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Contours of Usual Care: Meeting the Medical Needs of Diverse People with Serious Mental Illness

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Abstract

Purpose—To examine practices, barriers, and recommendations for addressing the physical health of racially and ethnically diverse people with serious mental illness (SMI).

Methods—Semi-structured interviews and participant observations were conducted with 21 administrators and 25 clinicians representing six mental health care organizations. Data were analyzed using constant comparative methods.

Results—Practices included intermittently collecting consumers' physical health data, connecting consumers with primary care, and providing on-site, culturally-tailored health promotion programs. Barriers included limited care coordination infrastructure, financial and professional boundaries, unhealthy local environments and culturally-specific dietary habits. Recommendations included: strengthening dialogue with medical providers and developing staff training programs.

Conclusion—Meeting the physical health needs of diverse consumers with SMI is impeded by organizational, environmental, and consumer-level barriers. Establishing better care coordination networks, increasing mental health provider education on medical issues, and culturally-tailoring health promotion programming provide plausible strategies for improving the physical health of this vulnerable population.

Keywords

Serious mental illness; medical care; care coordination; chronic disease; qualitative research

People with serious mental illness, defined as meeting criteria¹ for at least one of the *DSM-IV/SCID* diagnoses (e.g., schizophrenia, bipolar disorders), other than a substance use disorder, and having serious functional limitations, have a higher relative risk of death and more years of lives lost than people in the general population.^{2–4} Chronic conditions such as cardiovascular disease^{5,6} and diabetes^{5,7,8} have been shown to be particularly elevated in populations with Serious Mental Illness (SMI). Primary factors known to drive this health disparity are poor lifestyle habits (e.g., poor nutrition, physical inactivity, smoking, etc.).^{9–11} In addition, second-generation antipsychotic medications have been shown to affect negatively metabolic processes associated with cardiovascular disease.^{12–15} For racial and ethnic minority group members (e.g., African Americans, Hispanics) with SMI, studies suggest that the physical health burden may be especially pronounced. Compared with non-

Hispanic Whites with SMI, racial and ethnic minorities with SMI appear to have higher overall rates of obesity^{16,17} and diabetes,¹⁸ thus placing them at an elevated risk for cardiovascular disease.

Research has signaled that the quality of medical care received by people with SMI is, on average, poorer than that of the general population.^{19–24} One recent literature review²⁵ provides evidence that people with SMI are nearly 30% less likely than those without SMI to receive blood glucose, lipid, and other diabetes exams, or to be prescribed medications known to be successful in the management of chronic health conditions. Data from this review further demonstrated that less than one third of people with SMI received profiles on weight, blood glucose or lipid levels, before or during treatment with antipsychotic medications.²⁵ There is also growing evidence that people with SMI possess negative overall opinions of care quality and the health care system in general.^{26–28}

Much of the focus on improving the quality of care of people with SMI centers on addressing service fragmentation²⁹ and improving the coordination and communication between mental health and medical care professionals.³⁰ Druss³¹ and Kilbourne³² offer related theoretical frameworks for conceptualizing fragmentation of health care services for people with SMI, outlining a broad spectrum of barriers that extend across geographic, organizational, financial, and professional cultural dimensions. Geographic barriers are the distances that separate the physical workplaces of mental health and medical care providers, making it difficult for patients to access and receive care in an efficient manner. Organizational barriers involve technical gridlock arising from discordant program missions and policies, which, collectively, slow the exchange of information and coordination of services across sites. Financial barriers reflect general challenges in funding internal health promotion programs and external coordination and outreach efforts. Finally, professional cultural barriers to service coordination refer to the real and perceived professional boundaries that exist between providers from different clinical disciplines.

There has been limited qualitative research addressing the contours of usual physical health care in mental health care organizations providing services primarily to racially and ethnically diverse consumers with SMI, and to our knowledge, none from the perspective of providers serving these populations. An examination of usual care in these organizations can illustrate parameters of everyday practice, identify barriers, and inform the formulation of sustainable solutions to improve the physical health of diverse people with SMI. Using a qualitative design consisting of semi-structured interviews with mental health care providers—defined as administrators and clinicians working in mental health care organizations—and participant observations of everyday organizational operations, we assessed usual care in urban community mental health care organizations. Specifically, we examined the practices, barriers, and recommendations involved in the coordination and integration of medical care for racial and ethnic minorities with SMI. Qualitative mental health research provides several advantages to traditional quantitative approaches, most centrally, the ability to identify and contextualize latent and emerging service and resource delivery challenges within the context of real-world clinical practices.^{33,34}

Methods

Communities

Our study was conducted in the Northern Manhattan (New York) communities of Harlem, Washington Heights, and Inwood. These areas contain high concentrations of racial, ethnic, and linguistic diversity compared with estimates across Manhattan.³⁵ Residents in these three communities also live disproportionately below the federal poverty line, have less access to primary care physicians, have poorer physical health, and report greater symptoms

of psychological distress and mental illness, in comparison with residents of other communities in Manhattan.³⁵

Recruitment

To recruit organizations, we used a purposive sampling approach.³⁶ Research staff used publicly-available service directories to compile a master list of agencies in Northern Manhattan that served primarily people with SMI—as defined by SAMHSA¹ criteria—and focused on the stabilization of psychiatric symptoms and recovery, provided a variety of treatment modalities, and received funding from a range of sources. Selection was further refined based on recommendations from community members and other community-based organizations. Six organizations were identified, and all agreed to participate in this study. The following organizations were included: one housing-based site, one community-based mental health clinic, one publicly-funded community mental health center, one clubhouse program, and two hospital-based outpatient mental health clinics.

