Problem Management Plus:

An Evidence-Based Approach to Expanding Access to Community-Based Mental Health Supports

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INTRODUCTION

The COVID-19 pandemic exacerbated and brought to light the urgent need for behavioral health care services (inclusive of mental health and substance use disorder services) across the nation, including in the Commonwealth. According to the Blue Cross Blue Shield of Massachusetts Foundation's Massachusetts Health Survey (MHS), which was fielded between December 2020 and March 2021, more than a quarter (27%) of Massachusetts adults reported a behavioral health care need for themselves over the past 12 months, which coincided with the onset of the COVID-19 pandemic. The level of need for behavioral health care services was disproportionately high among certain groups of Massachusetts adults, including those who are racially, economically, culturally, or socially marginalized.[1]

Though the worst of the pandemic may be behind us, the need for behavioral health services remains high. For example:

- At the height of the pandemic (late 2020 to early 2021), over 40 percent of adults in Massachusetts reported symptoms of anxiety or depression. That rate has since fallen, ranging from 27 to 30 percent between March and September 2022.[2] However, the rate remains substantially higher than the 11 percent of adults nationally reporting symptoms of anxiety or depression in 2019.[3]
- Prior to the pandemic, 30 percent of youth reported "feeling sad or hopeless almost every day for two weeks or more [to the extent] that they stopped doing some usual activities." This number increased to 34 percent during the fall of 2020,[4] and it remained at that rate between September and December of 2021. These numbers were substantially higher for LGBTQ+ youth.[5]
- Compared to 2019, estimated and confirmed opioid overdose deaths increased by 14 percent in 2021.[6] The Commonwealth's confirmed age-adjusted opioid-related overdose death rate per 100,000 for Black non-Hispanic males increased by 66 percent from 32.6 percent in 2019 to 54.2 percent in 2021. Furthermore, the Commonwealth's 2021 confirmed opioid-related overdose death rate of 118.6 per 100,000 for American Indian non-Hispanic men was almost three times higher than for men in other racial or ethnic groups.[7]

These data demonstrate the substantial increase in behavioral health needs since the onset of the pandemic and the disproportionate impact on communities that are racially, economically, culturally, or socially marginalized. In addition to there being a disproportionate need for services across different subgroups in Massachusetts, the MHS also revealed disproportionate challenges in accessing services. Overall, more than half (57%) of Massachusetts adults who needed behavioral health care either had difficulty getting appointments for care when needed or did not obtain any behavioral health care. Those who reported needing but not trying to get behavioral health care tended to be racially, economically, culturally, or socially marginalized.[8]

The survey results suggest a broad array of factors serve as barriers to seeking and accessing behavioral health services. One plausible barrier includes the shortage of behavioral health care providers who share the languages, cultures, and lived experience of communities of color and immigrants. Such concordance in identity has been found to increase trust between health care providers and clients and improve quality of care.[9] In addition, some populations prefer to seek support from families or religious organizations, may not be aware of formal behavioral health services other than psychiatric hospitalization, and/or are deterred from seeking behavioral health services due to fear of being stigmatized by their communities.[10, 11]

Adding to the preexisting challenges of meeting demand for behavioral health services and particularly the needs of racially, economically, culturally, and socially marginalized groups, the pandemic reduced the behavioral health system's overall capacity as many licensed professionals left community behavioral health organizations for settings with better pay or left the field due to burnout.[12] This has exacerbated wait times for services.[13] Building behavioral workforce capacity and expanding its diversity will require continued investment and time to train a robust new cadre of behavioral health providers.[14]

Internationally, Problem Management Plus (PM+) is a proven, scalable, and cost-effective low-intensity mental health intervention that can be delivered by trained non-clinical workers or lay community members. PM+ fills a gap in the behavioral health services system by providing early intervention and potential prevention of more acute behavioral health service needs, and since it relies on building the capacity and diversity of the behavioral health workforce, it holds promise for enhancing access to community-based mental health supports in the United States.

