Whole Person Care in Under-resourced Communities: Stakeholder Priorities at Long-Term Follow-Up in Community Partners in Care

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Objective: Depressed individuals may require help from different agencies to address health and social needs, but how such coordination occurs in under-resourced communities is poorly understood. This study sought to identify priorities of Latino and African American depressed clients, explore whether service providers understand client priorities, and describe how providers address them.

Methods: Between October 2014 and February 2015, we interviewed 104 clients stratified by depression history and 50 representatives of different programs in health and social community agencies who participated in Community Partners in Care, a cluster-randomized trial of coalition-building approaches to delivering depression quality improvement programs. Clients were queried about their most pressing needs; program representatives identified their clients' needs and explained how they addressed them.

Results: Physical and mental health were clients' top priorities, followed by housing, caring for and building relationships with others, and employment. While persistently depressed clients prioritized mental health, those with improved depression prioritized relationships with others. Program representatives identified housing, employment, mental health, and improving relationships with others as clients' top priorities. Needs assessment, client-centered services, and linkages to other agencies were main strategies used to address client needs.

Conclusion: Depressed clients have multiple health and social needs, and program representatives in under-resourced communities understand the complexity of clients' needs. Agencies rely on needs assessment and referrals to meet their clients' needs, which enhances the importance of agency

Introduction

Depressive disorders are the leading cause of adult disability in the United States.[1] Depressive symptoms are associated with impaired functioning, greater health care utilization, increased risk for chronic diseases, and reduced quality of life.[2] Depressed individuals often have many unmet social and economic needs - also known as social-behavioral risk factors for mental health conditions - including housing, employment, food insecurity, and social isolation.[3,4] Social-behavioral factors and depression interact. Poorer individuals tend to have higher rates of depression, lower treatment rates, and worse treatment outcomes than their wealthier counterparts.[5] Housing instability,[6] neighborhood violence,[7] and food insecurity[8] adversely affect mental health. While depression has similar prevalence across racial/ethnic groups, racial/ethnic minorities have less access to evidence-based depression care and worse treatment outcomes, compared with Whites.[9] Racial/ethnic disparities are often compounded by socioeconomic factors; thus, effectively addressing social factors may be key to reducing mental health disparities.[10]

Several policy initiatives aim to integrate physical health, mental health, and social services across communities

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to improve health for vulnerable populations. Multi-sector, neighborhood-focused care coordination that can address health and social risk factors are key features of ThriveNYC[11] in New York City and the Health Neighborhood Initiative[12] in Los Angeles County. The Robert Wood Johnson Foundation's Culture of Health initiative,[13] the Accountable Health Communities Model,[14] and the Whole Person Care Pilots[15] pursued as part of California's 1115 Medicaid waiver[16] also promote multi-sector collaboration. Such efforts can be facilitated by co-location (eg, tenancy-based care management), transformations in financing and record-keeping, as well as other mechanisms for collaboration and cross-re-

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ferral to community-based agencies.[17]

Despite these efforts, little evidence exists on how agencies working in under-resourced communities can attend to health *and* social needs of their clients. For instance, little is known regarding the capacity and readiness of community-based agencies working in various sectors to identify and address their clients' needs, or about best practices for achieving multi-sector integration. Truly multi-sector integrated care approaches that address physical and mental health needs along with social needs are unusual in community settings.[18] Such approaches differ from traditional collaborative care models for depression, which are typically based in health care settings and rarely include social services as their main foci. While multi-sector integrated care approaches may have similarities to recovery-oriented treatment models implemented for severe mental illnesses through Assertive Community Treatment (ACT)[19,20] and related approaches,[21] most of these models are usually based in health systems rather than community-based networks.[22,23] Community-based multi-sector partnerships call for identifying and addressing health care needs in non-health care settings, such as churches, where care coordination could be challenging.[24] Although emerging multi-sector approaches, like SAMHSA's Recovery Support Strategic Initiative, use technical assistance to facilitate multi-sector collaboration,[25] we have a rudimentary understanding of the potential for intentional multi-sector, community-based collaborations to address physical health, mental health, and

social needs of depressed individuals, especially in under-resourced minority communities that struggle to address health care disparities.[18,26]

The Community Partners in Care (CPIC) study is a cluster-randomized controlled trial of depression quality improvement (QI) programs in minority, under-resourced communities in Los Angeles.[27,28] The study supported diverse community agencies in addressing depression, provides an illustrative example of how multi-sector collaboration among agencies may help address complex needs of depressed individuals. Short-term client outcomes in CPIC showed that a community-engaged, multi-sector approach improved not only depression outcomes like mental health-related quality of life (MHRQL), but also social risk factors, including homelessness, although the latter was not an explicit intervention area. CPIC findings raised questions about the potential for an intentional focus on integrating mental health care with social and medical services in the community context.

