



# Residential addiction treatment providers: Identifying the role of social context in worker health and turnover

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## ABSTRACT

Increased lethality and availability of addictive substances has strained US addiction treatment services, further exacerbating workforce shortages in these settings. The emotional and physical health toll of providing treatment may contribute to shortages. This community-initiated qualitative study aimed to identify conditions that affect provider health and turnover in residential addiction treatment from a Total Worker Health® perspective. Providers (direct service, supervisors, leaders) working in nonprofit residential treatment facilities in Massachusetts were recruited by role and geography to participate in interviews and focus groups. NVivo12 facilitated coding and analysis. 25% of transcripts were double coded to assess interrater reliability and coding consistency (mean Kappa = 0.82). Providers (N = 49) participated in 33 interviews and 4 focus groups. Many participants reported personal addiction histories. Analysis revealed how socio-contextual factors originating outside of residential facilities were dominant influences on “downstream” working conditions, worker health, staff turnover, and by extension, client care. Four primary socio-contextual themes surfaced: 1) Changes in type and potency of substances and client need not reliably accompanied by shifts in treatment practices; 2) challenges balancing state requirements and state-provided resources; 3) influence of structural discrimination and addiction stigma on pay and professional advancement; and 4) geographic location of facilities shape work and quality of life. Results were used to develop a conceptual model for residential addiction treatment to illustrate pathways by which ecological factors interact to affect provider health and turnover. Findings indicate that protecting health and wellbeing of providers—many of whom are in addiction recovery themselves— is integral to improving addiction treatment. From this workforce’s perspective, recent changes in socio-contextual factors have intensified already challenging working conditions (job demands, pay, advancement), negatively impacting worker health, turnover, and client care. Any interventions to improve treatment outcomes or working conditions in nonprofit addiction facilities must consider larger socio-contextual factors influencing these organizations.

## 1. Introduction

The marked rise in severe substance use—frequently referred to as the “opioid epidemic” due to increased availability of prescribed, illicit, and synthetic opioids—has strained addiction treatment services across the United States, especially public and nonprofit services (Beck et al., 2018). In 2020, 40.3 million Americans met criteria for a substance use disorder (SUD), representing approximately 14.5% of the population

(Substance Abuse and Mental Health Services Administration, 2021). With the COVID-19 pandemic, rates of drug overdose deaths increased 30% from 2019 to 2020 (Ahmed et al., 2021), further stretching addiction treatment services (Beck et al., 2018). This strain is exacerbated by shortages of addiction treatment providers in the workforce. The U.S. Health Resources Service Administration anticipates that the U. S. will fall 250,000 workers short of providers needed to meet addiction treatment demand by 2025 (Beck et al., 2018; National Center for

*Abbreviations:* Substance use disorder, SUD; Massachusetts Office of Health and Human Services, HHS.

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Health Workforce Analysis, 2016). Workforce attrition, which may be as high as 50%, contributes to this shortage (Beck et al., 2018; Bride and Kintzle, 2011; Alagoz et al., 2017). While most of documentation of this “epidemic” has been in the US, other countries (e.g. Canada, Australia) have experienced worrying addiction trends as well (Ho, 2019; Skinner and Roche, 2021; Olding et al., 2021; Rachiotis et al., 2021).

An often-overlooked consequence of providing addiction treatment is the psychological strain and physical health impact of this work on providers, such as clinicians, case managers, and residential assistants. This job strain may contribute to high workforce turnover within organizations and attrition from the field—a barrier to effective and consistent care delivery (Bride and Kintzle, 2011). Much of the local and national response to the “opioid epidemic” has focused on policies, programs, and treatment options for individuals experiencing addiction as well as primary prevention interventions (Gostin et al., 2017; Kolodny and Frieden, 2017). Policies and practices to protect health and wellbeing of existing providers have not received the same consideration (Hoge et al., 2013). Better understanding experiences of providers has the potential to provide insight into how to protect and support their health and wellbeing, minimize turnover, and ultimately improve client recovery outcomes at addiction treatment facilities.

### 1.1. Working in addiction treatment

The existing literature on the addiction treatment workforce has identified several key factors across socio-ecological levels important to understanding how working conditions may affect provider health and wellbeing. These studies are often cross-sectional, limited by small convenience samples, and were largely conducted before the rapid climb in SUDs in many US communities. Nonetheless, such studies have identified high prevalence of burnout (33–50%) (Skinner and Roche, 2021; Pike et al., 2019; Oyefeso et al., 2008), secondary traumatic stress (20–56%) (Ewer et al., 2015; Bride et al., 2009), psychological distress (82%) (Oyefeso et al., 2008), PTSD-related symptoms (19%) (Bride and Kintzle, 2011; Bride et al., 2009), and substance use among providers (38%) (Jones et al., 2009), with higher rates of secondary traumatic stress and burnout associated with low job satisfaction and occupational commitment (Bride and Kintzle, 2011; Skinner and Roche, 2021).

At an interpersonal level, studies find that supervisor and coworker support for providers in addition to interactions with clients are correlated with worker health and wellbeing, job satisfaction, and staff turnover in addiction treatment (Skinner and Roche, 2021; Ewer et al., 2015; Bogo et al., 2011; Knudsen et al., 2003; Ducharme et al., 2007; Bride et al., 2015). Greater coworker support and reflective supervision can reduce emotional exhaustion among providers will increasing professional satisfaction and intentions to stay at their job (Bogo et al., 2011; Ducharme et al., 2007). Such supports are critical in these occupational settings as over half of providers experience physical or verbal violence by clients—impacting their sense of safety and client care provision (Bride et al., 2015). Organizational factors may also influence addiction treatment provider wellbeing, job satisfaction, and turnover. Several studies have identified low pay as a primary concern for workers and a contributor to burnout and decreased job satisfaction (Olding et al., 2021; Duraisingam et al., 2009; Gallon et al., 2003). High case-loads and job demands are associated with worker burnout, secondary traumatic stress, and turnover (Skinner and Roche, 2021; Pike et al., 2019; Ewer et al., 2015; Broome et al., 2009; Garner and Hunter, 2014). Conversely, organizational cultures and policies that encourage job latitude and autonomy may decrease burnout (Rachiotis et al., 2021; Ducharme et al., 2007) and turnover (Knudsen et al., 2003).