This issue brief is designed to define and describe the PM+ intervention and its origins and identify preliminary considerations for implementing it in the United States. This report complements the Foundation's Advancing Community-Driven Mental Health (ACDMH) grant program. Through ACDMH, the Foundation is providing support to community-based organizations (CBOs) to adapt and implement the PM+ intervention with the aim of expanding access to culturally appropriate low-intensity mental health supports among racially, economically, culturally, and socially marginalized communities. This issue brief was informed by a review of peer-reviewed literature, a landscape scan, and interviews with program managers and individuals involved in the implementation and delivery of PM+, or a close variant of PM+, at four sites in the United States. It is important to note that these sites are at varying stages in their implementation of PM+ and that these interviews were conducted several months ago so many of these programs have evolved since the time of these interviews. While some of the U.S.-based PM+ programs began three to four years ago, the COVID-19 pandemic required some of these programs to halt or adjust their operations. Still, some of these earlier programs have begun to expand, while others are in much earlier stages of implementation. Nonetheless, all are new programs and therefore this issue brief focuses on describing the components of the PM+ intervention and highlighting *preliminary* lessons from *implementing* the intervention; there is not yet sufficient experience or data to speak to measures such as total number of individuals served, program efficacy, or cost impacts for these U.S.-based sites.

> PM+, as will be described in more detail, is an evidence-based low-intensity intervention aimed to improve aspects of mental health and psychosocial well-being. It is not an intervention for substance use disorders and therefore the terminology when referring to PM+ shifts from behavioral health (encompassing mental health and substance use disorders) to mental health.

BACKGROUND: THE WORLD HEALTH ORGANIZATION INTERVENTION

The World Health Organization (WHO) developed PM+ for use in moderate- to low- income countries with limited behavioral health services. The intervention is delivered by a trained non-clinical workforce (or lay providers) for people who are experiencing common mental health symptoms, such as anxiety or depression, or stressful life problems.[15] PM+ is a strength-based approach that uses evidence-based tools to help participants set and make progress on their own goals. Four major "problem solving behavioral techniques" are delivered in five 90-minute face-to-face sessions during which the techniques are explained, and participants identify ways that the techniques can be applied to their self-identified problems.

PM+ is transdiagnostic, meaning that it applies "the same underlying principles across mental disorders, without tailoring the protocol to specific diagnoses."[16] PM+ has been delivered primarily to individuals, though PM+ for groups is also being evaluated.[17] It is designed as a generic intervention with the expectation that it can be systematically adapted to various languages, settings, and cultural contexts while retaining fidelity to the evidence-based techniques.[18]

PM+ Problem Solving Behavioral Techniques
1. Stress management through relaxation
2. Practical problem management
3. Behavioral activation
4. Accessing social support

Who delivers PM+?
There are many terms used to describe the lay staff trained to deliver PM+. WHO uses the term "health worker." In other instances, when a person trained to deliver PM+ has an existing position and title – such as nurse or community health worker – their title may be used. More generic terms may include intervenors, intervention-ists, facilitators, and helpers. As part of the development of its grant program, the Foundation defined lay staff providing PM+ services as "non-clinical workers." Throughout this issue brief, the terms non-clinical workers, lay people, and lay providers will be used interchangeably to refer to those who deliver PM+ services.

Implementation of the PM+ intervention includes the following key elements:

- **Participant identification, recruitment, and screening strategy**, including selection of the prioritized population (or population of focus) and the personnel to deliver PM+.[19] This includes implementing a process to recruit and screen potential PM+ participants using one or more WHO recommended tools to identify individuals who may be appropriate for the PM+ intervention. For individuals identified through screening as having a severe mental illness, severe cognitive and/or neurological impairment, severe substance use disorder, high risk of suicide, or other conditions that PM+ would not be able to address, a clinician serving in the role of supervisor is notified and determines what kind of services would best meet that person's needs and/or makes appropriate referrals (this is described in more detail below).[20]

- **Customization of the intervention and implementation planning**, including modifying WHO's PM+ manual with mental health illustrations or case studies relevant to the population of focus and ensuring that participant materials are culturally appropriate while maintaining fidelity to the intervention's evidence-based techniques. Review of participant materials by local stakeholders who understand the population engaging in PM+ is necessary. In addition, it is important to develop partnerships with health care organizations that can provide referral services or more in-depth clinical interventions for individuals whose PM+ screening identifies needs that exceed what PM+ can suitably address.[21]

- **Training lay providers**. The clinicians trained in PM+ and serving in the role of supervisors provide seven to nine days (or approximately 80 hours) of training in PM+ to lay providers;[22] less PM+ training time is needed for those with previous mental health training. Training includes didactic presentations and review of the PM+ manual outside of class. In addition, there is considerable use of case studies and role playing to practice PM+ skills.