Using interview data from clients and program representatives of agencies from multiple sectors in the CPIC study, we sought to explore: 1) the difference in clients' needs based on their depression history; 2) the match between program representatives' and clients' perceptions of needs; and 3) the readiness of health care and social service agencies to pursue integrated care approaches to address physical health, mental health, and social needs of depressed individuals. Semi-structured interviews sought to: identify, prioritize, and compare the needs of individuals with different depression

histories; explore program representatives' understanding of their clients' unmet health and social needs; and describe common strategies used by agencies to address them. Our results provide insights into agency capacity to adopt integration models that will address clients' multiple needs and offer some strategies for achieving "whole person" care that addresses physical health, mental health, and social needs of depressed individuals and requires multi-sector collaboration. We also discuss potential strategies for helping reach the goal of whole person care.

METHODS

CPIC compared two interventions that implement evidence-based, depression QI programs across health and community-based agencies in two under-resourced, minority communities (South Los Angeles and Hollywood/Metro). One hundred and thirty-three programs in 60 agencies were randomized to one of two intervention arms. Resources for Services (RS) provided time-limited technical assistance to individual programs for depression QI. Community Engagement and Planning (CEP) supported multi-sector collaborations to develop and implement a community-wide training plan for depression QI. There was evidence that CEP, relative to RS, was more effective at 6 months and 12 months in improving depressed clients' MHRQL while reducing behavioral health hospitalizations.[27,28]

Study Participants

As is common in qualitative research, we used a theoretical (rather than random) sampling approach to ensure that our samples of clients and program representatives are diverse in terms of pre-defined characteristics required to better answer our research questions.[29]

Our first sampling goal was to select a diverse sample of approximately 100 out of 600 CPIC clients completing 3-year follow-up surveys. We designed a sampling strategy to ensure diversity among clients in terms of their depression status (improved [PHQ-8 score≤10] vs persistent [PHQ-8 score≥15] depression), ethnicity (African American and Latino), sex, and intervention status (CEP vs RS) to better understand heterogeneity in priorities within this population. We sequentially contacted 163 and recruited 104 (64%) clients (23 could not be reached; 20 had incorrect contact information; 14 initially agreed but could not be reached subsequently; and 2 refused). We interviewed clients between February and July 2014.

Our second sampling goal was to interview approximately 50 representatives of CPIC-enrolled programs. We aimed at recruiting a diverse (rather than random) sample of programs within CPIC agencies stratified by sector (health care vs social-community). The health care sector included participants from primary care and mental health agencies. Social-community sector included participants from homelessness, social services, community-trusted and substance abuse agencies.

Within each sector, we sought a balance of CEP and RS program representatives, and roughly the same number of providers and administrators, to be able to explore a wide range of perspectives. We recruited from among 289 program representatives (ie, providers and administrators) who had completed 12-month CPIC surveys. We first contacted eligible program representatives with highest CPIC engagement based on their participation in CPIC trainings. Because of their CPIC engagement, we had their most recent contact information. We reached out to them twice via email and followed up by telephone with those who did not respond to our invitation. We then reached out to all remaining program representatives according to sector and study arm until we assembled a sample with the above-described characteristics. By following this recruitment strategy, we contacted all 289 program representatives completing 12-month CPIC surveys. Our final sample consisted of 51 program representatives (164 did not respond; 69 no longer worked at the agency; and 5 wanted to but failed to participate). We interviewed program representatives between October 2014 and February 2015.

