as a dimension of continuity. Her communication dimension overlaps our "information sharing" among practitioners. We have drawn out the implications of communication and represented it in terms of its results: practitioners' knowledge of their clients.

In an early formulation, Bass (1971) referred to prompt and successful transfer from hospital to community care as critical to continuity. This concept was carried forward by Tessler and colleagues, who included it as one of three dimensions anchoring their research on continuity, reported in the 1980s (Tessler, 1987; Tessler, Willis, & Gubman, 1986). The notion of successful and rapid transfer is echoed in our smoothing transitions. Our contribution has been to clarify meaning through the addition of detail.

CONNECT: A Measure of Continuity of Care in Mental Health Services

The conceptualization described here laid the foundation for developing and evaluating a formal measure of continuity of care in mental health services: CONNECT. CONNECT addresses qualities of interpersonal interaction in service userpractitioner relationships through 72 items grouped into 13 scales and 1 single-item indicator. Examples of scales and item content appear in Table 1.

Service users completing CONNECT rate responses to items using 5-point scales. The measure is administered in interview format by trained lay interviewers. CONNECT was developed for group-level research on mental health services for persons who have serious mental illness. Preliminary testing included cognitive interviews and two pilot studies. A field test in which 400 persons with serious mental illness completed CONNECT provided data for psychometric evaluation. The results indicate that the measure is easily administered and produces well-distributed responses. Five scales meet the .80 criterion for internal-consistency reliability for group-level research. Estimates of 2-week test-retest reliability indicate fair-to-good agreement. A broad initial validation strategy including known groups

Scale Name	Item		
Physician knowledge	 How much does [name of psychiatrist] know about your strengths? How much does [name of psychiatrist] know about relationships that are important to you? How much does [name of psychiatrist] know about your family history? How much does [name of psychiatrist] know about your relationships with your family now? How much does [name of psychiatrist] know about what upsets you? How much does [name of psychiatrist] know about situations that are stressful for you? Bating scale: 1 = nothing: 2 = a little: 3 = some: 4 = a lot: 5 = everything 		
Case manager/therapist availability	 In the last year, I have left a phone message for [name of cm/t]. I have talked to [name of cm/t] by phone during the workday. [Name of cm/t] has returned my phone calls the same day. Rating scale: 1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5 = always 		
Practitioner flexibility	 [Name of cm/t] will go out of his/her way to help me. I can change appointment times with [name of cm/t]. I can add appointments with [name of cm/t] on short notice. [Name of psychiatrist] will go out of his/her way to help me. I can change appointment times with [name of psychiatrist]. I can add appointments with [name of psychiatrist]. 		
Practitioner coordination	 How often do [name of psychiatrist] and [name of cm/t] talk to each other about your treatment? How often do [name of psychiatrist] and [name of cm/t] work together like a team? How often do [name of psychiatrist] and [name of cm/t] agree about your care? 		
General coordination (single item)	1. Overall, is your mental health treatment well-coordinated?		
Inpatient-outpatient transition	 I had a good discharge plan. I met with hospital staff to agree on the plan. I had medication to take with me. I had a scheduled appointment for outpatient follow-up. Overall the transition was smooth. Rating scale: 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree 		

TABLE 1: Examples of Scales and Items of CONNECT

and convergent validity assessments produced results that will inform and focus future efforts. The results of the psychometric evaluation are reported in detail elsewhere (Ware, McHorney, Dickey, & Tugenberg, 2003).

The Case for Validity

Our argument that the domains here termed practitioners' knowledge of their clients, creating flexibility, practitioner availability, coordination, and smoothing transitions represent valid indicators of continuity has taken the following form. First, we laid out examples of the ethnographic data that make up the domains: events,

Domain	Link (Reducing Gaps, Interruptions)	Timing (Services Proceed at an Appropriate Pace)	Consistency (Stability, Sameness)
Knowledge Sharing information, knowing someone well			Knowing someone well
Flexibility	Pinch-hitting, accommodation	Accommodation	
Availability		Accessibility, responsiveness	
Coordination		Working collaboratively to improve timing	Good communication

TABLE 2: Relation of Measurement Domains to Initial Conceptual Framework

behaviors, and user reports that first suggested then defined each one. By making the empirical underpinnings of the domains explicit, we allow readers to form independent judgments of the integrity of the category construction process. Are the contents of the categories clear? Is the material captured accurately by the category label?