- **Supervising lay providers delivering PM+**. Supervision is intensive while lay people deliver PM+ for the first and second time; it often reduces as the person gains experience. Early supervision may include observation of one or more PM+ sessions. Group supervision and peer support of lay providers has also proven valuable. It is important for supervisors to assist lay providers who encounter a situation that cannot be addressed appropriately by PM+ and to make alternative treatment arrangements, including referrals to a higher level of care.

- **Monitoring individual outcomes**. The PM+ intervention builds in regular check-ins at each session to monitor the participant's distress about the problems that they are seeking to manage – that is, their goals. The participant and the lay provider work together to figure out how to use PM+ tools to improve management of the problem, or if the goal has been achieved and additional sessions remain, set a secondary goal. The screening tool used to identify individuals eligible for the program may also be administered at each session or at the conclusion of the final session to monitor individual progress and outcomes.

The PM+ intervention has a finite set of meetings and exercises, and the final session focuses on helping participants to continue effective management of their problems and developing strategies for addressing a relapse should it occur.

Who is suitable for participation in PM+? PM+ is suitable for adults suffering from symptoms of common mental health problems (e.g., anxiety, stress, or grief), as well as self-identified practical problems (e.g., unemployment or interpersonal conflict); it is not suitable for people with severe mental health problems (e.g., individuals with psychosis or imminent risk of suicide).

Tools to identify participants and monitor progress and outcomes:
WHO adapted Version 5 of the Psychological Outcome Profiles (PSYCHLOPS) questionnaire, which asks a potential participant to identify the problem that troubles them most, how much the problem has affected them, and one activity or action that is hard to do because of the problem. This tool is also used in each PM+ session to gauge how the person is doing and whether a new problem has arisen.

In addition to PSYCHLOPS, WHO also recommends the following two validated tools for screening potential PM+ participants and monitoring outcomes: the WHO Disability Assessment Schedule (WHODAS 2.0), a 12-item tool for assessing disability and level of functioning, and the Patient Health Questionnaire (PHQ-9), a nine-item tool for assessing frequency of symptoms of depression. WHO also supports use of other screening tools, multiple screening tools, or variations of these screening tools to assess suitability for participation in PM+, as long as they have been validated in the language being used.

APPLYING PM+ IN THE UNITED STATES: KEY CONSIDERATIONS AND INITIAL LEARNINGS

The success of the PM+ program overseas has prompted researchers to explore the viability of using PM+ to expand access to mental health services in the United States. To inform this issue brief, the leaders of four U.S.-based sites that have recently implemented or are in the process of implementing the PM+ intervention, or a close variant, were interviewed. Staff from Partners In Health who have assisted some of these U.S.-based sites in their rollout of PM+ and who have extensive experience implementing PM+ in low- or middle-income countries, including Malawi, Peru, Mexico, and Rwanda, were also interviewed.

The table on page five provides an overview of the U.S.-based sites that were interviewed for purposes of this project.[23] It should be noted that the Western Massachusetts intervention, known as PMPI+ (Problem Management Plus Immigrants) is not sufficiently loyal to the WHO intervention to officially be considered PM+. More specifically, the supervisors in this intervention are not clinicians. Field supervision of lay providers is provided by community leaders (e.g., pastors) who have mental health experience, community health worker certification, and in some instances, supervisory experience, however they are not licensed clinicians. In instances where lay providers have a question or concern that is better suited for a clinician, the question or concern is elevated to the program director, who then engages with a clinician and reports back to the lay provider. Interviews with those leading implementation of this program indicated that they view their approach as preventative, with the program focused on sharing a set of tools and techniques that can be relied upon to assist with a broad range of stressors and challenges. Given this focus and approach, interviewees indicated that they have not experienced significant need to escalate issues to a supervisor with clinical training. Nonetheless, the PMPI+ program is included in this brief because it provides some important lessons that may be used to inform implementation of future PM+ programs in the United States.