Interview Structure

During semi-structured telephone interviews, we asked clients to consider all issues they were working on and identify those they most wanted help with. After this open-ended question, we asked clients to specify if they wanted help with certain needs (eg, physical and mental health, housing, employment) that we identified from the literature and CPIC partner feedback.[30] Finally, we asked clients to name their three most pressing needs. We also asked additional questions about clients' experiences and outcomes of care,

Table 1. Sample characteristics

Characteristic	Clients, n=104		Program representatives, n=50	
	n	**%**	**n**	**%**
Study arm				
CEP	45	43	34	68
RS	59	57	16	32
Race/Ethnicity[a]				
Hispanic	43	41	11	22
African American	61	59	24	49
White	--		9	18
Other	--		5	10
Sex				
Male	44	42	8	16
Female	60	58	42	84
Clients' depression status				
Persistent depression, PHQ8 sum ≥15	53	51	--	--
Resolved depression, PHQ8 sum≤10	51	49	--	--
Provider's position				
Administrator	--	--	20	40
Provider	--	--	30	60
Service sector				
Community trusted agency	--	--	5	10
Homelessness	--	--	5	10
Mental health	--	--	7	14
Primary care	--	--	6	12
Social services	--	--	18	36
Substance abuse	--	--	9	18
Education[a]				
Less than high school	43	41	--	--
High school/GED	19	18	5	10
Some college or technical school	31	30	3	6
Bachelor's degree	9	9	14	28
Master's degree	2	2	19	38
MD or doctorate	--	--	9	18

a. Percentages may not sum to 100 due to missing data.
CEP, Community Engagement and Planning; RS, Resources for Services; PHQ8, Personal Health Questionnaire Depression Scale; GED, General Education Diploma; MD, Doctor of Medicine

which will be reported separately.

During semi-structured telephone interviews with program representatives, we first asked an open-ended question about their clients' concerns. We then asked participants to clarify whether specific needs prioritized by CPIC clients were significant concerns of their clients. The pre-specified list of needs was a modified version of the list used during client interviews. Finally, we asked participants to identify their clients' three most pressing concerns, strategies they use to address them, and barriers and facilitators to addressing those needs.

Twelve trained community and academic partners conducted client and program representative interviews using a pilot-tested structured protocol to ensure all questions were asked. Interviewers probed for additional information and clarifications. Interviews lasted an average of 48 minutes

and were audio-recorded (one agency interview was not recorded due to a technical difficulty). Clients received $25 gift cards, and program representatives received $40 gift cards as participation incentives. This study was approved by the RAND's Human Subjects Protection Committee.

Data Analysis

We quantitatively analyzed needs/concerns reported by clients and program representatives and qualitatively compared them. We calculated the percent of clients and program representatives who named each need in open-ended responses (not reported here) and later identified it among their top three most pressing needs. To explore relationships between client needs and depression history (improved or persistent), we calculated odds ratios. We also used Fischer's exact tests to explore the difference in clients' top three needs as reported by program representatives of health care and social-community service agencies.

We qualitatively analyzed program representative interviews to determine how agencies meet their clients' multiple needs. As in previous work,[31] we created interview summaries with verbatim quotes from audio recordings and entered them into RedCap - a secure, web-based, data capture and management tool. We used both deductive and inductive approaches to data coding.[32] Deductive coding focused on responses to questions related to the identification of needs, services provision, and ensuring the needs are fully addressed. Inductive coding helped identify cross-cutting themes emerging from responses to more than one interview question.

Table 2. Clients' reports of their top three concerns, overall and by depression status

Concerns/Needs	Total, N=104		Persistent depression, n=53		Improved depression, n=51		Persistent depression vs Improved depression		
	n	%	n	%	n	%	OR	95% CI	P
Treating your physical health	39	38	22	42	17	33	1.42	.64 - 3.15	.389
Improving your depression or low mood	38	37	24	45	14	28	2.19	.96 - 4.96	.059
Arranging housing	31	30	20	38	11	22	2.20	.93 - 5.25	.072
Caring for others and your relationships with others	30	29	11	21	19	37	.44	.18 - 1.06	.063
Finding work that will make you money	29	28	14	26	15	29	.86	.37 - 2.03	.733
Improving your spiritual health	20	19	11	21	9	18	1.22	.46 - 3.25	.688
Financial	18	17	9	17	9	18	.95	.35 - 2.64	.928
Finding food for you and your family	17	16	14	26	3	6	5.74	1.54 - 21.43	.005
Completing everyday tasks like finding transportation or fixing things	17	16	11	21	6	12	1.96	.67 - 5.78	.215
Other	12	12	5	9	7	14	.65	.19 - 2.21	.493
Getting benefits that you're eligible for (SSI, disability, unemployment)	11	11	8	15	3	6	2.84	.71 - 11.40	.127
Finding safety and avoiding violence around you	4	4	2	4	2	4	.96	.13 - 7.09	.969
Stopping your use of drugs or alcohol	2	2	1	2	1	2	.96	.06 - 15.79	.978