To recruit providers within these organizations, research staff conducted presentations at sites' staff meetings to discuss the study and answer questions. Administrators were asked to distribute a ward-off letter to all clinical staff at their respective organizations, informing staff that they might be contacted to participate in the study but were free to opt out. A master list of interested providers was compiled at each organization, and people were randomly selected to be interviewed. Participants were compensated \$20 for participating in the interview. All study procedures were approved by the appropriate Institutional Review Boards, and written informed consent was obtained from all participants.

Data collection

Semi-structured, in-depth qualitative interviews with providers were conducted by trained field staff and were complemented by on-site participant observations^{37,38} and detailed *in situ* field notes³⁹ of the daily practices and operations of the organizations and their staff. Participant observation and note-taking were conducted at five of the six clinic sites. Observation was not carried out at the sixth clinic site since this organization served many mandated consumers and staff expressed concerns regarding the confidentiality of program participants. Observation settings included health promotion programs provided at the sites, such as nutrition education groups or weight loss classes, or activities at day programs that otherwise promoted healthy living (such as dance groups). To understand further the breadth of attention paid to physical health and wellness at these sites, trained research assistants accompanied staff on structured home visits, social gatherings at the organizations, and staff meetings. All participant observations focused on issues related to the delivery and implementation of physical health improvement services and programs, with an emphasis on discussions and activities pertaining to physical health that occurred between staff and consumers.

Qualitative interviews lasted from 30 to 60 minutes and were digitally recorded, professionally transcribed, and audited for accuracy by trained research assistants. All identifying information (e.g., names) was deleted from the interview transcripts. Specific questions addressed several key areas related to usual care including how providers handled, and addressed barriers to the coordination of physical health improvement services for consumers as well as how providers addressed cultural issues in the detection and management of consumers' physical health problems (Box 1). Organizational documents such as mission statements, intake forms, and program schedules addressing the integration and coordination of physical health services were also reviewed.

Data analysis

Data coding and analysis was conducted using constant comparative methods informed by grounded theory.^{40–42} First, interview transcripts were collated by organization using NVivo software (QSR International Pty Ltd. Version 8, 2008). Following this step, a random cross-section of interviews from clinic administrators and clinicians, and clinic-specific field notes, were independently reviewed by two members of the research team to develop a general understanding of their content, and to generate ideas for major codes. These interviews and field notes were then examined using an open coding protocol.⁴³ During this exploratory phase, descriptive memos were drafted to develop an initial list of codes. Then, to develop an audit trail, these memos and codes were used to develop a detailed codebook of the parameters for each item and examples from the data to illustrate code applications. NVivo was then used to conduct a test-run of the new codebook using a different random cross-section of interviews. This test-run enabled the research team to refine the definitions of existing codes further and to add new analytic iterations.

Finally, the coders began to code the dataset formally and produce analytic reports. At regular team meetings, the coders convened to review reports and draft analytic memos describing the emergence of new categories and subcategories within and between codes. This process enabled objective exploration of any discernible patterns or differences along time and group dimensions. Following the coding phase, memos were created for each organization to uncover and problematize themes⁴³ emerging from the transcripts and related to practices, barriers, and recommendations. Relationships among themes were then explored through the application of a conceptual meta-matrix,⁴⁴ a tool useful for identifying latent inter- or intra-level associations across organizations.

To enhance the rigor of our analysis and reduce investigator biases, several strategies were utilized. Triangulation between research team members and the study's multiple data resources (e.g., interviews, participant observations) was used to ensure consistency and accuracy of information.^{45,46} In addition, the research team used member-checking to verify emergent data and interpretations with study respondents.⁴⁷ Specifically, we delivered presentations to clinic sites' staff on preliminary findings to obtain objective validation of emergent themes and to alert the study team to any inaccuracies in the data that should be re-evaluated and revised. Consultation with peer-experts was also used.⁴⁸

Results

Sample characteristics

Sample characteristics are presented in Table 1. A total of forty-six providers (21 administrators and 25 clinicians) representing six Northern Manhattan mental health care organizations participated in this qualitative study. The sample included psychiatrists, psychologists, social workers, case managers, and nurses. Between one and three administrators, and one and three clinicians, were interviewed from each of the six organizations. The mean age of administrators and clinicians in the sample was 49 years old (s.d. $\pm$ 9.4) and 45 years old (s.d. $\pm$ 9.7), respectively. Most respondents in both the administrator and clinician groups were female, at 57.1% and 80.0%, respectively. The majority of administrators were non-Hispanic White (71.4%), while the majority of clinicians were either Hispanic (40.0%) or non-Hispanic White (36.0%).