As mentioned above, there are core components of PM+ that must be maintained to ensure fidelity to this evidence-based intervention, though some aspects of PM+ may be adapted to best meet the needs of the participating population(s). This section describes ways the U.S.-based sites have implemented, and in some cases adapted, components of PM+ to best meet community needs while maintaining fidelity to the PM+ intervention (except for the PMPI+ program). Overall, research conducted for this paper demonstrates that the PM+ intervention can be adapted and customized in a variety of ways to meet the needs of different populations, in a range of settings and formats both internationally and thus far in the United States.

OVERVIEW OF U.S.–BASED SITES INTERVIEWED

ORGANIZATION	UNIVERSITY OF SOUTH FLORIDA, BRIDGE CLINIC	THE FAMILY VAN	THE NEW SCHOOL	UNIVERSITY OF MASSACHUSETTS
Location	Tampa Bay, Florida	Roxbury, Dorchester, and East Boston, Massachusetts	New York, New York	Western Massachusetts
Delivery Format	Individual, in person (clinic setting)	Individual, majority virtual	Individual, virtual	Family unit, in person
Priority Population	Spanish speaking and other patients from the free Building Relationships and Initiatives Dedicated to Gaining Equality (BRIDGE) clinic at the University of South Florida (USF)	Adult community members from historically marginalized communities of Boston seeking free health screenings, education, and referral services from the Family Van (a mobile clinic)	Initially made available to students at one university in New York and then expanded to staff and students at another college; currently expanding to reach clients of CBOs across New York City	Bhutanese refugees settled in Western Massachusetts
Lay Providers	Spanish speaking USF social work student volunteers	Community health workers (CHW)	First-year PhD and master's clinical psychology students and trained staff at participating CBOs	Bhutanese community members
Training of Lay Providers	In-person lectures by a doctoral social worker plus virtual work using an online course content platform	Initial training conducted by Partners In Health psychiatrists and psychologists

Ongoing training by a Licensed Independent Clinical Social Worker (LICSW) using a five-week hybrid model of virtual and in-person instruction | Virtual training by a master's level clinician using a variety of online learning and evaluation platforms | In-person training by a clinical psychologist |
| **Supervision** | Clinical social worker meets with social work students prior to, and immediately after, all sessions | LICSW and senior CHW provide supervision; start with weekly group supervision, then evolving to bi-weekly group meetings and individual check-ins | Licensed Clinical Social Worker (LCSW) and PhD students provide supervision; start with weekly supervision before scaling back to once a month; many of these supervisors first begin by serving in the "lay provider" role before assuming supervisor responsibilities | Two lay providers visit with each family; one supervises while the other implements the protocol (and each gets an opportunity to implement and to supervise)

Field supervision is also provided by community leaders with mental health experience and CHW certification; they are required to visit a family session at least twice (out of five total sessions) |

PARTICIPANT IDENTIFICATION, RECRUITMENT, AND SCREENING STRATEGY

A critical first step in implementing the PM+ intervention is determining the population that will be provided the services and then discerning appropriate recruitment and screening strategies for program participation. Health care settings, such as a free clinic or a walk-in mobile primary care van, seem to be ready-made venues for identifying and assessing potential participants for PM+. One mobile clinic site invited their clients who showed signs of emotional or other distress to consider PM+, and if interested, staff initiated the screening process. Two sites took referrals from health care clinics affiliated with their schools and screened referrals to determine interest and eligibility for participation. Community-based settings are also important places to consider for identifying and recruiting potential participants as they may provide the advantage of reaching individuals who are hesitant to interact with more traditional health care clinics or venues for a variety of reasons. For example, the Western Massachusetts site relied on community leaders who served the immigrant community to identify families that could benefit from their PMPI+ program.

It should be noted that receiving help for mental health issues is often stigmatized. The U.S. PM+ sites have found creative ways to address potential stigma. The Boston site held focus groups at each of its four locations to inform the structure and design for delivery of PM+. It also worked with two advisory councils to create a mental health anti-stigma campaign in the communities it planned to serve. Program staff who would be delivering PM+ contributed to a plan for marketing PM+ in a way that was linguistically appropriate and culturally responsive while accounting for potential stigma; they described PM+ as a method for addressing everyday stress and problems rather than framing it as a mental health program. Furthermore, initial conversations with a potential participant focused on describing how CHWs will work collaboratively with the participant to address their stressors and problems, again to avoid describing PM+ as a mental health support program. Along similar lines, the Western Massachusetts site describes PMPI+ as a useful tool to help reduce stress.