Data in this table are counts and percentages. They show frequencies with which each need was mentioned as one of the top 3 concerns by clients. Results are first presented for the total sample and then by the depression status. Odds ratios (OR) and 95% CI are presented in the last three columns

MZS reviewed excerpts from interview notes pertaining to a given question and grouped responses illustrating strategies to address needs. DK and EB reviewed the code book and results. We jointly discussed and chose quotations to illustrate findings.

RESULTS

The client sample has 61 (59%) African Americans and 43 (41%) Latinos; 60 (58%) females and 44 (42%) males (Table 1). Forty-five (43%) clients were enrolled through CEP agencies and 59 (57%) through RS agencies. Fifty-three clients (51%) had persistent depression (mean PHQ-8=20.33, SD=2.15) and 51 (49%) had resolved depression (mean PHQ-8=4.07, SD=2.90). Clients with persistent depression showed an average PHQ-8 score increase of 3.7

from baseline to 3 years, indicating mild worsening; those with resolved depression showed an average PHQ-8 score decrease of 8.7 points - a clinically meaningful improvement.[33]

We interviewed 20 (40%) administrators and 30 (60%) providers. Roughly two-thirds (67%) of the interviewees were from the CEP study arm. Most (84%) were female, half (49%) were African American, and 64% were from different social-community sectors, including homelessness, community-trusted, social services, and substance abuse agencies.

Client Priorities

Physical and mental health were the most cited among clients' top three priorities, followed by housing, caring for and building relationships with others, and employment (Table 2). For individuals with persistent depression, mental health was the

highest priority, followed by physical health, housing, employment, and food. Individuals with improved depression prioritized caring for and building relationships with others, followed by physical health, employment, mental health, and housing. Individuals with persistent depression were more than twice as likely to mention mental health and roughly six times as likely to mention food than individuals with improved depression, who were more than twice as likely to mention relationships with others. More than a quarter in each group, however, identified a desire to get help with employment. Study arm was not significantly associated with need priorities.

Program Staff Perceptions of Clients' Priorities

Program representatives viewed housing, employment, mental

Table 3. Program representatives' ranking of clients' top three concerns, overall and by sector type

Concerns/Needs	Total, N=50		Health care sector, n=13		Social-community sector, n=37	
	n	**%**	**n**	**%**	**n**	**%**
Arranging housing	27	54	6	46	21	57
Finding work/employment	21	42	5	38	16	43
Improving depression or low mood	20	40	7	54	13	35
Improving relationships with other people (family members; partners, co-workers etc.)	15	30	8	62	7	19
Improving their physical health	10	20	5	38	5	14
Help with stopping drug or alcohol use	9	18	1	8	8	22
Taking care of others (children, elderly parents)	7	14	2	15	5	14
Completing everyday tasks like finding transportation or fixing things	5	10	--	--	5	14
Getting benefits they are eligible for (SSI, disability, unemployment)	5	10	--	--	5	14
Finding safety and avoiding violence	4	8	--	--	4	11
Immigration issues	3	6	1	8	2	5
Finding food	3	6	1	8	2	5
Improving their spiritual health	1	2	--	--	1	3
Additional Needs						
Financial	6	12	1	8	5	14
Access to health care (mental and physical health)	3	6	1	8	2	5
Addressing multiple health needs (physical/mental/substance abuse)	3	6	--	--	3	8
Legal	2	4	--	--	2	5
Educational/academic	2	4	--	--	2	5
Social support	2	4	1	8	1	3
Missing	3	6	1	8	2	5

Data in this table are counts and percentages. They show frequencies with which each program representative mentioned each need as one of the top 3 concerns of their clients. Results are first presented for the total sample and then by the agency sector. Health care sector includes participants from primary care and mental health agencies. Social-community sector includes participants from homelessness, social services, community-trusted and substance abuse agencies.

health, and improving relationships with other people as their clients' top concerns (Table 3). Although there were no statistically significant differences in ranking of perceived clients' top needs by services sector (health care vs social-community), the order of perceived top concerns varied. While health care providers and administrators described building relationships with others as the top priority of their clients, followed by mental health and housing, social-community program representatives viewed housing, employment, and mental health as their clients' top priorities. Study arm was not significantly associated with reported priorities.