Second, we argued that the ethnographic "data bits" make up CONNECT's domains of measurement index continuity of care. They illustrate ways of preventing or closing gaps in services, adjusting the pace of services to promote stability for users, and reducing the disruptiveness of transitions, that is, they address links, timing, and consistency, dimensions identified as critical to continuity in the research literature and, for that reason, adopted as the initial orienting framework for analysis of the ethnographic data. These relationships are displayed graphically in Table 2.

The claim for trustworthiness turns, then, on an interpretive logic linking the ethnographic data to the measurement domains, on the one hand, and to indicators of continuity endorsed by other observers, on the other hand. The domains take on a form of face validity as a result.

Ethnography and Item Writing

In conducting ethnographic research, we adhere to principles of complexity and context. The more detail provided, the more perspectives represented, the more nuanced the description, and the clearer the nature and impact of contextual factors, the better, or "richer," we consider our data to be. Writing items, in contrast, is governed by a set of principles that is almost the reverse. "Good" ethnographic data are complex, but "good" questionnaire items are simple: one idea per item, expressed directly, in as few words as possible (Aday, 1989). In ethnography, we emphasize contingencies of social and historical context, but questionnaire items must be universally applicable (to avoid missing data) and quite narrowly focused on the present (to minimize recall bias). Concreteness is also a criterion on which the quality of questionnaire items is judged.

The incongruity between principles of ethnographic data collection and item writing meant that many of the "data bits" we felt provided the most insight into the

meaning and everyday experience of continuity—the "cat story," for example were inaccessible as items. Our response to this challenge was to write items that were simple, concrete, oriented to the present, and likely to speak to the experience of most service users.

Representing User Perspectives

Continuity of care in mental health services stems largely from the efforts of providers. Thus, it is not surprising that much of the material informing our conceptualization of continuity came from observations of provider activities. The fact that many of these—clinicians sharing information, rearranging their schedules to create flexibility, working to titrate change in doses that would not be unduly disruptive—were also invisible to service users created a conflict between the goal of producing a measure of continuity and our commitment to incorporating user perspectives. Eventually, the task evolved into one of representing the ethnographically derived domains of the measure in ways of which users could be expected to have knowledge.⁴

This meant that we wrote items reflecting the meanings of the conceptual domains that arose from the ethnography but in most cases did not correspond to the underlying data bits. Thus, sharing information among practitioners was rendered as items tapping practitioners' knowledge of their clients ("How much does your psychiatrist know about relationships that are important to you?"); rearranging schedules to create flexibility became questions about clients' being able to change scheduled appointments ("I can change appointment times. I can add appointments on short notice."); and acting in coordinated fashion was realized as questions about interactions among practitioners on which service users would likely be able to comment ("How often do [name of psychiatrist] and [name of case manager] work together like a team? How often do [name of psychiatrist] and [name of case manager or therapist] agree about your care?").

CONCLUSION

Our experience in using ethnography to inform the construction of CONNECT points to a number of ways in which ethnographic methods can contribute to the process of measure development. First, these methods ground the interpretation of analytic constructs in the results of empirical research, reducing the conceptual distance between these constructs and their representations and enhancing validity as a result.

The observational techniques associated with ethnography might also serve to enhance validity. Observational techniques of data collection provide access to phenomena that might lie outside the awareness not only of interviewees but also of the "experts" whose accumulated insights have traditionally been relied on for decisions about the definition of measurement domains. Treating the actions of study informants, as well as their words, as data and assigning responsibility for describing an object of inquiry to trained observers opens the door to insights research participants might be unable to report. The range of concepts available for domain definition can be greatly expanded as a result. Ethnography provides a basis for carrying out qualitative validation as well as enhancing validity. Applying concepts intended to outline a process of validation for inquiry-guided research (Mishler, 1990), we have worked here to establish the trustworthiness of five conceptual domains defining CONNECT, a new measure of continuity in mental health care. In so doing, we have both staked a claim to the measure's validity and demonstrated what a qualitative validation process might look like.

NOTES

1. We recognize that the terms used to refer to persons who use mental health services have different meanings for different constituencies. Except where it results in awkward phrasing, we refer to these individuals as *service users*. Otherwise, we use the term *clients*.

2. The domains can be said to overlap in that some ethnographic material informs more than one category.

3. This anecdote, which we came to refer to as "the cat story," also helped to develop the notion of flexibility.

4. For a detailed discussion of this issue and an assessment of the extent and ways in which user perspectives ultimately appear in CONNECT, see Ware and Tugenberg (2001), available from the authors.

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