These studies help to identify key working conditions and their associations with provider health, wellbeing, and turnover—confirming what many providers inherently know to be true about their work environments. However, these findings are often presented without consideration of larger socio-political and geographic contexts in which these individuals live and work (Olding et al., 2021; Oser et al., 2013a).

Whether factors are transferable across different locations, professional roles, time periods, and facility type is less clear.

One type of facility that has received little attention in addiction treatment research is residential treatment facilities, and these providers constitute 25–30% of the workforce (email communication, Bureau of Substance Addiction Services, September 2022). These licensed congregate care facilities provide post-detoxification clients with professional SUD treatment and case management while residing at facilities for 3–6 months (Massachusetts Bureau of Substance Addiction Services, 2021). Staff in these settings provide 24/7 care (similar to hospital-based programs) to clients who may work and spend time outside of the facility (similar to outpatient programs). These clients may be at higher risk of relapse than clients in hospital-based or outpatient programs since they spend time in the wider community while early in recovery from severe SUDs (Massachusetts Bureau of Substance Addiction Services, 2021). Thus residential facilities are a key link in the addiction recovery care continuum with specific work challenges. A healthy, robust residential workforce that is equipped to successfully guide clients through this critical period could therefore substantially impact client outcomes.

### 1.2. Bringing a Total Worker Health® perspective to this study

We view workplaces as fundamental determinants of health and recognize the influence of design and organization of treatment facilities, client-provider social interactions, and interactions between staff on health and wellbeing of providers (Lovejoy et al., 2021). Thus, this study aimed to identify conditions that affect organizational, provider and client health and wellbeing in residential addiction treatment from a Total Worker Health® perspective (Chari et al., 2018; Sorensen et al., 2020). Total Worker Health® is a comprehensive framework for evaluating how worker health is affected both by biopsychosocial work factors and larger socio-contextual factors outside of the workplace (Chari et al., 2018; Sorensen et al., 2021). Using a community-based qualitative approach, we also aimed to identify relationships between these within-workplace and beyond-workplace factors to inform development of a conceptual model integrating those pathways from providers’ perspectives. This study focused on non-profit, state-supported residential facilities in Massachusetts, a state with one of highest opioid overdose death rates in the US (increasing 6-fold since 2000) (National Institute on Drug Abuse, 2020). This context contributes to particularly challenging and evolving work environments, providing insight into contexts in which working conditions, provider health, and client care and outcomes are shaped.

## 2. Methods

### 2.1. Theoretical orientation and guide development

This qualitative study was initiated by addiction treatment providers, and a provider served as an integral part of the research team. Development of interview and focus group guides was informed by Total Worker Health® frameworks (Lovejoy et al., 2021; Chari et al., 2018; Sorensen et al., 2021), psychosocial stress theories (Kubzansky et al., 2014; Cohen et al., 1995), and addiction treatment literature (Bride and Kintzle, 2011; Ducharme et al., 2007; Bride et al., 2015; Azagba and Sharaf, 2011; Cunningham, 2016; van Berkel and Knies, 2016). Interview and focus group guides were designed to ask parallel questions and probes. Guides were organized around four primary domains: 1) path to participant’s current position; 2) occupational challenges and rewards; 3) how work environments positively and negatively affects staff health; and 4) suggestions to support providers and how this would affect client care. Guides were modified with feedback from experts in Total Worker Health®, qualitative methods, and addiction treatment and with piloting among participants. This study was approved by the Harvard Longwood Campus IRB.

## 2.2. Study sample, setting, and data collection protocol

Providers working in licensed nonprofit residential addiction treatment facilities in Massachusetts were purposively recruited according to organizational role and geography to participate in semi-structured interviews or focus groups. We contacted 42 residential facilities, identified through a state-wide coalition and internet searches. Fifteen organizations were interested in participating and shared study information with staff. Participant recruitment is illustrated in Fig. 1.

Participants included leaders, supervisors, and direct service providers (clinicians, case managers, and residential assistants who may also be recovery coaches) (Fig. 2).

Participants were required to be conversant in English, 18+ years old, and employed at the organization for >3 months. Leaders and supervisors participated in individual interviews (range: 30–127 min) conducted by the first author over the phone or secure video conferencing. Direct service providers were given the choice to participate in an interview or a 90-min focus group. Focus groups were stratified by occupational role to minimizing occupational power differentials and were facilitated by the first author and either the provider-researcher or another qualitative researcher via video conferencing. During data collection, the lead author used an iterative monitoring process to record new topics and differences in perspectives that emerged to monitor saturation level. Data collection occurred February–June 2021 and was stopped when no new content emerged with each subsequent interview or focus group (Saunders et al., 2018).

## 2.3. Analysis, quality assessment, and trustworthiness

All interviews and focus groups were audio recorded and transcribed

verbatim with exception of one participant (detailed notes taken upon request). We used NVivo12 to facilitate thematic analysis. As a first step, a code book was constructed with theoretical constructs and through an open-coding process with a sample of transcripts representing different occupational roles. This code book was piloted by two independent coders and modified for conceptual clarity.

The first author coded all transcripts, and 25% of transcripts were double-coded by an independent researcher to identify inconsistencies and differences in interpretation. Inter-coding reliability was iteratively calculated using the Kappa statistic. When  $Kappa < 0.6$  for any code, the team met to resolve discrepancies. The final mean Kappa across all codes was 0.82 (range: 0.61–1.0) (Viera and Garrett, 2005). Data within and between codes were then grouped and summarized to structure an immersion-crystallization approach to identify themes and subthemes through which to understand participant experiences. Throughout all study stages, we iteratively documented our group and individual reflections to better understand positionality, interpretation, and shared and differing researcher-provider experiences to inform analysis (Peshkin, 1988; Stelson, 2021).