Identifying and Addressing Multiple Needs

While a majority of program representatives reported that intakes included formal client needs assessment to determine what help a client may need, some described using informal activities (eg, talking to clients, reviewing referral information, home visits, and familiarity with the community) to identify and understand clients' multiple needs. Program representatives viewed such assessments as useful for identifying needs and building relationships with clients. "We do assessments. We meet them where they're at. We are there on the front line," said a substance abuse program provider (Participant01).

Program representatives described social, interpersonal, and health concerns as interrelated aims of treatment interventions. One mental health provider (Participant16) said: "Our patients are highly isolated…A lot of what we try to do in the clinic is to get them engaged with other people and do social activities." A primary care provider (Participant09) stated that depression can affect "just the basic ability to take care of daily needs…or

taking care of getting into stable housing, or to integrate in social settings, to basically function in a healthy way."

Once identified, most program representatives try to address clients' multiple needs and considered addressing social needs as a gateway to wellness. As one legal and financial services provider (Participant37) said, "when housed, people feel better about themselves and feel that there is a lot less confusion going on in the world," suggesting that addressing housing can help improve mental wellness.

Program representatives stated that they try to offer services in a client-centered manner, which they defined as focusing on how they delivered services as much as what they delivered. One substance abuse program administrator (Participant08) noted: "We involve clients in their treatment planning and development. We try to adjust it to what clients see as their immediate needs, instead of prescribing them treatment as we see best."

Some providers said even offering a wide range of services could be ineffective without a trusting relationship with a client. Providers described the importance of clients feeling respected, heard, and not judged. Some emphasized the importance of supporting clients' self-efficacy and minimizing stigma of seeking mental health services. Others described educating clients about their rights so that they could advocate for themselves. Some providers stated that they served their clients best by providing them with options and, at times, recommendations, but leaving decision-making to the client.

Most program representatives suggested that addressing clients' needs

required linking clients to resources offered by other agencies. Many interviewees cited the importance of access to a wide network of agencies to address clients' multiple needs. An administrator at a mental health agency (Participant22) said: "We have a lot of staff members who do a variety of things in terms of being multidisciplinary and multi-faceted and very resourceful and helping the clients acquire certain resources...everything from mental health, physical health, to housing and employment."

More often, however, interviewees described challenges linking clients to services, including staff shortages, lack of electronic health records, and the need for provider training as barriers to collaboration. To illustrate, a substance abuse program representative (Participant08) said: "We don't have enough resources to have enough staff to accommodate all the different needs." A mental health service provider (Participant17) described the absence of electronic health records as another barrier: "the provider will write 'Refer to Wellness Center' on the record. But the wellness center doesn't really connect to our medical records. There's no way to find out if they get there or for receiving agencies to figure out if the referrals got there."

Finally, some thought more provider education on social determinants of health was needed to facilitate the delivery of whole person care. As a primary care provider (Participant50) said, "I think that medical providers would benefit from increased awareness of [social] determinants, such as socioeconomic status and the influence that has on health...so that the providers realize that working in a job

program can really help their client, maybe even more than they can."

DISCUSSION

Consistent with the literature, we found that African American and Latino individuals in under-resourced communities in Los Angeles, who initially identified as depressed in health or social-community settings and participated in a CPIC study follow-up, have multiple unmet needs, ranging from physical and mental health to housing, employment, and managing relationships.[34,35] While clients with improved depressive symptoms prioritized support for caring for and building relationships with others, those with persistent depression prioritized mental health needs and also identified a range of social risk factors, such as housing, employment, and food scarcity.

Program representatives in the CPIC study providing services in the same communities (but not necessarily to our sampled client participants) understood housing, employment, mental health needs, and relationships with others as most pressing, indicating their understanding of what depressed individuals may need. Compared with clients' reports, program representatives somewhat underestimated the importance of clients' physical health needs.