Practices

Intermittently collecting physical health information and monitoring consumers' physical health—During intake, most providers solicited some physical health information from consumers on issues—such as acute and chronic disease history,

prior hospitalizations, and medication usage—using a combination of spoken queries and standardized forms. Beyond the intake period, however, consumers' physical health statuses were secondary considerations for most providers. Providers described the follow-up collection of consumers' physical health data as being intermittent and unstructured, with staff typically acquiring this information through consumers' self-report rather than a systematic review of medical records. A psychologist commented on her ongoing attempts at balancing consumers' ongoing behavioral concerns (e.g., mental health, employment issues,) with their physical health needs:

How much I work, or how intensely I focus on this medical issue, depends on many factors; for example, how much the illness affects his functioning—how well functioning they are that they can or cannot take care of their medical needs independently without my help. All those factors come into play, but I would say that in general the medical conditions are secondary because, typically, there is so much trauma and depression to cover, maybe some resistance to psychiatric treatment, [which is] the priority for me. Then, I hope that everybody makes a little effort and everybody helps with the medical needs. [Psychologist]

By and large, providers focused on implementing basic physical health monitoring tasks that required little medical expertise, such as recording consumers' weight and other anthropometrics, or checking vital signs. Providers, such as a second psychologist quoted below, noted the need for staff to act consistently as educators and motivators with consumers, using resources such as health promotion pamphlets to improve consumers' health literacy and guide consumers toward increased self-recognition of personal physical health needs.

I often see myself as a mother and as a teacher as much as a mental health professional. A lot of these folks don't have anybody else. There is one guy I'm thinking of—he's lost weight. He's a big guy, probably 6'3, 6'5. He was well over 300 pounds. He has done it himself; he walks a lot. We try to encourage the things that are doable, like walking. [We say,] 'You don't have to go to *Jack LaLanne* (a popular health and fitness club)—or wherever it is people go—and lift 100 pounds.' So, you try and break it down into doable pieces, and just bring it up again and again and point out why [. . .] being overweight is a problem. [Psychologist]

Connecting consumers with primary care—Across the board, clinicians, administrators and front-line staff triaged and shared the responsibility of connecting consumers with primary care services by establishing appointments and following-up with medical care providers. In effect, staff acted as navigators between sites in order to complete what was framed as a care coordination loop. Staff members' central roles in this loop included identifying primary care providers who were attuned to the needs of the consumer population, setting primary care appointments, escorting consumers to and from sites, filling consumers' medicine prescriptions, and providing translation services for the large contingent of consumers with limited English proficiency. Follow-up responsibilities, composing the final segment of the care coordination loop, included making repeated post-appointment contacts with primary care counterparts to obtain patient information and test results and helping process consumers' insurance claims.

Engaging consumers in health promotion activities—Based on our participant observations and interviews, health promotion programs offered by sites had primary objectives of getting consumers to understand better how lifestyle choices affect health and encouraging consumers to light-intensity physical activity, such as community walks and basic calisthenics. Such programs were often delivered by front-line staff (e.g. social workers, certified nutritionists) and emphasized education and some self-management

techniques. For example, in one health promotion class that we attended on holistic health, participants were taught general stretching and warm-up techniques and how to take their own pulse. At another site, we observed staff furnishing consumers with food and nutrition diaries, pedometers, scales to perform weigh-ins, and offering consumers opportunities to go on community trips to grocery stores and to participate in the preparation of healthy food.

Some providers offered more culturally-specific physical activity programs in the forms of health promotion classes that capitalized on the aerobic aspects of Latin dancing traditions, such as *salsa* and *bachata*. Similarly, providers explored ways to integrate culturally-specific foods with a healthy twist into consumers' dietary regimens. A nurse from a housing-based organization described the culturally-competent approach to healthy food preparation and cooking that she believed shaped and ultimately made her cooking demonstrations popular with her diverse consumer population:

We have one young [African American] lady that comes in and [says], 'They don't understand my food.' There have been cooking classes before, and a lot of [the African Americans] didn't participate, but now my class is full because I kind of incorporate [their] way of eating, and they can identify with it. But it's still healthy cooking. The other young lady that does the cooking classes is Caucasian, and they say, 'Her food is not filling. We don't like the food.' But when I come, it's food that they are used to—[like] macaroni—which is healthy, but it's still culturally the same foods that they've grown up with [. . .]. [Nurse]

Barriers

Difficulties navigating health care systems—Across most sites, mental health care clinicians were viewed as having to navigate through multiple layers of geographic fragmentation in order to complete the care coordination loop. This process began with mental health care staff struggling to identify local medical care professionals attuned to the unique needs of the SMI population and capable of interacting with consumers with limited English proficiency, then struggling to find time to get consumers to their medical appointments, and ending with consumers (and their escorts) spending an exorbitant amount of time waiting to be seen. This process strained site and staff resources and appeared to catalyze both provider and consumer reluctance to follow-up with medical appointments. An administrator observed:

I think that our patients, partly because of their illnesses and the symptoms of their illnesses, partly because of the cultural and language issues, and partly because the system is not very well organized—they often get lost in the system. And so we send staff members with patients when they go for their medical appointments just to make sure that they can negotiate the system [. . .] The patients just get overwhelmed. I mean, I get overwhelmed. But [. . .] if you imagine, you're not feeling well, you may have symptoms of psychosis; you don't speak the language, and you're trying to figure out what office to go to; it can be overwhelming, and patients get frustrated and don't get the care that they need. [Administrator]

Unhealthy local environments—Another barrier described by interviewees pertained to consumers living in unhealthy environments. Providers characterized consumers' environments as being fragmented along two tiers: 1) having a dearth of safe, walkable areas and 2) having high concentrations of fast food chains and *bodegas* (small convenience stores common in racial and ethnic minority communities) selling inexpensive foods and beverages with high calorie, sugar, and sodium counts. This environment provided consumers and their families with few safe spaces to exercise and few outlets to purchase healthy, affordable foods (e.g., fruits and vegetables). Collectively, these environmental obstacles appeared to

affect providers' ability to complement their health education interventions with actionable and realistic recommendations for consumers to engage in healthier behaviors. A clinic administrator framed this dichotomy in terms of consumers' socioeconomic status (SES):

I think it's more cultural and poverty-related than anything else. [. . .] The poverty issue is what's available. 'What's in the neighborhood; what do you have access to; what can you afford to pay for?' For a lot of our patients, it's not practical for them to prepare their own foods because they may not have access to a kitchen, or they may not be cognitively with it and want to cook their own food, so it's easier to go to McDonald's and just buy a Big Mac, then to go buy a chicken and cook it and season it. The nutritional needs of our patients are high, [but] it's not just what they put in their mouths, it's what they have access to. [Administrator]

Financial barriers—We observed that the financial forces driving medical care fragmentation fell into three overlapping constellations: 1) the conflict between the pressures to fill large clinical quotas in primary care clinics and the clinical complexities presented by people with SMI; 2) the health care system's complicated and time-consuming reimbursement procedures; and 3) limited and unpredictable fiscal resources for on-site health promotion services and programs.

Across the board, providers emphasized that the care of patients with SMI was more complex and demanding than that of patients in the general population. As one administrator explained, by being asked to provide robust, personalized care to a large quota of very high-need, complex patients, such as people with SMI, within a short period of time, mental health care professionals were ultimately being confronted with an untenable challenge.

The requirements we have established for our current productivity are about a patient every 30 minutes. In a usual primary care practice, it's more like four [patients] an hour, [but] with schizophrenia, what you got are these cognitive issues. So, unraveling the history, the engagement, working with the person—you have to take it slower, especially in the beginning. With anybody else, you could see them for five minutes to check on their labs or something, but with this population it's a slower process, and the question is: 'Will it pay for itself?' [Administrator]

In addition to the extended amount of time spent establishing and facilitating care for consumers, providers routinely found themselves spending very long periods of time dealing with insurance claims and advocating for payment reconciliation. Within this thread, providers felt that confusing insurance claim verbiage and the often large, unpredictable fees and co-pays associated with obtaining complex and ongoing care discouraged many consumers from seeking medical attention and fomented their negative attitudes toward medical care and the health care system. An administrator detailed a common scenario involving billing:

Hospitals will send these massive bills to people saying '[You owe] a set amount per month.' And then we're left to try and fight either [to] get the bill reduced or get financial aid. It's unbelievable. People with Medicare and Medicaid; Medicare has sometimes very high co-pays. And people are just like, 'I can't pay this.' So, we're left trying to help them. And that's a real disincentive [for consumers] to go to the doctor. We reassure them that, for a few hundred dollars, usually they're not getting sent to jail. But when you've got disorganized people who don't know how the system works, and they get a \$300 bill, then they get freaked out. [Administrator]

For those providers interviewed whose organizations offered on-site physical health services, many highlighted how complicated insurance reimbursement policies and limited

internal funding weakened opportunities to establish robust, secure internal programming. These providers felt that, in contrast to services directly related to mental health treatment, physical health services were more cumbersome to get reimbursed for and tended not to be a financial priority for their executive management. Combined, these barriers hampered providers' capacity to engage consumers in continuous health promotion programming.

Limited care coordination infrastructure—At the organizational level, many providers indicated that, even with medical providers in the same building or nearby, they found themselves acting as the lone advocates for consumers' medical care, feeling as one administrator described it, “so close [yet] a world away.” Interviewees believed that the general reason for this collaborative nadir were obstructive, organization-specific regulations and HIPAA policies that made it difficult to exchange health information with medical clinicians in a straightforward and timely fashion. Such administrative encumbrances ultimately put the onus of coordination on the mental health care professional. An administrator working in a hospital-based setting described an ever-changing web of coordination and the growing tendency to count on patients and, where possible, technology, for providing medical follow-up information:

Every patient, on a yearly basis and on intake, is given a form that we ask them to bring to their primary care doctor to have a physical exam done and documented. The return on that is not 100% [. . .] We try as best as we can, but I will say that—even with the medical doctors in-house—we rely more on the computer than actually reaching out to them—and certainly outside primary care physicians—directly. It's very hard; in this age of HIPAA and all these things, it takes time. We don't necessarily do that much outreach to the primary care doctors outside of the hospital system. So, we rely a lot on the patients for information. If anybody is doing outreach, it's us reaching out . . . a [primary care] doctor will refer a patient, [but] it's rare for them to follow-up with a phone call to us. We would be doing more of the follow-up than they would. There's definitely a breakdown in the communication area. [Administrator]

In general, providers felt that the care coordination system for consumers was porous due to traditional primary care not having the necessary operational infrastructure to manage the clinical complexities of providing care to people with SMI, also highlighting challenges associated with connecting consumers with limited English proficiency to primarily English-speaking primary care workforces. Several providers, such as the clinic administrator quoted below, went further, perceiving this coordination void as a product of primary care's long-standing stigma against people with mental illness.