## 3. Results

### 3.1. Overview

A total of 49 individuals across 15 organizations participated in either an interview ( $N = 31$ ) or focus group ( $N = 18$ ). Participants predominantly identified as White and represented all regions of Massachusetts, with heavier representation from the greater Boston area. While not specifically asked, over half of this sample reported themselves in SUD recovery (Table 1), often describing how they were drawn

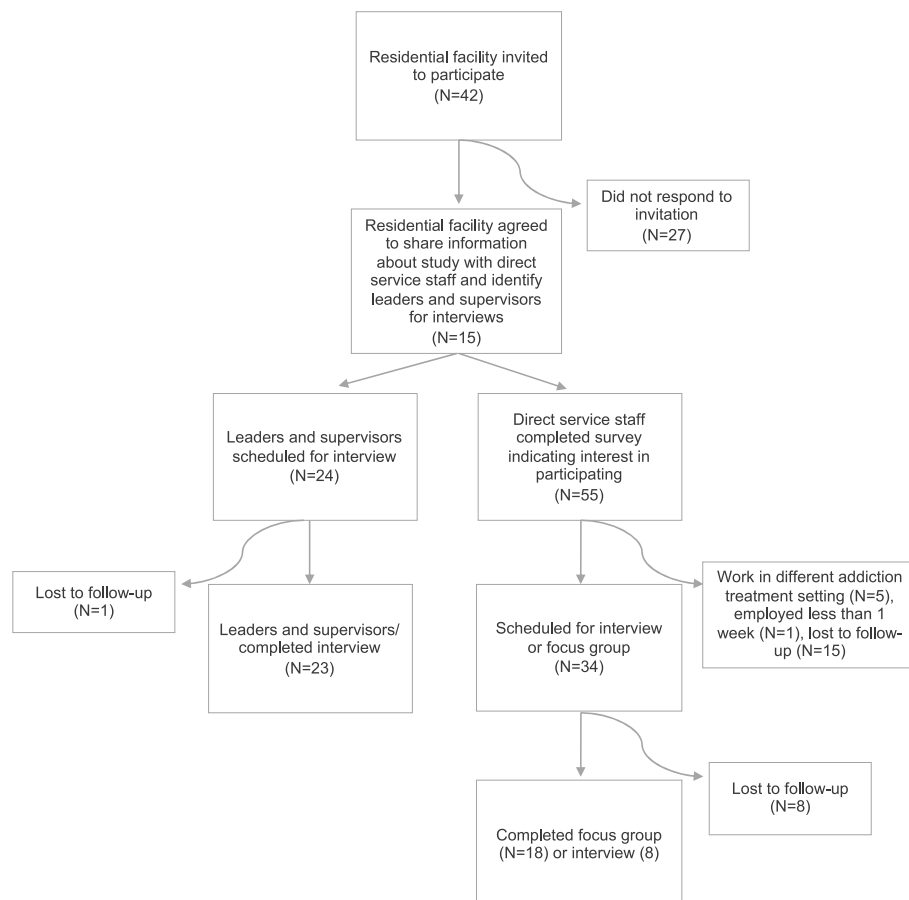


Fig. 1. Recruitment of residential addiction treatment facilities and participants.

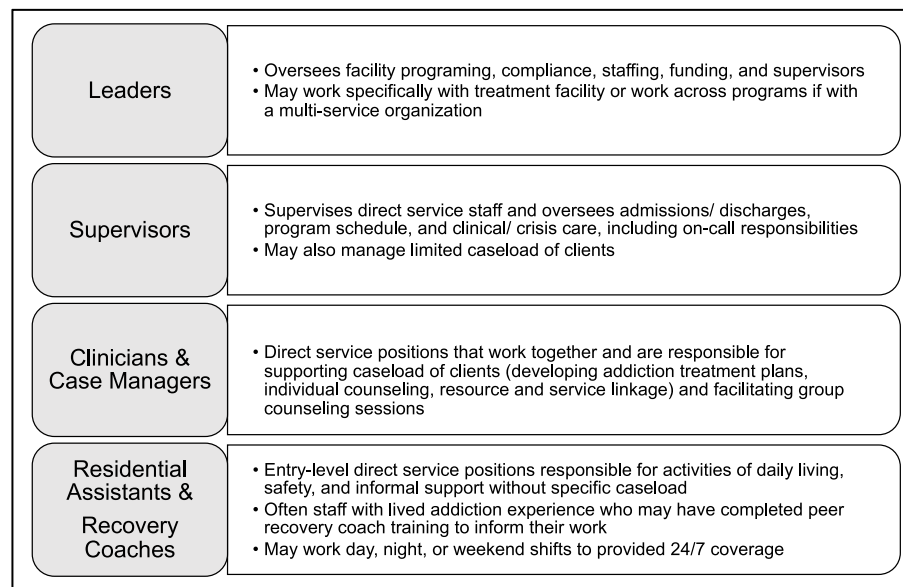


Fig. 2. Description of participant occupational roles.

**Table 1**  
Characteristics of purposive sample of residential addiction treatment workers in Massachusetts.

Participant Characteristic	N = 49
Position	
Residential assistant/Recovery coach	13 (27%)
Clinician/Case manager	13 (27%)
Supervisor	13 (27%)
Leader	10 (20%)
Self-disclosed SUD history <sup>a</sup>	26 (53%)
Gender	
Woman	26 (53%)
Man	23 (47%)
Nonbinary/gender-queer	0 (0%)
Age (years)	
18-34	16 (30%)
35-44	10 (20%)
44-54	8 (16%)
55+	15 (31%)
Racial-ethnic self-identification <sup>b</sup>	
White	40 (82%)
African American/Black	5 (10%)
Latinx/Hispanic	4 (8%)
American Indian/Native American	1 (2%)
Asian/Pacific Islander	1 (2%)
Caribbean	1 (2%)
Time worked at facility	
<1 year	8 (16%)
1-2 years	15 (31%)
3-5 years	15 (31%)
6-10 years	5 (10%)
10-15 years	2 (4%)
10-15 years	4 (8%)
Size of participant's facility	
<20 beds	4 (8%)
20-29 beds	12 (24%)
30-39 beds	7 (14%)
40-49 beds	0 (0%)
50+ beds	26 (53%)

<sup>a</sup> No participant was asked if they had SUD history. Participants volunteered this background.