The need for improving relationships with and/or caring for others was prioritized by both clients and program representatives, which suggests that clients and providers recognize the harmful effects of loneliness and the burdens of caregiving,[36] and

that they perceive that social support may be protective of health.[37] Providers indicate high readiness to link clients to services or provide interventions that bolster social functioning.[38] Some of the most widely studied interventions of these types are integral to recovery-oriented treatment models, such as family peer support or psychoeducation interventions.[39]

> *While clients with improved depressive symptoms prioritized support for caring for and building relationships with others, those with persistent depression prioritized mental health needs and also identified a range of social risk factors, such as housing, employment, and food scarcity.*

Program representatives described clients' needs as best addressed using multi-sector integrated approaches or through linkages to other agencies, which may illustrate potential readiness for delivering whole person care that connects care for physical and mental health with the provision of services that can help clients address their social needs. Indeed, program representatives, regardless of sector, described a responsibility to provide client services in a multi-sector and collaborative fashion. These responses suggest that it may be important for future research to focus on improving mechanisms for systems and communities to effectively and efficiently provide integrated services, or whole person care, that span physical and mental health, as well social services, and to identify different strategies to achieve that goal.

Potential strategies for helping reach the goal of whole person care in community settings may include improvements in tracking information on social and behavioral risk factors and referrals to services that address them in data systems, such as electronic health records.[40] Other process-oriented strategies may include developing trust, communicating respect, and encouraging client self-efficacy, suggesting the need for an intentional, client-centered approach to services integration that includes self-management skills.[22] Because program representatives underestimated depressed clients' priorities for their physical health needs, special attention to integrating physical health concerns into community care may be necessary, which is similar to having a dedicated nurse and building interdisciplinary capacity to address all domains of health in ACT teams.[23] Similarly, medical and mental health providers are likely to need extra support and skill development[41] to integrate care that addresses social factors.[42]

Study Limitations

Our study has several limitations. Our sample of clients and providers/ administrators was purposive and selected from participants in long-term CPIC follow-up. Therefore, results may not be representative of individuals with depression in other communities or programs/agencies providing services to them. However, our sampling approach is appropriate for a qualitative study to gather views from a diverse, stratified sample of stakeholders, including those largely underrepresented in studies of services delivery. Systematic data on the perspectives, capacities, and challenges for social-community agencies may be useful for health care policy initiatives emphasizing multi-sector health partnerships. Moreover, participating clients were African American or Latino living in Los Angeles and agency staff from CPIC sites. Their priorities, therefore, could differ from those of other ethnic groups, providers, or communities. Finally, results rest on interviews rather than observation of services or review of policies. While data come from participants in an intervention study, we used self-reported data from clients and program representatives from both study arms. Because there were no differences in priorities based on study arm, our results may have more general applicability.

Conclusion

Our findings are consistent with current whole person approaches to services and policies that address health and social needs through community and health system collaboration and suggest particular areas for future infrastructure and training capacity development.[43] Indeed,

the need for expanded research on community-based collaborative coalitions is substantial. A recent Cochrane review identified CPIC as the main rigorous study in the literature of added value of multi-sector coalitions to improve health of minority communities, thereby supporting our choice of focusing on CPIC clients and agencies to explore the concept of whole person care.[18] Moving forward, the larger literature on care coordination,[44,45] team-based models like ACT,[24,25] and quality improvement collaboratives[46,47] may provide conceptual models, multi-sector network structures, and management strategies that can support the development of best practices for integration.

CONFLICT OF INTEREST

No conflicts of interest to report.

AUTHOR CONTRIBUTIONS

Research concept and design: Khodyakov, Jones, Wells, Bromley; Acquisition of data: Khodyakov, Jones, Heller, Pulido, Bromley; Data analysis and interpretation: Khodyakov, Sharif, Jones, Bromley; Manuscript draft: Khodyakov, Sharif, Jones, Heller, Pulido, Wells, Bromley; Statistical expertise: Sharif; Acquisition of funding: Khodyakov, Wells, Bromley; Administrative: Sharif, Heller, Pulido; Supervision: Khodyakov, Bromley

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