It's striking to me [. . .] the amount of time and resources spent getting [consumers] to a medical clinic, finding a medical clinic that is culturally competent; [we] know of very few physicians who are really great with severely mentally ill patients. A lot of time clinicians, I think, are scared of folks with psychotic illnesses. They think [the consumers are] hearing voices that are going to hurt them. I think a lot of them, when [they] initially start working with this population, maybe had some fears that really don't pan out. [Administrator]

Professional boundaries—Opinions were polarized on the degree to which mental health care professionals were ultimately responsible for medical care coordination, with providers drawing from lessons in professional dogma as well as past on-the-job experiences. Those providers conflicted about co-located medical services or even general care coordination typically attributed their reluctance to a feeling of not possessing the clinical competence or technical resources needed to address consumers' physical health issues adequately. An administrator outlined a perspective common among providers:

I'm sure there are some of my clinicians who are very good about calling up the patient's primary care doctor, probably more so the psychiatrist than the psychologist [but] I would have to say that the therapists probably are not as good as following-up on these issues in part because it's not their area of expertise, and they don't consider that necessarily their responsibility to worry about the patient's medical health [. . .] I can't say that all of my clinicians call the patient's primary care doctor if there are health concerns. I would be shocked if they were doing that on a regular basis. [Administrator]

Consumer-level barriers—Many providers believed that consumers' limited ability or motivation to follow health promotion guidelines played a key part in unsatisfactory medical care outcomes and self-management practices. Some of the interviewees felt that consumer engagement issues were driven mostly by consumers' cognitive deficits. In contrast, other providers felt that these engagement issues were driven primarily by consumers' sociocultural preferences, such as “soul foods” and ethnic staples with high concentrations of salt and fat that may carry deeply-rooted cultural value. This dichotomy further highlighted providers' uncertain views, such as those presented below, of how best to target consumers' self-management difficulties and identify salient opportunities to intervene.

Some patients are very invested in their food. So I'm trying to explain to them that culture, food is part of culture, but it's not the only thing. That modifying your diet somewhat; you know, something is lost and something is gained [. . .] White rice all the time really messes up my patients' diabetes . . . it's the meaning of white rice for them. ‘I'm home. My Grandmother made white rice.’ That kind of thing. So you don't want to take that away from them, unless you give them something different. [Psychiatrist]

Finally, the negative secondary effects of psychotropic medications were viewed by providers as an ongoing, largely immovable deterrent to any sustainable reductions in the consumer population's chronic disease risk indices. Along these lines, most providers conceded that there was a tipping point where the more severe of cases would receive an intensive, personalized focus from mental health care providers, thereby diminishing existing professional boundaries. One site's Activity Therapist explained the shifting paradigm:

How actively they're going [to a primary care clinic], those kind of things, I don't know how much follow-up there is on that. You become more aware of it when there's a problem. So, when there's a problem, it's almost like it's already in crisis mode, and now we've got to figure out, ‘Well, this wasn't in place, or this isn't in place.’ So, you know, I feel like it's kind of looking backwards, and this is the problem. [Activity Therapist]

Recommendations

Bridging communication and care coordination gaps—Recommendations from providers on improving the physical health of consumers centered on the following: bridging gulfs in the communication and exchange of information with primary care clinics, cultivating on-site opportunities for physical health interventions and basic medical services, and providing staff training around physical health and health promotion strategies.

Despite the recognition of challenges, providers were almost universally desirous of plans that would expand access to patient medical records to those mental health care professionals most involved in the medical care coordination loop. Along these lines, providers sought opportunities to establish what they called a consumer fast-tracking arrangement, or to have an official liaison or advocate at the primary care site, to minimize

the time needed between scheduling an appointment and a consumer being seen as well as to aid in the exchange of patient information. As the administrator below explained, a more structured system could help address coordination barriers.

I would [like a] system of sharing information in which I have access through the computer to that information and everybody has more easy access to medical information, [. . .] Sometimes, it is good to go to the information when you need it, instead of waiting for a doctor to call you, or [. . .] to go through the regular [process]. [We need to] have some information system where that is more accessible, [. . .] a system in which they have to inform us [of results]; they have to let us know. [Administrator]

Providers also expressed a broad interest in being able to establish routine case conferences with consumers' medical care teams in an effort to more efficiently discuss and act on patient physical health issues. This forum was viewed as an opportunity to move from what several providers described as an impersonal, numbers-driven exchange to a collaboration where consumers' mental health and medical care could be addressed with greater transparency and parity. Moreover, these case conferences were viewed as ideal venues for mental health care providers to assuage stigma-related concerns that medical providers may hold related to mental illness. A clinic administrator described how a more cohesive, interdisciplinary approach could wed mental health care staff's skills in recognizing consumers' interpersonal nuances and primary care's attributes in addressing medical needs.