<sup>b</sup> Participants self-recorded multiple racial-ethnic identities. Frequencies exceed total number of participants.

to work in addiction because of personal experience.

From the perspective of participants, the role of larger socio-contextual factors originating outside of individual residential

facilities emerged as a dominant influence on working conditions, worker health and wellbeing, staff turnover, and client. As a result, we focused on contextual influences for further analysis, identifying four primary themes: 1) changes in type and potency of substances and client needs not reliably accompanied by shifts in treatment practices; 2) challenges in balancing state requirements with state-provided resources; 3) influence of structural discrimination and addiction stigma on pay and professional advancement; and 4) geographic location of facilities shape work and quality of life.

As part of our analysis, we also conceptually mapped how these socio-contextual themes influenced the cascading relationships between working conditions, worker health, turnover, and client care and outcomes; interact across ecological levels; and additional pathways and feedback loops illuminated through thematic analysis. Within each socio-contextual theme, we describe *downstream effects* explicitly guided by this conceptual model (Fig. 3).

### 3.2. Theme 1: Changes in type and potency of substances and client needs not reliably accompanied by shifts in treatment practices

Participants frequently referenced how both the nature of addictive substances and scope of client needs had evolved and intensified, while treatment practices at facilities remained largely static. They noted that the substances that clients use have changed substantially in terms of addictive properties, toxicity, lethality, and availability. One clinician spoke to this change: "Rarely do we get an old-fashioned alcoholic. We still get them, but that's a much smaller percentage of the people we have here, whereas it was the majority of people we had here for a long time." Observing increased toxicity of substances, one supervisor reflected:

I didn't hear about overdoses as much when I first started [in 2012]. And that was also when, as some of the clients will tell you, when heroin was heroin and before fentanyl took over the scene and became more dangerous ... So I think that has really changed the scene in regards to the overdoses and how easy it is to overdose .... If they're not dying, they are overdosing and coming to treatment and saying, "Yeah, I've had 50 overdoses in my life."

Participants also reported that changes in the nature of substances coincided with changing characteristics of clients. Workers with longer tenures noted that clients now tended to be younger with fewer life-skills, sometimes coming from families with intergenerational

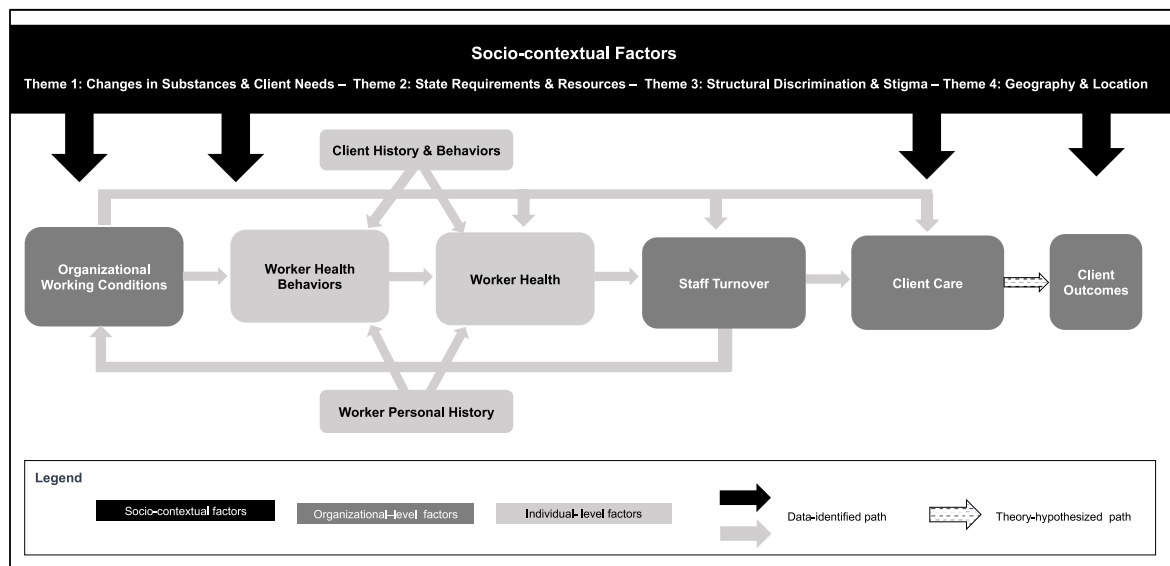


Fig. 3. Conceptual model integrating contextual factors into residential addiction treatment worker health and client care across ecological levels.

substance use. A leader observed:

For the last 8–10 years, it's been younger people with opioid use disorder. And what's different about that population is... they really lack the fundamental life skills to live independently, because they never learned them in the first place. A lot of our clients are second generation users ... or they were incarcerated at a really young age.

A number of participants also described how clients have more complex medication that staff needed to administer as non-medical professionals.

While substances and client needs have evolved, participants described how day-to-day treatment practices had not correspondingly changed, often creating friction within organizations as leaders sought to provide different treatment options. Across roles, participants described how work with clients remained rooted in the “Social Model,” based on 12-step peer treatment programs like Alcoholics Anonymous (AA), since this is what many providers in recovery had experienced when they had been clients. One residential assistant/recovery coach described challenges of learning new approaches to addiction treatment: “When I got clean 23 years ago, I went to treatment, and they said you go to AA or you'll use again. And me, to just be open-minded to multiple pathways of sobriety for each person. And I had to learn that though ... because I knew what worked for me.” At the same time, leaders and supervisors noted struggles with shifting the treatment orientation of the workforce to also include medication-assisted treatment, psychotherapeutic practices, and co-occurring mental health treatment in organizational practice. As one leader stated: “I'll say this for my people who work for me who are people with lived experience, and there's a lot of them. They have a hard time stepping outside of their own recovery when it comes to helping other people. They found a formula that works really well for them, and they've been successful with it. And it's hard for them to envision someone else being successful with different means.”