CUSTOMIZATION OF THE INTERVENTION AND IMPLEMENTATION PLANNING

Though these U.S.-based sites are still in the relatively early stages of implementing their programs, some were able to provide specific examples of ways that they have adapted their programs to align with the language, cultural, and other preferences of the communities they serve or plan to serve. At one site, in alignment with the WHO recommendation to ensure that program materials are appropriate for the community being served, program administrators facilitated a translation of the survey questionnaires with the help of two translators, an expert panel, and pre-testing among 10 community members.[24]

Another site shared an adaptation of the intervention intended to better meet the needs of the community it was serving and enhance the likelihood of continued participation and engagement. In this case, the site modified the format of the PM+ intervention from five 90-minute sessions to shorter increments of time in response to participants' difficulty in dedicating a full hour and a half of time to each session.[25]

TRAINING LAY PROVIDERS

Selecting Individuals to Train
The PM+ manual suggests that lay providers (i.e., the people delivering the PM+ intervention), at a minimum, are high school graduates, or have a high school level of education, and are motivated to help members of their community.[26] Each of the U.S. programs met these minimum criteria, and sites generally sought individuals who demonstrated authenticity, skill in connecting to people, empathy, and who were able to establish self-care practices.[27] At the same time, the characteristics, experience, and background of the lay providers trained to deliver PM+ varied, demonstrating the flexibility and adaptability of this intervention.

For example, some of the organizations interviewed trained people without prior mental health experience, including CHWs, CBO staff, and in the case of the Western Massachusetts site implementing PMPI+, members of the Bhutanese community. Bhutanese community members were identified by community leaders with intimate knowledge of the needs of the community.[28]

In other cases, sites trained individuals with prior mental health training, including social work students and doctoral psychology students. One of these sites sought to build the capacity of its PM+ program by first training students in graduate mental health professional programs, with the expectation that some would become a cadre of trainers and supervisors for additional sites implementing PM+.

Training Methods and Resources
All four sites followed the WHO's PM+ recommendations for providing lay providers with seven to nine days of training in PM+. However, all sites found that freeing up staff for a two-week, full-time training was a challenge, and as a result, program administrators adapted the training schedule, format, and timeline to better meet the needs of trainees. For example, one site used a hybrid training structure that included both in-person live sessions and self-paced asynchronous virtual learning sessions tailored to the learning preferences of the individuals being trained. Another site found it more effective to provide training in increments spread out over a month or so rather than requiring 80 hours in succession.[29] In this case, in contrast to the site described above, trainees actually found it challenging to carve out time for asynchronous learning; in response, the trainer increased class time.[30] In addition, the trainer assigned each trainee a "buddy" with more experience implementing PM+ to support trainees between classes. In line with the PM+ guidelines, a site that was training social work students was able to shorten the training to five days (40 hours) since these individuals had already been trained in mental health topics and listening skills.[31]

Since much of the training was virtual during the COVID-19 pandemic, sites used a variety of platforms and tools to accommodate online learning. For example, one site produced demonstration videos with PM+ trainers role playing both participant and lay provider interactions. This site also used Zoom breakout rooms to separate trainees into pairs to practice skills or practice presenting parts of a PM+ session. The instructor was able to drop into the breakout rooms to observe and answer questions and to provide immediate feedback. Sometimes asynchronous practice sessions were recorded for instructor review.[32]

SUPERVISING LAY PROVIDERS

WHO recommends that supervisors of the PM+ intervention be mental health clinicians with experience in cognitive behavioral therapy (CBT). If it is not possible to have supervision from mental health clinicians with experience in CBT, WHO recommends that supervisors have training and practice in the methods used in PM+ and experience in supervision. WHO also recommends close supervision of new lay providers for at least their first two full sessions delivering PM+.[33]

Three of the four sites used mental health clinicians as supervisors and provided weekly supervision support for the lay providers over the course of their first two cases, with supervision declining to twice monthly over time. Ongoing supervision varied across sites, with some sites providing supervision in groups with individual supervision provided as needed. Group supervision included case presentations followed by discussion, problem solving for shared challenges, and skill building exercises.[34] One site described their group supervision as a place where the CHWs providing the PM+ intervention could speak freely about difficult participants, get support, and participate in skill building exercises.