I think sometimes, in trying to help, we create more problems than we solve. I say that partly thinking that the world of physical health is very different from the world of mental health. Some people don't recognize their own physical problems . . . [and] there's a certain fatalism that comes [along] with [that]. [It] gets compounded if you have racial discrimination. People just kind of give up. It really takes special kind of skills. You really have to believe in the person to generate in them, the belief that they themselves are deserving, and that there's a possibility that their physical condition can be better. [Administrator]

Developing staff training and education programs—Several providers envisaged what might be called a mutually beneficial cross-pollination mechanism of clinical training with primary care, where medical residents and mental health care trainees could be educated on provisioning services to each disciplines' typical patient population and receive training on the counterparts' diagnostic and organizational best practices. Other providers, such as the social worker quoted below, identified a broader need to generate buy-in from executive management and policymakers on the establishment of more robust, objective and person-centered care:

I am not sure psychiatry is preoccupied enough [with] the side effects of the psycho-tropic medications, like diabetes or obesity. I would like that to happen; that psychiatrists become much more aware and mindful of these side effects and the need to find maybe a permanent way to treat that risk. [. . .] I think it is about training; it starts with medical school. Training about holistic concepts, and training that is less biased by the influence of pharmaceutical companies and more conscious about an integral type of training [on] mental health and mental treatment. I think that diabetes and obesity [are] probably related to the financial interest of the pharmaceutical companies that tend to disregard the secondary effects [. . .] Secondly, I would say [that when] the upper management in an organization makes [this] a priority, then the rest of the stuff falls [in place]—so it is [addressing] training and then institutional symptoms. [Social Worker]

Escaping the one-size-fits-all paradigm—Providers in support of co-located medical services differed widely in their views of who ought to be trained or brought in to deliver medical services and perform follow-up with consumers. In general, providers' recommendations were influenced by their respective organizations' programmatic contingencies, namely budget and operational constraints. Several providers described the potential benefits of having a medical home where a broad spectrum of mental health and medical care services would be offered in a one-stop, wraparound treatment shop. Separately, providers expressed optimism that basic clinical training for a non-physician medical professional (e.g., nurse practitioners) could serve as a worthy alternative to costly *per diem* physician hires. However, this view was not shared by all. A clinic administrator presented a discrepant opinion:

I do not think with this particular patient population you could get away with a nurse practitioner. Physicians tend to work more quickly; they are more efficient than nurse practitioners as a rule. The trick is finding a good internist who sees the whole bio-social piece of it rather than just a narrow slice of the patient [. . .] if you can get an MD, you're much better off. They're more expensive, but you'll get a bigger bang for the buck. [Administrator]

More generally, providers recognized the importance of tanking small steps, and developing basic wellness and health programs in motivating consumers to monitor and improve their physical health. Along these lines, providers who had used family-based interventions or peer-led programs to facilitate consumer buy-in championed broader uses of these approaches. As we observed during a visit at one site's physical activity group meeting, the utilization of consumers as session leaders had a perceptible impact on other participants' willingness to join the activities and take active ownership of the program and their health.

Lastly, providers emphasized the need to embrace structure and standardized mechanisms that would allow for the ongoing collection and sharing of information on consumers' key chronic disease risk indices (e.g., weight, blood pressure, glucose levels). More broadly, providers such as the administrator quoted below, felt that more dynamic clinical programming and training opportunities would help to engender a more productive and fulfilling work environment for staff, thereby facilitating care continuity and enhancing communication opportunities with medical providers and consumers.

Who wants to be doing the same thing always? Basically, when people criticize staff for being burnt out, and not doing new things, it's usually because the system isn't set up to support them doing something new [. . .] What doesn't work is, you give no latitude in terms of the amount of work people are doing. You introduce no tools that people can use to carry out something new. And then you get mad that they're not doing anything new. If you want people to do a new thing, most people would actually enjoy doing a new thing. You just have to provide the support to train them and make it feasible. [Administrator]

Discussion

In this study, we examined the contours of what six mental health care organizations do to address the medical needs of racially and ethnically diverse consumers, the barriers that providers encounter in meeting these needs, and what providers believe could improve the physical health and quality of medical care of these consumers. Throughout the study, we observed staff filling multiple roles—from case managers to system navigators to cooks—in an effort to complete the care coordination loop and maintain medical care continuity for consumers.

Many of our findings are consistent with previous qualitative studies examining the medical care of people with SMI from the perspective of mental health care providers.^{49–52} For example, we found that usual practices across sites consisted of intermittent collection and monitoring of consumers' health information, and efforts to connect consumers with primary care. Providers also discussed well known barriers to care, such as consumers' difficulties navigating the health care system, financial obstacles in integrating health and mental health services, limited care coordination infrastructure, and professional boundary issues.