**Downstream effects:** Participants described how changes in illicit substances and client needs increased job demands and intensity. One leader explained changes in workload-per-client: “So not only are we treating people clinically, we're literally teaching guys how to do laundry or how to prepare a meal, and these are considerations we didn't necessarily have to worry about before.” With increased crisis management, a residential assistant shared how unpredictable workdays were the norm: “What you thought was going to be just kind of an uneventful day turns into the police coming or having to search the house

for fentanyl or somebody needs to be hospitalized, or whatever it might be ... So that can be draining, like never really knowing what your day is going to look like.” In addition to increased crisis response demands on providers, a supervisor described the corresponding new need to keep up with required client safety trainings: “Overdose reversal is a huge component. And that's one of the major traumas on the job. And that didn't exist as much when opiates weren't in the picture. So again, it comes down to training, making sure that people are aware. Even now, the landscape changes pretty regularly as to what we're needing to be aware of as new drugs of choice that are being used and what their effects are in terms of health and safety.” However, when listing all the state-required trainings staff must complete each year, another supervisor stated: “But I think that doesn't even really touch what we need the training on [to treat addiction].”

Participants described how the mental and physical health of providers had been impacted by changes in substances and client needs. Increased lethality of substances and precarity of clients has resulted in more clients deaths. Participants frequently shared how their own mental health was directly impacted by exposure to traumatic events, exhaustion, and grief from clients who had died, as one residential assistant disclosed: “There are times when you remember somebody that you worked with in the program, and they did really well, then you find out they overdosed and they're gone. And then there are times when it just hits you and you cry.”

Changes in work demands also made it hard for workers to prioritize their own healthcare. One supervisor observed: “People will be like, ‘Oh, I have a doctor's appointment, that's okay, I can stay.’ And it's like, ‘No, you need to go to your doctor's appointment.’ ... If I've been on the phone with doctors all day and stuff, and to get home and have to continue doing this work for myself, that is very difficult.” Toxicity of substances also surfaced in transcripts as posing new risks of accidental occupational exposure for providers. Several participants recounted instances where staff were exposed to airborne fentanyl and needed emergency care.

The mental and physical health of providers who were in recovery appeared to be differentially affected by changes in substance and client needs. Participants shared concerns about coworkers struggling to maintain their recovery in response to increased work demands and intensity. One clinician shared: “I've lost friends in the field that didn't manage a healthy life-balance and relapsed, and then they're gone. And it's brutal.” Some participants noted how colleagues in recovery were more likely to be managing chronic conditions stemming from SUDs (e.



g. HIV, hepatitis C). De-prioritization of personal health care due to work fatigue would have greater impact on such chronic conditions.

### 3.3. Theme 2: Challenges balancing state requirements and state-provided resources

Participants in leadership and supervisory positions frequently described how regulations and mandates by the state dictated many working conditions at residential facilities. Participants described how low reimbursement rates for client care were set by the state, but were insufficient to cover many costs associated with other state regulations, namely 1) minimum staffing ratios; 2) increased hiring qualifications; 3) ad hoc “unfunded mandates.”

Participants often reported frustration with how the state set low reimbursement rates for the state’s Medicaid program (the primary insurance for clients accessing these facilities) in addition to not providing enough supplemental program funding. These funding sources were used to cover staff pay and benefits, which were in turn regulated by a state minimum wage guideline for these positions. Participants reported that reimbursement rates were informed by staffing costs projected by these state wage guidelines, which were, according to participants, themselves based on outdated cost of living and inflation calculations. One leader lamented the circular rationale for insufficient reimbursement and subsequent low wages: “So, when we would go up for a new rate review, what the state was doing was using that information from years prior, so it’s not even accurate information ... That’s been a discussion for 15 years.”

Inadequate state reimbursement for services interacted with other state requirements to shape working conditions in these facilities. A leader described how minimum staffing ratios had not been modified despite changes in substances and client needs, and now the facility had to choose between operating with fewer staff or struggle to find additional money to hire for positions unfunded by the state:

One of the big things is the regulations when it comes to staffing pattern, it has not changed in decades. So when we’re saying we have a different clientele than 20 years ago but [state agency] is saying that the same staffing pattern matches, it doesn’t ... We have two people who are solely [managing] the medication room ... That was a choice that we had to make knowing that we weren’t going to get reimbursed necessarily for that position.

At the same time, participants also reported struggling to hire staff at competitive rates given that the state had increased qualification to hold supervisory positions but reimbursement rates had not commensurately changed. As one leader worried: “There’s new regulations coming through this summer that on their face are a good thing. They’re upping requirements for our clinical directors .... But how are we supposed to pay for a [licensed clinical social worker] with the rates that we have now?.. We can’t find candidates now with those [current] rates.”

Leaders also described the organizational burden of ad hoc “unfunded mandates,” with which they were expected to comply without additional resources to do so. One leader complained: “These changes include a lot of unfunded mandates. So, these are things where the state says, we want you to do this, we know it’s going to cost you more money, but we’re not giving you any more money.” According to these participants, “unfunded mandates” further depleted available funds to improve working conditions at their facilities.

*Downstream effects:* Nearly all participants across all roles described how low wages were a primary drivers of staff turnover and attrition or a deterrent to working in addiction. Participants often emphasized how they were motivated to join this workforce by factors other than pay. However, pay was often insufficient to support their families, often requiring a second job if they were residential assistants. One residential assistant described her predicament: “So I’m a single mother. I have three kids and my husband’s passed away, so I have no choice but to work [two jobs]. So sometimes it’s like, I could go be a waitress and

probably make the same amount in a week that I make every two weeks. So I love doing this to help people, and it’s very satisfying, but sometimes it’s undoable for someone that needs to meet a financial obligation, working 70, 80 hours a week.” Leaders and supervisors shared a sincere desire to pay staff more, but an inability to do so due to low reimbursement rates that funded their services. One leader described the facility’s tight budget: “If we had the money, we would be paying these staff \$60,000 to \$70,000 a year to work direct care. That’s what they deserve ... But the reality is, these programs are not funded that way ... Our bed-rate is something like \$80 a day. We can barely keep the doors open on that.”