As described above, the Western Massachusetts site did not rely on mental health professionals as direct supervisors. Rather, supervision training was provided to both the community leaders serving as field supervisors and the Bhutanese community members serving as lay providers. Lay providers visited homes in groups of two,

with one person serving as a "peer supervisor." Community leaders also observed service delivery at each site twice, and both community leaders and clinical psychology staff were available for additional consultation, however clinical staff were not part of the core supervision in program implementation.[35]

In addition to providing supervisory guidance in implementing PM+, some sites sought other ways to support lay providers, recognizing that mental health work can add unanticipated stress to their lives. For example, some sites incorporated self-care check-ins between supervisors and lay providers. One site added several hours of training by a yoga instructor to supplement the techniques included in PM+.[36]

MONITORING INDIVIDUAL PROGRESS AND OUTCOMES

The PM+ intervention uses PSYCHLOPs at each PM+ session to check in with the participant regarding their priority problems and whether any significant new problems have arisen. In addition, the screening tools for functioning and depression (i.e., WHODAS 2.0 and PHQ-9, mentioned above) can be repeated after completing the full PM+ intervention, usually two weeks and/or three months post-completion, to measure change over time.[37] All of the sites interviewed used one of these tools described above in alignment with WHO recommendations for initial screening and either monitoring individual progress over the course of the intervention and/or at the end of the intervention.

EVALUATING THE IMPACT OF PM+

Sites can use the tools mentioned above to assess change in an individual's functioning and distress, but these programs have not yet been in effect for a sufficient period of time to support evaluation of the efficacy of PM+ in improving the mental health status of program participants in the United States. The U.S. sites are in the early stages of implementation, and at the time of this publication, only a small population of people had been served by such programs. However, some program evaluation is underway.

For example, two of the four sites are engaged in formal research studies with an evaluation component. The New York site has funding from the National Institutes of Health for a cluster randomized controlled trial that compares PM+ provided by trained staff at 20 CBOs with care as usual at 20 standard CBOs.[38] In addition to the WHO recommended measures, they will use smartphones to collect digital data (steps, physical activity, socializing, sleep) to objectively measure emotional regulation and distress tolerance for both the PM+ group and the controls. The evaluation will also include an economic analysis regarding health care costs among those who receive the PM+ intervention compared to those who do not.[39]

The Western Massachusetts PMPI+ intervention, funded by the National Institutes of Health, is also conducting an evaluation using a control group that will participate in PMPI+ once the evaluation component is complete. It is using a structured questionnaire that will be implemented at baseline, upon completion of PMPI+, and three months post-completion. In addition, it will collect and test hair samples at baseline and post-completion using the ELISA cortisol hair test, an indicator of chronic psychological stress.[40] The hope is that those who have completed PMPI+ will demonstrate a reduction in the amounts of cortisol detected in the ELISA cortisol hair test compared to those who did not participate program.

CONCLUSION

PM+ holds promise for becoming an important intervention for expanding access to mental health supports as part of the broader behavioral health system in the United States. Evidence to date, taken from other countries, indicates that PM+ is a valuable intervention for addressing anxiety, depression, and stress that can be delivered and maintained at low cost compared to more conventional clinical services; this success has prompted sites in the United States to begin to test its application domestically.[41,42,43] Though further experience and evaluation are required, this intervention for providing community-based mental health support may play an important role in addressing stress and mild mental health problems before clinical care is required, or instead of formal clinical care, reducing the demand for the limited supply of behavioral health professional services.

Given that efforts to expand and diversify the clinical behavioral health workforce will take years, PM+ may prove particularly promising in the short term by improving access to mental health services provided by individuals who are racially, economically, culturally, or socially marginalized and who share the cultures and experiences of community members who might be interested in participating in this program. PM+ may also serve as an additional pathway for recruiting candidates from racially, culturally, or socially marginalized groups for further training in behavioral health.

As PM+ implementation in the United States expands, including through the Foundation's Advancing Community-Driven Mental Health grant program, it will be critical to measure the health and financial impacts of the intervention, as well as its impact on participants' levels of stress, anxiety, and other challenges of daily living. As we look ahead, this evaluation and experience will be critical in considering if and what role PM+ may have as an essential supplement to the existing mental health services system.

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