Recommendations to improve care were also consistent with previous work^{31,49–52} and included gaining executive-level commitment to streamline communication mechanisms between mental health and medical care providers, developing staff training and educational programs, and escaping a one-size-fits-all paradigm for improving the health of the consumer population.

Providers described fragmentation of medical services as occurring at several levels. Geographic and organizational barriers were found to impact the care coordination loop by complicating efforts to efficiently get consumers to medical sites for appointments, establish reciprocal working relationships with primary care physicians, and obtain consumers' health records, mirroring findings from an Institute of Medicine⁵³ report on improving health care quality for people with mental illness and other research.^{50,52} These barriers stoked staffs' tendencies to operate outside of traditional referral avenues and more in isolation.⁵⁴ To reverse this trend, more structured and accessible patient data mechanisms are necessary, and may be achieved in part through greater education on how to use available patient record resources and/or executive-level data-sharing agreements that both improve and expand access to patient records.

Beyond these common geographic and organizational level barriers, our data suggested that greater attention must be devoted to countering the language barriers faced by consumers with limited English proficiency who struggle to access medical care services. Currently, little is known about the health care needs of people with SMI and limited English proficiency. However, the usage of bilingual providers and/or trained medical interpreters offers one intuitive approach to eliminating these language barriers throughout the entire continuum of care.

Financial barriers described by interviewees typically arose in the form of tenuous funding sources that were exacerbated by high demand for complex consumer care and ultimately led to less robust, financially-secure programming and greater fragmentation. These outcomes illuminate a need for more cost-effective, integrated care models, such as those proposed in recent literature^{55,56} that combine mental health and physical health care services into medical homes. At the same time, the professional boundary issues described in this study illustrate potential barriers to these proposed types of integrated care models, echoing other research in this area.^{31,57} Providers' recommendations for addressing these boundaries were consistent with prior literature,^{32,49} and chiefly included making clinical and health education training opportunities more accessible to staff to better leverage resources and promote understanding of the physical health challenges facing the SMI population. Providers felt interdisciplinary training along these lines would help foster general ideological and operational harmony and accountability between all parties involved in care coordination. These training opportunities could also help reduce medical providers' associating stigma with people suffering SMI.

At the consumer-level, providers recognized the obstacles imposed by consumers' low prioritization of health promotion and self-management activities.^{58,59} According to

providers, these consumer-level barriers result from both cognitive and motivational barriers as well as sociocultural customs, suggesting that health care interventions in this population require more engaging, user-friendly learning modules and should to be tailored to account for consumers' uniquely interwoven sociocultural preferences and habits.^{60,61} Attention to cultural norms and preferences is essential to addressing these consumer-level barriers and ultimately improving consumers' engagement with medical care services and self-management behaviors.

Existing health improvement intervention programs aimed at addressing the quality chasm in medical care for people with SMI, such as lifestyle and chronic disease self-management interventions,^{62–65} have shown promise in reducing cardiovascular and metabolic disease risk factors among this population. However, these studies have tended to include limited numbers of participants from racial and ethnic minority groups and have failed to make culturally-relevant adaptations to the interventions.⁶⁰ Future studies are needed to examine whether these promising interventions are effective in improving the health of racially and ethnically diverse people with SMI. Our findings suggest some specific targets for making lifestyle interventions culturally-relevant for consumers from diverse racial and ethnic groups. For example, we found that interventions should aim to integrate culturally-grounded physical health activities, such as ethnically specific dancing classes, that are viewed as fun and engaging for African American and Hispanics consumers. We also observed that nutrition education classes may be most effective when they strive to educate African American and Hispanic consumers on how to prepare healthy variations of popular cultural dishes that are a staple of their everyday diet.

Further, expanding upon the existing literature on the physical health of people with SMI, we found that barriers thought to contribute to obesogenic environments,⁶⁶ such as limited access to fresh, healthy foods and safe areas for physical activity, were viewed as endemic obstacles to better health in consumers' communities. Comparable environmental obstacles have been observed in studies surveying residents living in similarly diverse or low socioeconomic status communities.^{67–69} Nevertheless, few studies have examined these environmental issues among people with SMI.⁷⁰ More research is needed for the development and evaluation of multilevel health interventions for people with SMI that aim to reduce environmental barriers linked to poor health. For example, in recent years, the City of New York has taken broad, policy-oriented steps to address practices in the commercial food industry, recently introducing bills to eliminate trans-fat, mandate calorie postings in chain restaurants, and improve lower-income people's access to fresh, healthy foods in particular through specially-tailored food vouchers.^{71–73} The impact of these policy initiatives on improving the health and well-being of racially and ethnically diverse populations (with and without psychiatric conditions) that are disproportionately affected by obesity and chronic medical conditions must be carefully evaluated.