Participants across facilities and roles emphasized how low pay contributed to high turnover and attrition, often leaving positions unfilled. This was exacerbated by state-required qualification increases with wages lower than other social service and behavioral health fields. One supervisor shared: “If you were to ask me the number one challenge of my job, it would be hiring, because it’s so hard to attract a good applicant. They hear the pay, and they just ghost you.” Thus high turnover, increased qualifications, and low pay coalesced to generate chronic understaffing at some facilities, which risked compliance with the state’s staffing ratios. With vacant positions in these 24-hour facilities, work was redistributed to remaining staff, thereby increasing workload and generating a feedback loop (Fig. 3). One clinician described this loop: “The ratio is like 10-to-1 ... If a [clinician] leaves, then you’re picking up somebody else’s clients. So then it’s a ratio of 15-to-1. That’s a lot.” A leader described how this feedback loop then drives more people to leave the field: “There are plenty of things that can lead to burnout here, and if you throw being overworked on top of all of the other challenges, it’s very easy to get burned out and decide, I can go do something else for this kind of money.”

Across roles, participants described how increased pay would disrupt this feedback loop and ultimately improve client care. Some supervisors described direct service staff who needed to work multiple jobs falling asleep on their shift. Direct service staff and supervisors also noted how hard it was to engage with clients when workers were emotionally and physically exhausted. As one leader summarized:

If you have a healthier, better rested, more able workforce, they’re going to be able to provide better services to the clients, without a doubt. So, when you put all of these other strains and stresses on the system and the people within it ... it just becomes more and more difficult to make sure you are maintaining that appropriate level of care .... So, I think all those supports would trickle down to better health of our workforce and, therefore, better client care.

In addition to the pay-turnover-workload feedback loop, state reimbursement rates and resources dedicated to hiring and training new staff left little funding to improve other working conditions, such as physical space and benefits. As such, facility leaders and supervisors often had little power to improve their staff’s working conditions. One supervisor reflected: “I have a ton of ideas of what could be some of those programs. But the reality is until the state raises reimbursement rates for Medicaid and other services, we can’t afford to do these things.”

### 3.4. Theme 3: Influence of structural discrimination and addiction stigma on pay and professional advancement

Throughout interviews and focus groups, participants threaded descriptions of state policies that structurally discriminated against providers who were in recovery with perceptions of addiction stigma in their own communities. As noted earlier, a substantial portion of this workforce reported being in SUD recovery. Some participants connected social and structural patterning of substance availability, addiction, and trauma exposures with their perception of providers in recovery as disproportionately more likely to be people of color, in entry-level positions, and exposed to similar traumas when they were clients themselves. These participants also noted how providers in recovery often

possessed fewer financial resources compared to colleagues without SUD histories. Limited finances impacted their ability to seek out additional education and training to progress in the field. As one leader observed:

Unfortunately that all kind of leads to one of the big frustrations for folks as they're trying to grow within the field. They're trying to go to school and get to that next job, that next level kind of thing. On what? At \$15 an hour? That's \$30,000 a year. So, unfortunately at that salary, you probably have a second job. And it becomes a real barrier to having people advance when they say that ... 'I can only do it very part time, it's going take me six or more years to get this done.'

Participants across roles also described frustration with a larger societal acceptance of low pay and systematic devaluing of addiction treatment work, even compared to other social and behavioral health fields. These participants suggested that this was in part due to perceptions that clients were undeserving people, who brought their disease upon themselves. As one case manager summarized: "Not having additional resources, again, because society doesn't want to. Who wants to help an addict, you know? It's their choice. These things are still being said." Others observed how historical stigma was still imbedded in pay differentials of providers and workers doing comparable work with other populations. As one leader pointed out: "Look at Department of Mental Health's rate, because we're from the same pool of staff and the same credentials, and they are getting paid more for the same staff level. That just doesn't make sense."

*Downstream effects:* As described earlier, participants reported how the state had increased qualifications to hold supervisory positions as a means to improve client care. These qualification requirements—coupled with underpayment of a workforce often with limited personal economic resources—exacerbated inequities within the workforce. One leader described the structural inequity in job advancement for many direct service workers: "You have people who've been in the field for 20 or 30 years, that have this lived experience, that know what they're doing, but now they don't qualify for those positions."

In essence, changes in qualification with this specific workforce structured two classes of providers patterned by addiction history: one class of workers with advanced degrees, more financial resources, and who, by virtue of their higher positions, were less exposed to occupational trauma over the course of their careers, and a second class of workers without advanced degrees nor options to advance in the field due to limited finances. A supervisor stated: "The requirements are weeding you out. I'm sure there are plenty of people that'd be really good at the job that are being weeded out ... I always think about the social class and racial implications of that. People of color that have had less opportunity to return to school than I did. Are we holding those folks back?" A different supervisor speculated about how providers may internalize societal devaluing of the field—potentially interacting with workers' personal experiences being devalued as a person in recovery—and this could perpetuate low wages with limited advancement: "It's a really low paying job. It's a really grueling job. Right? It's almost like you're gaslit—like the type of person who stays at that job almost has to not know their worth. Because you'd just wake up and be like 'Oh my God, I'm not getting paid enough for this.'"

As described earlier, participants reported concerns for colleagues relapsing, and some named structural and stigma-related barriers for workers to get necessary care. Taking time off to support their recovery often required unpaid leave, and frontline workers, many of whom were in recovery, may not be able to afford to take this time. A few participants also observed that policies of dismissal for relapsing on-the-job and organizational stigma of the "helper" requiring help themselves discouraged disclosing need for support. As one case manager shared: "When someone in recovery is working in a recovery setting ... they either have to quit their job, or something happened, they relapse and they get fired."

### 3.5. Theme 4: Geographic location of facilities shapes work and quality of life

Geographic location of residential facilities surfaced as another contextual theme that affected working conditions and workers. According to participants, geography and location affected them in three primary ways: 1) availability of substances and activities in the larger community; 2) accessibility of additional social services; and 3) variation in cost of living.

Participants working in Boston-based residential facilities frequently described how they were situated in areas with greater availability of substances and high SUD prevalence. One residential assistant recounted: "Sometimes [people in the neighborhood] would be sitting in the stairwell shooting dope when our clients were right outside ... I'd have to run outside because people were OD'ing in the parking lot. So to actually see someone turn blue and to give someone Narcan, it was like I didn't sign up for this, you know? And so for me it became my norm working here." One leader noted how funding constraints dictated affordable locations for services, which created safety concerns for staff: "We've had folks who have nearly been missed by a gunshot that came from outside and went through the window."

At the same time, those in non-urban areas also described difficulty in meeting the needs of some clients because of the dearth and geographic dispersion of ancillary social services. One case manager shared, "So if they're not a good fit for our program, that's a challenge. Where can they go, because again, in [specific region] where we are, there's not a lot of programs. And there's also not a lot of quality programs."

Concerns over low wages also varied by geographic location. Leaders reported how state-authorized pay and reimbursement rates governed the entire state, despite substantial variation in cost-of-living and operation costs (highest in greater Boston). One leader recalled when cost of living differences surfaced at a state-wide meeting to discuss provider minimum wages guidelines: "I had somebody from Western Mass saying, 'Well, we can't say that we want our direct care staff to be paid \$15 an hour because we only pay \$10 an hour ... ' We're in Boston paying more for our property and our utilities and everything else, and you're in Western Mass – [the cost differences] doesn't really connect."

*Downstream effects:* Ensuring that communities with higher SUD prevalence have access to treatment services is imperative. However, when describing facilities' surrounding areas, participants often explained how location increased exposure to traumatic events for staff as they responded to overdoses and witnessed substance use near facilities. As one residential assistant disclosed, "When you're responding to an overdose—I'm creature of habit. I'm just running to the person. I want to get him breathing. I want to get 9-1-1 there and do my part until they come and take over. And you do it over and over again, but then afterwards, man, after a while, that stuff takes a toll on you, man. It doesn't just affect you. If you don't get the service you need, it will begin to infect you."

Location of residential facilities also could increase job demands and work intensity. Not only were staff in urban areas ethically responsible for responding to overdoses they encountered in their neighborhoods, the pervasiveness of community substance use could also make supporting clients in programs more challenging. As one leader observed: "The staff have had to be a lot more diligent on watching for people's vulnerabilities, especially when they're going outside of the house. That's obviously where they're at more risk." Location in urban areas with greater density of social services made it easier to connect clients with supportive services that they could actually access, compared with rural providers. Rural providers describe expending great effort in finding outside services to support their clients, adding to their workload: "I think what you tend to do then is you take on a lot of the work yourself .... You're hustling hard, because you know that this person ... burned all their bridges. They don't have a job. They don't have any money. There's no shelters. Where are they going to go?.. There's so few

resources for a lot of things.”

Participants also mentioned how the areas surrounding facilities could beneficially buffer stress and support coworker connection. Participants working in neighborhoods with restaurants described the importance to taking a break from the intense work to get lunch with coworkers. One supervisor described calming benefits of their location: “Our physical environment, there’s actually space outside so the guys and the staff can go outside, go for walks. So, for us, we were lucky that we’re in a community ... So having that experience for us, for ourselves I think made a big difference, just having the space ... It kind of felt peaceful at times.”

The reported limited variation in wages despite substantial differences in cost-of-living also impacted workers wellbeing and attrition in the field. Participants across Massachusetts lamented low pay, but these frustrations appeared more pronounced among participants located in more expensive parts of the state. When asked what drove understaffing and turnover at their facility, one residential assistant shared: “If you’re not clinical, the pay rate for a [residential assistant] is just so low, some places it’s only \$14 an hour. And especially in the Boston area!”

#### 4. Discussion

Throughout interviews and focus groups, participants described being motivated to work in addiction treatment because they cared deeply about helping individuals with SUDs move into recovery. Often in the same breath, however, participants described the emotional toll that this can take on workers. From the perspectives of this workforce, this work was not always worth the low compensation and health consequences, contributing to workforce turnover and attrition. Permeation of and interactions between contextual factors and working conditions, worker health, and client care was clearly pronounced in this study. Four primary contextual themes surfaced through transcript analysis: 1) changes in substances and client need that were not reliably accompanied by shifts in treatment practices; 2) challenges balancing state requirements and state-provided resources; 3) influence of structural discrimination and addiction stigma on pay and professional advancement; and 4) geographic location of facilities shaping work and quality of life.

These four socio-contextual themes underpinned relationships between “downstream” working conditions, provider health, and organizational outcomes, like staff turnover and client care, which operated at different ecological levels as depicted in our conceptual model (Fig. 3). A growing body of research documents relationships between provider burnout, psychological health, pay and benefits, supervisor and coworker support, job satisfaction, and intention to leave in addiction treatment settings (Bride and Kintzle, 2011; Skinner and Roche, 2021; Olding et al., 2021; Rachiotis et al., 2021; Pike et al., 2019; Oyefeso et al., 2008; Ewer et al., 2015; Bride et al., 2009, 2015; Bogo et al., 2011; Ducharme et al., 2007; Duraisingam et al., 2009; Broome et al., 2009; Garner and Hunter, 2014; Oser et al., 2013a; Knight et al., 2011). These relationships are important to consider, but as can be seen from this study, in order to support worker health and improve client outcomes, researchers, policymakers, and practitioners must also consider working conditions within the larger contexts in which these residential facilities exist. From a social-ecological perspective, it is unsurprising that participants described how these contextual factors could be felt in many aspects of their work and personal lives. While many contextual factors that emerged from these data, such as the treatment orientation of the workforce or government funding and regulations, are not new, other contextual factors, such as lethality of substances or cost-of-living, have changed over time and now interact with stable contextual factors to produce new challenges. While these dynamics are well-understood among providers, they have not been well-characterized in the literature.