Finally, binary tension appeared to exist between providers' need to prescribe psychotropic medications, which are known to improve consumers' mental health at the potential detriment of their physical health. In our sample, it is possible that providers' tendency to prioritize mental health issues over medical care concerns may have contributed to some consumers' relative lack of engagement in health promotion activities and with primary care in general. Other studies have shown that aiming to make consumers more active participants in treatment that emphasizes the symbiotic relationships between mental and physical health could encourage increased health knowledge and engagement, and promote better overall health outcomes.^{74–77}

Our study findings must be interpreted in light of several limitations. First, the study was conducted in one urban setting predominantly of racial and ethnic minorities, namely

Hispanics of Dominican descent and African Americans. Accordingly, findings from this study may not be generalizable to other clinical settings, such as those in rural communities. Further, providers may have been inclined to present their respective organizations and practices in a favorable light to avoid any possible conflict with superiors or colleagues. However, given the wide-ranging responses of the interviewees, the impact of such biases appears to be minimal. Finally, since the study was conducted, considerable reforms to the health care system have occurred. The Patient Protection and Affordable Care Act (ACA), passed in March 2010 by the U.S. Congress, is well-positioned to address many of service fragmentation scenarios outlined in our findings, namely as a result of the legislation's focus funding demonstration projects, covering more preventive screening, encouraging integrated care, and supporting community health centers and increased staff training.^{78,79} Conversely, as the bill seeks to expand access to care to more people from low SES backgrounds, the demand for primary care from newly covered populations may outpace the availability of services, potentially leading to longer wait times for care and poorer overall care quality.

CONCLUSION

Mental health care providers who are tasked with addressing the physical health needs of people with SMI struggle to effectively leverage the institutional resources needed to improve the physical health of their consumers due to limited access to primary care, low levels of funding for physical health promotion programming, and consumers' cognitive deficits. Barriers unique to racially and ethnically diverse people with SMI included unhealthy local environments and culturally-specific dietary habits, and language barriers for those with limited English proficiency. Efforts to bridge the coordination chasm between mental health and medical care providers must take into account the confluence of forces—geographic, financial, organizational, cultural, environmental, and consumer-level—which, collectively, can weaken opportunities for quality care coordination and service provisioning and contribute to health disparities in this population. Encouragingly, results from this analysis indicate that community organizations providing mental health care services to diverse people with SMI are aware of some sociocultural factors that influence the health and medical care of diverse consumers with SMI. These organizations are also willing to embrace standardized physical health monitoring and maintenance protocols, as crafted through expanded clinical education and training opportunities and more tightly interwoven collaborations with medical providers, to improve the health care quality and health of consumers.

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Box 1. EXAMPLES OF SEMI-STRUCTURED INTERVIEW THEMES AND QUESTIONS BY PARTICIPANT TYPE

Participant Type	Example Interview Themes	Sample Questions
Administrators	<ul style="list-style-type: none"> Integration of mental health and physical health services. 	<ul style="list-style-type: none"> How does your clinic handle the coordination of physical health care for SMI (Serious Mental Illness) consumers? What have you tried? What worked? Why? What did not work? Why?^a Who are the key physical healthcare service providers in this neighborhood? What are the strengths of the services that these [physical healthcare service] organizations provide? What are some weaknesses? What worked? Why do you think it was successful? Were there any barriers?^a
Clinicians	<ul style="list-style-type: none"> Physical health needs of consumers. Cultural competence in the detection and prevention of co-morbid conditions. Health promotion programs available on site. 	<ul style="list-style-type: none"> In your opinion, what are the most important physical health needs of SMI consumers? How does your clinic address the physical health needs of these clients? What is in place now to handle these issues at the clinic?^a Thinking about your patients' physical health needs, is there anything that you would you like to try? Are there any foreseeable obstacles?^a How do you handle cultural issues in the detection and management of physical health problems? Do you know of any examples in the clinic? Are some physical health interventions more effective for particular cultural groups (for example, Latinos, Caucasians, African Americans)? How so? Why?^a Can you tell me about a time when you had difficulty treating a patient due to what you perceived to be a cultural barrier; that is, when a patient's cultural beliefs or traditions made the treatment more complicated? How does the clinic promote consumers' wellness self-management? Specifically, for food? For exercise?^a

^aRepresent follow-up probes initiated by the interviewer.

Table 1**SAMPLE CHARACTERISTICS**

	Administrators (n = 21)		Clinicians (n = 25)	
	N	Mean (SD)/Percentages	N	Mean (SD)/Percentages
Age ^a	20	49 (9.4)	25	45 (9.7)
Female	12	57.1	20	80.0
Foreign Born	5	23.8	7	38.9
Race/Ethnicity				
Hispanic	3	14.3	10	40.0
Black/African	2	9.5	4	16.0
American				
Non-Hispanic White	15	71.4	9	36.0
Other	1	4.8	2	8.0
Language Fluency ^b				
English Only	10	47.6	10	40
Bilingual	11	52.4	15	60
Spanish Only	0	0	0	0
Years of Education				
Less than 12 years	0	0	0	0
High School Diploma	1	4.8	1	4.2
Beyond High School	20	95.2	23	95.8
Profession/ Discipline				
Psychiatrist	8	38.1	5	20.0
Psychologist	6	28.6	5	20.0
Social Worker	4	19.0	8	32.0
Nurse	1	4.8	3	12.0
Other	2	9.5	4	16.0

^a Administrators, n = 20^b Clinicians, n = 24