Close analysis of downstream effects of these socio-contextual factors also reveals several additional constructs, pathways, and loops, which

we depict in our conceptual model (Fig. 3). First, client behaviors (e.g. overdoses) and client trauma-saturated histories divulged to staff appeared to independently influence providers’ current health behaviors and health outcomes as a construct separate from working conditions, client care, and client outcomes. Second, providers’ own personal histories surfaced as a key construct. While we did not specifically ask participants to disclose SUD histories, over half of this sample volunteered this information. A number of participants also estimated that the majority of the workforce is in recovery, consistent with surveyed convenience samples (Jones et al., 2009; Ducharme et al., 2007). While these estimates are rough approximations, they indicate that a substantial portion of this workforce has shared experience with clients and has their own behavioral, psychological, and physical health needs as a result. Third, we also heard how high rates of turnover and attrition—precipitated by poor worker health and challenging working conditions—generated a feedback loop whereby workloads increased and social support decreased for remaining staff, further depreciating working conditions.

Per our conceptual model (Fig. 3), conventional interventions to support workers and address turnover usually occur somewhere between the *worker health* and *staff turnover* constructs as a reaction to attrition or complaints of poor worker health. These intervention are almost always individual-level interventions, like mindfulness practice, often with little long-term effectiveness (Cocker and Joss, 2016; Webb and Carpenter, 2012). A traditional occupational health perspective would encourage more “upstream” interventions at the organizational level to modify conditions under which people work (Lamontagne et al., 2007). However as recognized by participants, residential facilities often cannot control their working conditions due to government regulations and low reimbursement rates. Taking into account larger contextual factors therefore allows other solutions and opportunities to support workers and clients to surface in addition to important considerations for tailoring multilevel Total Worker Health® interventions (Sorensen et al., 2020).

For example, in this study’s setting, coordinated increases in Medicaid reimbursement with provider minimum salaries by the Massachusetts Office of Health and Human Services (HHS— which oversees the state Medicaid program and addiction services) could interrupt the pay-turnover-workload feedback loop while providing facilities with additional funds to implement tailored interventions. Low pay and reimbursement is a perennial issue, however with the contextual changes in substances, client needs, service demand, and qualification requirements, the need is now more pronounced. But even HHS does not have complete control over funding and reimbursements, since their budget is determined by the Massachusetts legislature. Collaborations between state agencies and treatment facilities to elucidate for legislatures how contextual factors and funding allocation affect worker health— and subsequent client care—could help state agencies and organizations support workers and clients together. While concern for providers traverses state and national borders (Skinner and Roche, 2021; Olding et al., 2021; Rachiotis et al., 2021; Pike et al., 2019; Ewer et al., 2015; Duraisingam et al., 2009; Oser et al., 2013), the role of government in addiction treatment varies across the US and internationally (Roscoe et al., 2021). Identifying exactly how a government influences residential working conditions is essential to improving worker health and turnover across settings.

With regards to intervention, our study reinforces that this workforce is different from other social and behavioral health workforces. Not only are there behavioral and physical health considerations for workers motivated by personal addiction experiences, but many likely have fewer financial and educational resources compared to those in other health and social service fields. Participants reported rising qualification requirements to advance in addiction treatment, and training and educational standards are critical as substance and client needs evolve. However, without supports to meet these new qualifications, participants observed how workers in recovery, who may be



disproportionately people of color and in lower-paying, direct-service positions without required educational credentials, were less likely to be able to advance. Without intentional development of accessible education and advancement ladders, new qualification requirements structurally discriminate against workers who possess important attributes and skills to build rapport and connect with clients.

#### 4.1. Strengths, considerations, and limitations

This study is one of the first to assess how larger contextual factors affect wellbeing of organizations, workers, and clients in residential addiction treatment and includes participants across occupational roles and state regions. We also noticed concordance of participants across the organizational hierarchy, and this agreement on work experiences is particularly noteworthy. That said, the study has several limitations. To participate, facility leaders needed to agree to send out recruitment information. These facilities may be different from facilities who did not respond to recruitment efforts. It is also possible that “survivor bias” influenced this analysis, since participants all continued to work in addiction treatment, although a few participants reported leaving for several years before returning to the field. While we tried, we were unsuccessful at recruiting providers who had recently left their positions. The transferability of these findings is also important to consider. How these contextual themes manifest and affect working conditions, workers, and clients will likely differ by location and treatment setting. However, we believe that these factors will remain key themes across geography, setting, and time, and can be tested in a range of other settings.

## 5. Conclusion

Addiction treatment models must be reconceptualized to recognize the health and wellbeing of addiction treatment providers as critical components of addiction care. Without an emotionally and physically healthy workforce with the endurance to stay in the field and further develop expertise, treatment facilities will continue to struggle to provide adequate addiction care to clients. However, it is not enough to try to improve working conditions at these facilities; one must also consider the role of larger socio-contextual factors that shape the distribution of resources to organizations, who is motivated to join this workforce, and who leaves this workforce. Qualitative analysis of focus groups and interviews of residential providers in Massachusetts illuminated four primary contextual themes—changes in substances and client needs, balancing state requirements with state resources, structural discrimination and stigma, and geography and location—as well as the independent influence of client and worker histories. These constructs generate downstream effects on and feedback loops between working conditions, worker health, turnover, and client care. By integrating these constructs into an expanded conceptual model, we illustrate how protecting the health and wellbeing of addiction treatment providers is an integral component to providing addiction treatment writ large. Moreover, it is only possible to substantively improve protections and supports provided to this workforce when considering the larger socio-contextual factors that shape working conditions and addiction treatment in the first place.

## Credit statement

Elisabeth Stelson: Conceptualization, Methodology, Investigation, Formal analysis, writing-drafting/ editing, Visualization, Funding acquisition; Lauren Sabbath: Conceptualization, Investigation, Formal analysis, writing-editing; Glorian Sorensen: Conceptualization, Methodology; Funding acquisition, Supervision, writing-editing; Laura Kubzansky: Methodology, Supervision, writing-editing; Lisa Berkman: Methodology, Supervision, writing-editing; Erika Sabbath: Conceptualization, Methodology, Formal analysis, writing-editing, Visualization,

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## Declaration of competing interest

None.

## Data availability

The data that has been used is confidential.

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